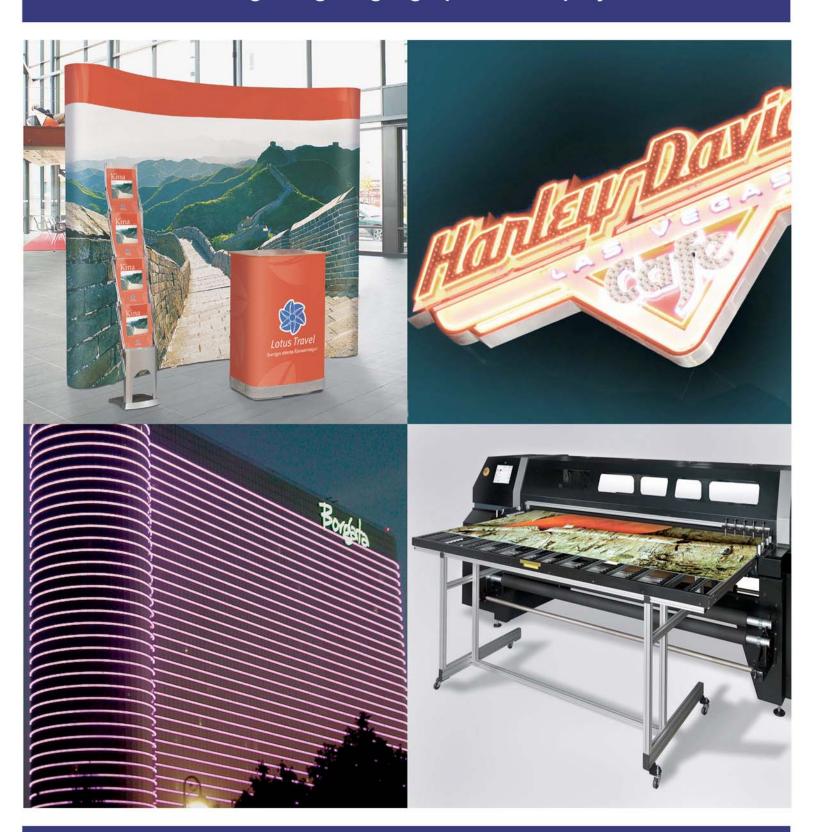


sign • lighting • graphics • display

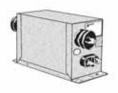


# **IEC PRODUCT CATALOG**

#### **SIGN SUPPLIES**

- Sign Ballasts & Transformers
- Neon Supplies
- Adhesives
- Paint Products









A

# **EXTRUSIONS**

- Sign Frame & Architectural Systems
- Kits
- Components











B

# **ELECTRICAL**

- Ballasts
- Lamps
- Fixtures
- Electrical Hardware



C

#### **SUBSTRATES**

- Aluminum Shee
- Foam Boards
- Plastic
- Composite









# **GRAPHICS**

- Computerized Sign Making Equipment
- Consumables
- Digital Imaging Films









# ١

# **HARDWARE**

- Fasteners
- Tools
- Fabrication Equipment



# **LAMINATING**

- Wide Format Films
- Mounting Supplies
- Laminating Equipment







G





SECTION A: SIGN SUPPLIES





# LIGHTING COMPONENTS ELECTRONIC HO & SLIMLINE SIGN BALLASTS



Lighting Components electronic energy efficient sign ballasts are light weight and offer full light output while saving energy and increasing the life of lamps and ballast. Advantages include 40% less power consumption than comparable magnetic ballasts and very low starting temperature (-30°F) along with the lowest case operating temperature. Total harmonic distortion is less then 10%, with low in-rush current for optimal system performance and an extra flexible voltage regulation, operating at line voltages between 70V - 135V. Can be used for either HO (800mA) or Slimline (425mA) lamps. Also equipped with red and blue 11' leads. Wiring for these ballasts are simpler, with half the connections used with old-style magnetic ballasts. Lamps are parallel wired, therefore if one burns out the others continue to operate. 4 year warranty.

120V • 50/60Hz • Individually Boxed • -30°F Min. Start Temp. • Class P

Catalog Number	Total Lamp Min/Max Footage	Max Line Current Amps.	Max Input Watts	Open Circuit Volts	Wiring Diagram	Case Dimensions	Weight Each (Lbs)
One, Two or Three Lamps LIG-424-13L	4' to 24'	1.1	134	600	1	A	5
One, Two, Three or Four Lar	nps 10' to 40'	2.4	305	750	3	В	8
One, Two, Three, Four, Five <b>LIG-832-16L</b>	or Six Lamps 8' to 32'	1.7	198	600	2	В	8
Two, Three, Four, Five or Six LIG-1048-26L	Lamps 10' to 48'	2.5	292	700	2	В	8
NOTE: (1) Designed spe	cifically for use with 10	l' lamns		·		<u> </u>	

# LIGHTING COMPONENTS MULTI-VOLTAGE ELECTRONIC HO & SLIMLINE SIGN BALLASTS (9)

Lighting Components Multi-Voltage electronic sign ballasts incorporate all the same features as the 120V version with the added flexibility of operating at line voltages between 170V - 380V.

208/220/240/277/347V • 50/60Hz • Individually Boxed • -30°F Min. Start Temp. • Class P

Catalog Number	Total Lamp Min/Max Footage	Max Line Current Amps.	Max Input Watts	Open Circuit Volts	Wiring Diagram	Case Dimensions	Weight Each (Lbs)
One, Two or Three Lamps LIG-424-13MV	4' to 24'	.7 @ 208V .6 @ 240V .53 @ 277V	146 146 146	600	1	A	5
One, Two, Three or Four Lar	nps 10' to 40'	1.48 @ 208V 1.27 @ 240V 1.1 @ 277V	332 331 329	825	3	В	8
One, Two, Three, Four, Five LIG-832-16MV	or Six Lamps 8' to 32'	1.05 @ 208V .9 @ 240V .8 @ 277V	216 216 216	800	2	В	8
Two, Three, Four, Five or Siz LIG-104826MV	x Lamps 10' to 48'	1.51 @ 208V .99 @ 240V .99 @ 277V	316 313 313	825	2	В	8

Mounting
Length Length Width Height

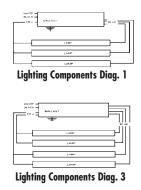
A 11-1/8 10-1/2 3 1-3/4

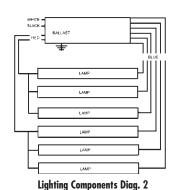
Optional Lead Cover

2-1/2

13-3/4

13-3/16





Commerce: 323.803.2000 / 800.225.5432 (CALL IEC) / Fax 323.803.2019

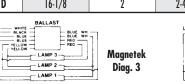
TP5

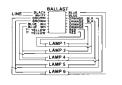


A-2					Interstat	<b>e</b> Electric
MAGNETEK/UNIVER		HNOLOGIES • H	O SIGN BALLAS	<u>TS</u> (4)	MagneTek	Univer Lighting Ted
For high output 800mA lam 20°F Min. Start Temp. ● Tl 120V ● 60Hz ● Individually	•	; P	•			
Catalog Number	Total Lamp Min/Max Footage	Line Current Amps.	Open Circuit Volts	Wiring Diagram	Case Dimensions	Weight Ed (Lbs.)
One Lamp <b>256-148-800</b> (1)	2' to 5'-4"	0.55	400	1	A	8
One or Two Lamps 256-248-800 256-272-800	4' to 8' 4' to 12'	.90 1.35	400 500	1 or 2 1 or 2	A A	8
Two Lamps <b>256-296-800</b>	12' to 16'	1.80	500	1 or 2	В	11
One, Two or Three Lamps 256-348-800 256-396-800	4' to 12' 10' to 24'	1.35 2.70	500 720	1, 3 or 8 1, 3 or 8	A C	8 14
Two or Three Lamps 256-372-800 256-3120-800	12' to 18' 16' to 30'	2.00 3.50	590 885	3 or 8 3 or 8	B D	12 16
One Two Three or Four Lamps 256-464-800 256-472-800	10' to 22' 10' to 24'	2.40 2.70	680 720	1, 4, 6 or 9 1, 4, 6 or 9	( (	14 14
One, Two, Three or Four Lamps 256-448-800 256-484-800 256-496-800 256-1588 (277V) 256-4120-800	8' to 16' 16' to 28' 16' to 32' 20' to 32' 20' to 40'	1.90 3.50 3.50 1.70 4.40	590 950 950 900 720	1, 4, 6 or 9 4, 6 or 9 4, 6 or 9 4, 6 or 9 4, 6 or 9	B D D D	12 16 16 16 18
One, Two, Three, Four, Five or 256-648-800 256-672-800 256-696-800	Six Lamps 10' to 26' 20' to 36' 20' to 48'	3.00 4.30 5.00	825 720 720	5, 7 or 10 5, 7 or 10 5, 7 or 10	D D D	16 18 18

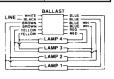
Case **Dimensions** Mounting Width Case Width Mounting Length Case Height 11-9/64 1-3/4 3-3/16 11-9/64 2-43/64 3-3/16 B 2 ( 13-3/4 2 2-43/64 3-3/16 2-43/64 D 16-1/8 3-3/16

**NOTE:** (1) 0°F minimum start temperature for 5' and 5'-4" lamps.





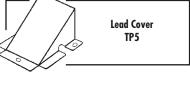
Magnetek Diag. 7

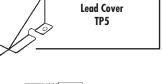


Magnetek Diag. 8

# **Lead Cover** TP5



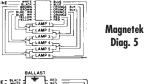


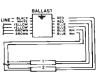




Magnetek

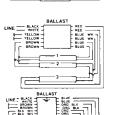
Diag. 9





# **Magnetek Wiring Diagrams**

All ballast cases must be grounded to the sign. The sign must be grounded by the installer for safety.



Magnetek Diag. 6

Magnetek

Diag. 2

Magnetek Diag. 10

#### INTERSTATE ELECTRIC CO., INC.

Magnetek

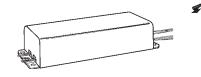
Diag. 4



# **ADVANCE HO SIGN BALLASTS**

For high output 800mA lamps. Filled with "Solid-Fil" for reliable performance in the most adverse conditions.

-20°F Min. Start Temp. ● Thermally Protected ● Class P 120V ● 60Hz ● Individually Boxed

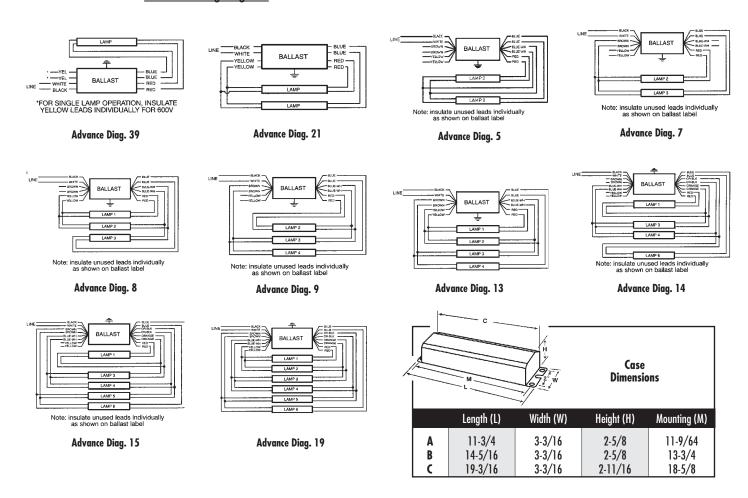


Catalog	Total Lamp	Max Line	Open Circuit	Wiring	Case	Weight Each
Number	Min/Max Footage	Current Amps.	Volts	Diagram	Dimensions	(Lbs.)
One, Two Lamps ASB-41212TP	4' to 12'	1.48	480	21, 39	А	12
Two, Three, Four Lamps ASB-62024TP ASB-122424TP ASB-204024TP	6' to 20'	2.56	590	5, 8, 13	A	12
	12' to 24'	2.70	785	7, 9, 13	B	14
	20' (1) to 40' (1)	4.00	600	5, 9, 13	C	21
Four, Five, Six Lamps ASB-124046TP ASB-244846TP	12' (2) to 40' (2)	3.90	600	14, 15, 19	(	21
	24' (3) to 48' (3)	5.19	700	14, 15, 19	(	21

#### NOTE:

- (1) Total lamp length of each circuit (A) and (B) must not be less than 10 ft. nor more than 20 ft. Circuit (A) is comprised of lamps 1, 2. Circuit (B) is comprised of lamps 3, 4. (See wiring diagrams).
- (2) Total lamp length of each circuit (A) and (B) must not be less than 6 ft. nor more than 20 ft. Circuit (A) is comprised of lamps 1, 2, 3. Circuit (B) is comprised of lamps 4, 5, 6. (See wiring diagrams).
- (3) Total lamp length of each circuit (A) and (B) must not be less than 12 ft. nor more than 24 ft. Circuit (A) is comprised of lamps 1, 2, 3. Circuit (B) is comprised of lamps 4, 5, 6. (See wiring diagrams).

#### **Advance Wiring Diagrams**



# MAGNETEK • JEFFERSON & UNIVERSAL FLASHING HO SIGN BALLASTS



For high output 800mA lamps. For use with a high output rated flasher. -20°F Min. Start Temp.

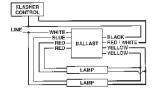
120V ● 60Hz ● Individually Boxed



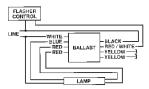
Jefferson Cat. No.	Universal Cat. No.	Total Lamp Min/Max Footage	Line Current Amps.	Open Circuit Volts	Wiring Diagram	Case Dimensions (From Page C-1)	Weight Each (Lbs.)
One or Two Lamps <b>256-1272-800</b>	51601XLHRFL	4' to 12'	1.60	465	11 or 12	A	10
Two Lamps <b>256-1296-800</b>	51591XLHRFL	12' to 16'	1.95	530	11	A	10
One, Two or Three Lamps <b>256-1348-800</b>	51604XLHRFL	4' to 12'	1.70	465	13, 14 or 15	A	10
Two or Three Lamps <b>256-1372-800</b>	51611CRFL	12' to 18'	2.20	595	13 or 14	А	12

**NOTE:** "800" suffix indicates thermally protected, Class P.

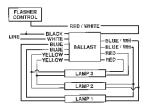
#### Magnetek Wiring Diagrams cont.



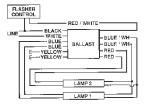
Magnetek Diag. 11



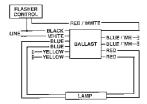
Magnetek Diag. 12



Magnetek Diag. 13



Magnetek Diag. 14



Magnetek Diag. 15

# MAGNETEK MSB-3 SELECT PLUS SERIES HO SIGN BALLASTS (9)

For high output 800mA lamps. These three ballasts accommodate nearly every sign application.

-20°F Min. Start Temp. • Thermally Protected • Class P

120V • 60Hz • Individually Boxed





Catalog	Total Lamp	Max Line	Open Circuit	Wiring Diagram	Case Dimensions (From Page A-2)	Weight Each
Number	Min/Max Footage	Current Amps.	Volts	(From Page A-2)		(Lbs.)
One, Two, Three, Four, Five or Six Lamps MSB-218-816 MSB-1232-816 MSB-1048-816	2' to 18' 12' to 32' 10' to 48'	2 3.5 4.8	625 970 800	3, 4, 5, 6, 7 or 8 3, 4, 5, 6, 7 or 8 1, 2, 3, 4, 7 or 8	C D D	15 16 17.5



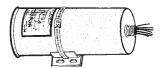
# MAGNETEK/UNIVERSAL LIGHTING TECHNOLOGIES • WATERPROOF BALLASTS (9)

MagneTek



Designed to withstand direct exposure to rain and snow. Encased in a round aluminum can and supplied with mounting bracket. A 3/4-14 threaded nipple is provided at end where wiring exists.

-20°F Min. Start Temp. 120V • 60Hz • Individually Boxed

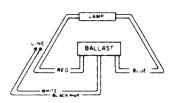


Catalog Number	Lamp Type Min/Max Footage	Line Current Amps.	Open Circuit Volts	Wiring Diagram	Case Dimensions	Weight Each (Lbs.)
One Lamp WPR481LH	Any 1 HO • 800mA Lamp 4' to 8'	1.20	430	40	E	13
One or Two Lamps WPR490XLH (1)	Any 1 or 2 HO • 800mA Lamps 4' to 12'	1.60	4.65	41	E	12.8
Two Lamps WPR480XLHR	Any 2 HO ● 800mA Lamps 12' to 16'	1.95	530	41	E	12
WPR931	Any 2 VHO ● 1500mA Lamps 12' to 16'	.50	530	41	F	18.7

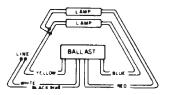
**NOTE:**  $^{(1)}$  Cannot be used with 1/F24, 36 or 42T12 lamp.

# Magnetek Wiring Diagrams cont.

All ballast cases must be grounded to the sign. The sign must be grounded by the installer for safety.

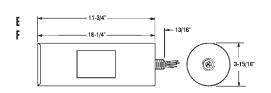


Magnetek Diag. 40



Magnetek Diag. 41

#### **Case Dimensions**



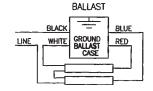
# MAGNETEK COLD CATHODE LAMP BALLAST (4)

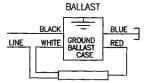
For lighting one or two 96" 25mm (T8) cold cathode lamps. Dimmable. Can be used indoors or outdoors if enclosed.

120V • 60Hz • Thermally Protected • Class P

Catalog Number	Description	Lamp Current	Input Current	Overall I	Dimensions W	(Inches)	Weight (lbs.)
256-2961-800	1 or 2 96" 25mm	200mA	3.6 Amps.	11-11/16	3-3/16	2-9/16	13

#### **Magnetek Wiring Diagrams**





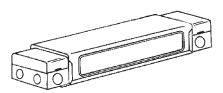


# **HO JUNCTION BOX SIGN BALLASTS**

MagneTek

An HO junction box style sign ballast can be achieved by simply attaching SB-4 splice boxes to the ends of any Magnetek sign ballast. Easily mounted in a matter of seconds.

Catalog Number	Description
SB-4	Splice Box



**SB-4 Splice Boxes** Shown attached to an HO sign ballast

# MTW/AWM DUAL RATED BALLAST WIRE

Catalog Number Prefix	Number Color Code Suffix	Wire Gauge AWG	Conductor	Put Up
14MTWAWM-	01 - Black 02 - White 03 - Red	14	Stranded	500' Spool
12MTWAWM-	<b>04</b> - Orange <b>05</b> - Yellow	12	Stranded	500' Spool
18MTWAWM-	<b>06</b> - Green <b>07</b> - Blue <b>08</b> - Brown	18	Stranded	500' Spool
16MTWAWM-	19 - Purple 91 - Blue/White 93 - Orange/Black	16	Stranded	500' Spool



MTW is 105°, 600V machine tool wire. AWM is 90°, 1000V appliance wiring material.

#### **Ordering Information**

Add color code suffix to number prefix to complete catalog number. i.e. 14MTWAWM-07 = 14MTW/AWM blue wire. Minimum order one 500' spool.



# **SIGN BALLAST Cross Reference Chart**

For high output 800mA lamps • 120V • 60Hz

Total Lamp Min/Max Footage	FRANCE	ADVANCE	ALLANSON	SLI/POWERLIGHTING	JEFFERSON	UNIVERSAL
1/2' to 5' 4"	-	_	-	_	256-148 <sup>(1)</sup>	51609XRTC
1/4' to 8'	-	_	-		256-248 (1)	51742
1/4' to 12'	268D	ASB0412-12TP	-	V12L4-12	256-272 (1)	51601XLHRTCF
2/4' to 8'	-	-	-	-	256-248 (1)	51742
2/4' to 12'	268D	ASB0412-12TP	ALL-272A	V12L4-12	256-272 (1)	51601XLHRTC
2/8' to 16'	288D	ASB0620-24TP	ALL-296A	-	256-296 (1)	51591XLHR
3/4' to 12'	348D	ASB0620-24TP	ALL-348A	V234L16-24	256-348 (1)	51604XLHRTC
3/8' to 18'	368D	ASB0620-24TP	ALL-372A	-	256-372 (1)	51611CRTC
3/16' to 24'	388D	ASB1224-24TP	ALL-396A	-	256-396 (1)	51863RTC
3/26' to 30'	3128D	ASB2040-24TP	-	-	256-3120 (1)	51744JR
4/8' to 16'	448D	ASB0620-24TP	ALL-448A	V234L8-16	256-448 (1)	51741CR
4/12' to 20'	458D	ASB0620-24TP	-	-	256-464 (1)	51791R
4/16' to 24'	468D	ASB1224-24TP	ALL-472A	V234L16-24	256-472 (1)	51792RTC
4/16' to 28'	-	ASB2040-24TP	-	6G3782WF	256-484 (1)	51793JRTC
4/16' to 32'	488D	ASB2040-24TP	ALL-496A	V456L24-32	256-496 (1)	51745JRTC
4/32' to 40'	4128D	ASB2040-24TP	ALL-4120A	-	256-4120 (1)	51862R
5/10' to 25'	-	ASB1240-46TP	-	6G3753AWF	256-648 (1)	51794JR
5/20' to 30'	568D	ASB1240-46TP	ALL-572A	V456L24-36	256-672 (1)	51797SR
5/30' to 40'	588D	ASB1240-46TP	ALL-696A	V456L32-48	256-696 (1)	51861RTCP
6/10' to 25'	-	ASB1240-46TP	-	V456L10-25	256-648 (1)	51794JR
6/24' to 36'	668D	ASB1240-46TP	ALL-672A	V456L24-36	256-672 (1)	51797SR
6/36' to 48'	688D	ASB2448-46TP	ALL-696A	V456L32-48	256-696 (1)	51861RTCP

NOTE: (1) Any Jefferson ballast with a suffix of "000", "100", "600" or "800" may be used in most applications.



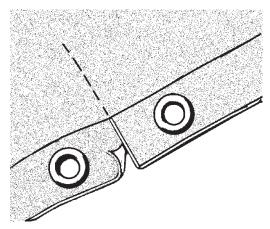
# The Most Complete Supplier in the West!

Sign ● Lighting & Electrical Supplies ● Computer Sign Making Equipment ● Display & Exhibit Supplies Creative Boards & Substrates • Digital Imaging & Laminating Supplies

# **BANDANNA BANNER FABRIC**

Bandanna Banner is a precision made vinyl product with consistently smooth thermo-welded hems, top and bottom. It features double grommets at 2' intervals. This enables the material to be split between the grommets thus leaving a grommet at all four corners of the desired banner. Sold by the 24 yard roll. Also available in yellow, red, blue, black and green.

Catalog Number	Color	Width	Weiaht	Put Up
BAN-02-1122	White	22"	11.5 oz.	1
BAN-02-1134	White	34"	11.5 oz.	1
BAN-02-1146	White	46"	11.5 oz.	1
BAN-02-1422	White	22"	14 oz.	1
BAN-02-1434	White	34"	14 oz.	1
BAN-02-1446	White	46"	14 oz.	1



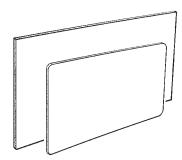


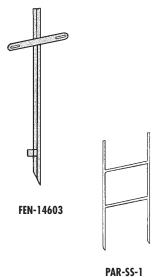
# **SIGN BLANKS & STAKES**

Sign blanks are rectangular, white on both sides and have no punched holes. Other colors, sizes and configurations also available.

FEN-14603 is a sturdy, black sign stake made from 3/4" steel angle. PAR-SS-1 is a lightweight, rustproof and economical stake for use with fluted PVC, etc. Many other sign stakes also available.

Catalog Number	Color Description	Width	Dimensions Length	Thickness	Corners	Put Up
ALL-1218040 ALL-1218080 ALL-1824032R ALL-1824040 ALL-1824040R ALL-18240403 ALL-1824063 ALL-1824080 ALL-1848063R ALL-2224040 ALL-2430040 ALL-2436032 ALL-2436040	White Aluminum	12" 12" 18" 18" 18" 18" 18" 18" 22" 24" 24"	18" 18" 24" 24" 24" 24" 24" 48" 24" 30" 36"	.040" .080" .032" .032" .040" .040" .063" .080" .063" .040" .040"	Square Square Square Radius Square Radius Square Square Square Square Square Square Square	25/100 25/100 25/100 25/100 25/100 25/100 25/100 25/100 10/25 10/25 10/25
ALL-2436063 ALL-3648040 ALL-062424 ALL-102424R	White Aluminum White Aluminum White Steel White Steel	24" 36" 6" 10"	36" 48" 24" 24"	.063" .040" 24 Ga. 24 Ga.	Square Square Square Radius	10/25 10/25 10/25 10/25 25/100
ALL-121824 ALL-243624 ALL-243624R ALL-364824	White Steel White Steel White Steel White Steel White Steel	12" 24" 24" 36"	18" 36" 36" 48"	24 Ga. 24 Ga. 24 Ga. 24 Ga.	Square Square Radius Square	25/100 25/100 25/100 25/100 25/100
INT-1824PC INT-1824TG	White Lexan Polycarbonate White Tuf-Glas	18" 18"	24" 24"	.118/.177 <sup>(1)</sup> .177	Square Square	1 1
STY-1824060 STY-2436060	White Styrene White Styrene	18" 24"	24" 36"	.060" .060"	Square Square	25/100 25/100
MOR-1824125 MOR-1824250 MOR-2436125 MOR-2436250	White Masonite White Masonite White Masonite White Masonite	18" 18" 24" 24"	24" 24" 36" 36"	.125" .250" .125" .250"	Square Square Square Square	25/100 25/100 25/100 25/100
FEN-14603 PAR-SS-1	Steel Stake w/Cross Arm Steel "H" Stake ry in thickness, subject to availab	10"	48" 30"	.177	-	12/48 50







#### **BOOKS**

We offer a variety of industry related publications. All softcover editions.

Catalog Number	Description
SIG-48 SIG-137 SIG-170 SIG-171 SIG-175 SIG-182 SIG-197	Neon Techniques - 233 Pages (7"x10")  '02 Signwriters Pricing Guide - 44 Pages (3"x5")  '02 Custom Electric Sign Pricing Guide - 52 Pages (8.5"x11")  '02 Neon Price Guide - 40 Pages (8.5"x11")  '02 Computer Graphics Pricing Guide - 48 Pages (3"x5")  '02 Screenprinters Pricing Guide - 36 Pages (3"x5")  '02 Sign Contractor Pricing Guide - 118 Pages (8.5"x11")
INT-NE-BOOK	Neon and Cold Cathode Lighting - 23 Pages (8.5"x11")











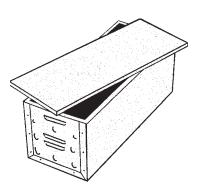




# **TRANSFORMER BOXES** (4)

Transformer boxes are made of electro-galvanized sheet steel. Both top-off and top and side-off models are available. Top and side-off models are produced to allow for better access to the transformer for easier wiring. Also offered in different lengths for multiple transformer applications. All transformer boxes are UL Listed and have many convenient 1/2", 3/4" and toggle switch knockouts.

Catalog Number	Description	Length	Height	Width	Put Up
INT-1TO-18 INT-1SO-24	Single Top-Off Single Top and Side-Off	18" 23-3/8"	7" 7"	7" 7"	12/72 25
INT-1TO-24	Single Top-Off	23-3/8"	7"	7"	25
INT-2SO-36 INT-2TO-36	Double Top and Side-Off Double Top-Off	35-3/8" 35-3/8"	8" 8"	7" 7"	25 25
INT-3TO-21	Single 120 mA Top-Off	21-1/2"	12"	8"	25



Top-Off Style Transformer Box

# **BLOCKOUT BRUSHES**

For applying blockout paint to neon tubing and for other utility uses.

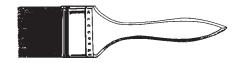
Catalog Number	Description	Width	Put Up
SOL-7764-1/2	Black Nylon Bristle Brush	1/2"	12
SOL-7764-3/4	Black Nylon Bristle Brush	3/4"	12



# **WOOSTER CHIP ECONOMY BRUSHES**

Economy brushes often used for only the job at hand.

Catalog Number	Description	Width	Put Up
WOO-CHIP1	White China Bristle Brush	1"	36
WOO-CHIP1.5	White China Bristle Brush	1.5"	36
WOO-CHIP2	White China Bristle Brush	2"	24
WOO-CHIP2.5	White China Bristle Brush	2.5"	24
WOO-CHIP3	White China Bristle Brush	3"	24





WOOSTER

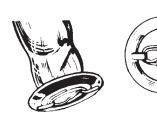
# **BUFFING COMPOUNDS**

A variety of buffing compounds are available for use with many types of materials. Call for more information.

# **ELECTRODE BUTTONS**

Electrode buttons provide enlarged contact surface.

Catalog Number	Description	Put Up
STA-15B	15 mm Brass Electrode Buttons	100/1M



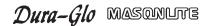


**Electrode Button** Shown on Electrode

# **ELECTRODE CAPS**

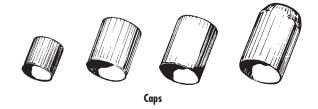
Electrode caps provide a capped contact surface. Electrode Saver caps are used on electrodes that have had the electrode wires broken off. The wire mesh within the electrode cap will provide an effective electrical contact to the broken off wire stub. Available in 15mm only.

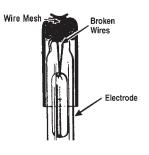
Catalog Number	Description	Dia.	Length <sup>(1)</sup>	
STA-12C STA-12LC STA-15C STA-15LC EGL-19C	Brass Cap w/Drift Holes Brass Cap w/Drift Holes Brass Cap w/Drift Holes Brass Cap w/Drift Holes Brass Cap w/Drift Holes	12 mm 12 mm 15 mm 15 mm 19 mm	5/8" 1" 5/8" 1"	
ROS-15	Electrode Saver Cap	15 mm	-	
MAS-QEC-12 (2) MAS-QEC-13 (2) MAS-QEC-15 (2)	Copper Cap w/Drift Holes Copper Cap w/Drift Holes Copper Cap w/Drift Holes	12 mm 13 mm 15 mm	1" 1" 1-1/8"	
NOTE: (1) Approximate length. (2) For use with Masonlite QuickSilver electrodes.				











Shown in use on Electrode

# 

# **ELECTRODE CAPPING CEMENT**

Used to permanently affix brass electrode caps onto processed electrodes. Sold in powder form.

Catalog Number	Description	Mfgr.	Put Up
EGL-CEMENT	Electrode Capping Cement	EGL	1 lb. Bag

CYRO



#### **CEMENTS FOR PLASTICS**

**IPS-3:** Non-flammable, water thin, very fast-setting solvent cement for acrylics. Also bonds styrene, butyrate and polycarbonate to themselves. Will not bond to cross-linked acrylics. Initial bond develops within minutes and reaches increased strength rapidly. Humid conditions during application may cause a whitish (blushing) joint.

**IPS-4:** Non-flammable, water thin, moderately fast-setting solvent cement for acrylics. Also bonds styrene, butyrate and polycarbonate to themselves. Will not bond to cross-linked acrylics. Initial bond develops moderately fast and reaches full strength within hours. Creates a high strength bond to acrylics, styrenes, butyrates but creates a low strength bond to polycarbonates. Humid conditions during application may cause blushing (less likely than IPS-3).

IPS-16: Fast-drying, high-strength acrylic cement. Also bonds styrene, butyrate, polycarbonate and other plastics and porous surfaces. Will not bond to crossed-linked acrylics. Has a medium viscosity which forms a quick initial bond to facilitate handling. Initial bond develops rapidly and reaches full strength within hours. This cement creates a low strenath bond to polycarbonates.

**IPS-40:** Two-part, reactive, high-strength cement for bonding acrylics to each other and to polyester, butyrate, PVC, styrene, wood, etc. Meets Mil Spec A-8576 Type III.

**IPS-55:** VOC-free, clear, two-part, reactive, urethane-based adhesive for bonding polycarbonate, butyrate, ABS and PETG. Recommended for bonding butyrate trim to polycarbonate faces in channel letter manufacture. Excellent UV light resistance. Forms a high strength bond at room temperature in a few hours. Packaged in a 1:1, 50ml cartridge. Special mixing nozzle included. Designed for use in the IPS-GUN-50ML dispenser gun. Bead cure is 1-1/2" to 2 hours.

**IPS-58:** A faster setting version of IPS-55. Bead cure is 25 minutes.

IPS-56: For bonding Signfoam, PVC, aluminum & steel. Packaged in a 1:1, 50ml cartridge, mixing nozzle included. For use in the IPS-GUN-50ML mixing dispenser gun.

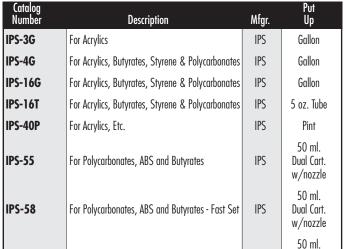
IPS-1802: Medium-setting, light-bodied cement for bonding acrylic, styrene, rigid PVC, ABS and butyrate to themselves and to each other. Initial bond develops within a few hours and reaches high strength in 24 to 48 hours gradually increasing for several weeks.

**IPS-2007:** Water thin, very fast setting solvent cement for bonding PVC, foamed PVC and Kydex to themselves and to each other.

**IPS-4007:** A low VOC version of IPS-1007. A clear, thin-bodied, very fast setting cement for bonding rigid vinyl, foamed PVC, Sintra and Kydex.

CYR-117: A clear acrylic cement that is free of Dichloromethane. Does not cause crazing or blushing when used as recommended.

**INT-CB:** Channel Bond is a one-part, quick setting, high strength adhesive. Especially useful in bonding letter trim (cellulose acetate butyrate) to polycarbonate. Also bonds acrylic and modified acrylic to polycarbonate. Use a HYP-49 applicator to apply. Be sure surfaces to be bonded are clean and smooth. Shelf life is 6 months or more when kept at 35°F to 85°F conditions.



For Sign Foam, PVC, Alum. and Steel

For Acrylics, ABS, Butyrates, PVC and Styrene

Channel Bond **NOTE:** (1) A low VOC version of IPS-1007.

Channel Bond

For PVC

For ABS, Sintra

For Acrylics

IPS-56

IPS-1802G

**IPS-2007G** 

**CYR-117G** 

INT-CB-Q

INT-CB-G

IPS-4007G (1)





**IPS** 

**IPS** 

**IPS** 

**IPS** 

Cyro

Dual Cart.

w/nozzle

Gallon

Gallon

Gallon

Gallon

Quart

Gallon







# **MISCELLANEOUS CEMENTS & SEALANTS**

High quality miscellaneous cements and sealants for many applications. Other 3M cements also available.

BES-103: High quality rubber cement.

BES-203: Solvent for BES-103 rubber cement.

GEN-SCS-1200 SERIES: Premium silicone sealant for weatherproofing sign faces.

MMM-77: High-tack multipurpose adhesive for surfaces such as paper, cardboard, fabric, metal, wood and glass.









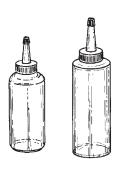




Catalog Number	Description	Mfgr.	Put Up
BES-103G	Rubber Cement	Best Test	Gallon
BES-203G	Solvent for Rubber Cement	Best Test	Gallon
MMM-6065	Spraymount Artist Adhesive	3M	10.25 oz. Aerosol
MMM-77	Spray Cement	3M	16.5 oz. Aerosol
MMM-90	High Strength Spray Cement	3M	16.5 oz. Aerosol
GEN-SCS-1201	Silicone Sealant, Clear	GE	11 oz. Cartridge
GEN-SCS-1202	Silicone Sealant, White	GE	11 oz. Cartridge
GEN-SCS-1203	Silicone Sealant, Black	GE	11 oz. Cartridge
GEN-SCS-1297	Silicone Sealant, Bronze	GE	11 oz. Cartridge

# **MISCELLANEOUS CEMENT DISPENSERS**

Catalog Number	Description	Capacity	Put Up		
HYP-25 HYP-49 HYP-65	Plastic Bottle w/.025 Needle Plastic Bottle w/.049 Needle Plastic Bottle w/.065 Needle	2 oz. 2 oz. 2 oz.	1 1 1		
INT-40Z INT-80Z			1		
IPS-GUN-50ML IPS-NOZ-50ML	Dispenser for 50 ml Dual Cart. Mixing Nozzle for 50 ml Dual Cart.	50ml -	1 1		
INT-GUN	Manual Economy Cartridge Gun	11 oz. Cart.	1		
LOR-GUN-50 LOR-GUN-CX	50ml Dispenser w/o Plunger <sup>(1)</sup> Dispenser	50ml 380ml	1		
LOR-PL-41	4:1 Ratio Plunger for 50ml Dispenser	-	1		
LOR-TIP-50 LOR-TIP-CX LOR-TIP-CX38	Disposable Static Mixing Tip Disposable 1/4" Static Mixing Tip 3/8" Disposable 9-1/2" Static Mixing Tip	50ml 380ml 380ml	1 1 1		
NOTE:	NOTE:				



INT-40Z INT-80Z



**HYP-25 HYP-49** HYP-65



Mixing Nozzle



LOR-GUN-50

# **PLASTIC CLEANERS**

METHANOL: Used to clean areas of acrylic sheets. Not for use on MC or butyrate

IPS-57A: An all purpose plastic cleaner suitable for use on acrylics, polycarbonates, vinyls, ABS and styrene. Helps dissipate static charge and leaves a surface clear of residue.

FMS-PC-G: Cleans nearly every type of plastic without damaging or dissolving the plastic itself. Leaves a protective anti-static wax coating that keeps the sign cleaner longer. Does not contain harmful chemicals.

FMS-PPC-G: Cleaner for plastic prior to painting. Removes static, wax, dust and other foreign matter to facilitate good paint adhesion. Does not contain harmful chemicals.

	Catalog Number	Description	Mfgr.	Put Up
	r-013G	Methanol	-	Gallon
	r-013F	Methanol	-	5 Gallon
FM	-57AG	Plastic Cleaner	IPS	Gallon
	S-PC-G	Brillite Plastic Cleaner	FMS	Gallon
	S-PPC-G	Brillite Pre-paint Cleaner	FMS	Gallon



LORD ADHESIVES LORD

Lord acrylic adhesives are versatile and ideal for use with a wide range of materials, including minimally prepared or unprepared metal surfaces. Lord 400 Series acrylic adhesives carry the distinction of bonding the largest variety of metals in the world. Lord acrylic adhesives are not limited to metal applications; they also bond plastics and ceramics, thermoplastics like polypropylene and ABS and thermosets like fiberglass, sheet molded compounds (SMC) and fiber reinforced plastics (FRP). Lord acrylic adhesives resist severe environmental conditions and bond with minimal surface preparation. Oily metal alloys bond with little preparation. Other advantages are fast cure at room temperature, easy to use with convenient no-mix feature and meets VOC regulations. Lord acrylic adhesives are two-part systems that use accelerators to cure. Consult the Lord Adhesives Selection Guide at the bottom of this page for product specifications and applications.

Lord 400 Series acrylic adhesives offer extremely high impact and peel strength. They bond minimally prepared metals and plastics and achieve high shear strengths. They also provide excellent environmental and chemical resistance.

Lord two-part urethane adhesives provide superior bonds with minimal surface preparation for today's high-performance thermosets and thermoplastics. They offer primerless adhesion for sheet molded compounds (SMC) and are ideal for prepared metals, rubber and fiber reinforced plastics. Lord urethane adhesives cure at room temperature and can also be accelerated with heat. They bring excellent structural integrity to assemblies made of plastic, metal, foams and elastomers. Lord urethane adhesives provide outstanding hot strength to 250°F (121°C), are environmentally friendly and require no special pumping equipment.

All Lord adhesive products are kept in our exclusive climate controlled KOOL room to assure quality and optimum shelf life. Many other adhesives and accelerators are also available. Packed 12 per case.



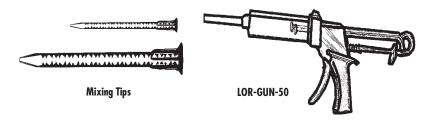
Catalog Number	Cement Type	Size
LOR-40319-50	Acrylic Adhesive	50ml Cartridge
LOR-40319-CX	Acrylic Adhesive	380ml Cartridge
LOR-40619-50	Acrylic Adhesive	50ml Cartridge
LOR-40619-CX	Acrylic Adhesive	380ml Cartridge
LOR-41019-CX	Acrylic Adhesive	380ml Cartridge
LOR-7542AB50	Urethane Adhesive	50ml Cartridge
LOR-7550AC50	Urethane Adhesive	50ml Cartridge
LOR-32032250	Ероху	50ml Cartridge
LOR-320322CX	Ероху	380ml Cartridge

# **LORD-PAK DISPENSING SYSTEMS & ACCESSORIES**

LORD-PAK 50ml adhesive dispensing system consists of a hand-held, two-component adhesive dispenser, a dual-barrel cartridge and a disposable static mixer. Ideal for off-site repair and assembly. A durable, portable and well-balanced dispensing gun for production situations that do not require application of long beads of material. An easy, efficient and economical alternative to manual proportioning and mixing of half pints and quarts.

LORD-PAK CX 380ml adhesive dispensing system consists of a coaxial cartridge with an inner wall separating the two components, a manual dispensing gun, retaining nut and disposable static mixer. Ideal for field repairs. A pneumatic version for production situations is also available.

Catalog Number	Description			
LOR-GUN-50 LOR-GUN-CX	50ml Dispenser w/o Plunger <sup>(1)</sup> 380ml Dispenser			
LOR-PL-41	4:1 Ratio Plunger for 50ml Dispenser (2)			
LOR-TIP-50 LOR-TIP-CX LOR-TIP-CX38	50ml Disposable Static Mixing Tip 380ml Disposable 1/4" Static Mixing Tip 380ml 3/8" Disposable 9-1/2" Static Mixing Tip			
NOTE:				



#### **LORD ADHESIVES SELECTION GUIDE**

Lord adhesive products actually improve the structural dynamics of a product with a strong bond in less time and expense than with unsightly welds, bolts, rivets and other mechanical fasteners. Lord offers a full line of acrylic, epoxy, urethane and cyanoacrylate adhesives.

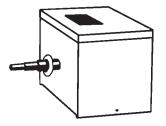
Product	Application	Working Time <sup>@72°F</sup>	Handling Time <sup>@72°F</sup>	Full Cure <sup>@72°F</sup>	Sag Resistance	Comments
403/19	All plastics and Unprepared Metals. Same as 403/19 w/Longer Work Time. Same as 406/19 w/Longer Work Time.	2 to 4 Minutes	6 to 8 Minutes	1 Hour	Excellent	Fast room temp. bond w/no surface prep.
406/19		6 to 10 Minutes	15 to 20 Minutes	4 Hours	Excellent	Longer work time that 403/19.
410/19		25 to 45 Minutes	1 to 2 Hours	8 to 10 Hours	Excellent	Longer work time that 406/19.
7542 A/B	Plastics, SMC, Prepared Metals, FRP, Foam	4 to 5 Minutes	1 to 2 Hours	8 to 10 Hours	Excellent	Odorless, nonflammable.
7550 A/C	Trimcap, Plastics and Non-structural Applications.	3 to 5 Minutes	15 to 30 Minutes	24 Hours	Self Leveling	Clear, odorless, flexible, nonflammable.
320	Signfoam, Ceramic, Primed Metal, Stone, Rubber.	30 to 60 Minutes	2 to 5 Hours	24 Hours	Excellent	Rubber to acrylic, heat resistant

# **CLOCK MOVEMENTS**

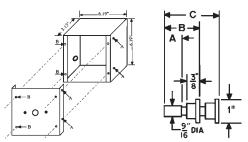
Designed for large dial outdoor clocks up to 48". The long arbor helps prevent shadows in illuminated signs or clocks. Manual set movements are set by manually moving the hands to the correct time. Remote set movements have a separate setting motor to move the hands fast forward which is activated by a remote momentary contact switch or the A970 indoor remote switch.  $110V \bullet 60$ Hz

The H200HUB set of hubs adapts your custom hands to the arbor shafts. Hands are available in several styles from American Time & Signal and when used, no hub set is necessary.

Catalog Number	Description	A	В	С
AME-H200M4 AME-H200R4	Manual Clock Movement Remote Clock Movement	4-1/2" 4-1/2"	3-3/4" 3-3/4"	3" 3"
AME-H200HUB AME-A970	Hub Set for H200 Movement Indoor Remote Set Switch	-	-	-







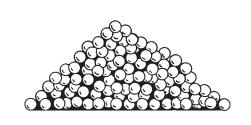
### **CRACKLE TUBE GLASS FILL**

Crackle tube neon creates a dynamic effect similar to fast arcs of electricity or lightning contained within the walls of the glass tube. Along with special pumping procedures, the glass fills described below are used inside the tube to obstruct the common flow of the electrical arc to create this striking effect.

ABS-GLASS consists of small broken pieces of 4mm O.D. thin-wall soda lime glass in varying 3/8" to 1" lengths. Full length sticks also available.

CG-1101-02 are 3mm O.D. solid borosilicate glass beads. Beads give a uniformed look to a crackle tube piece. 2mm through 6mm beads are available.

Catalog Number	Description	Put Up
ABS-GLASS CG-1101-02 (12,500)	4MM Glass Pieces 3MM Glass Beads	1 Lb. 1 Lb.





#### **EDGEMATE EDGING**

Edgemate edging is a .017 thick polyester laminate edging pre-coated with either a pressure sensitive or high speed heat-activated glue. Its durability makes it ideal for edges of boards that are subject to wear. Other edging styles, widths and colors available. Sold by the roll.

The EDG-Z1523 hand iron is also available for applying heat activated edging to smaller parts.

Catalog Number	Description	Color	Width (Inches)	Thickness (Inches)	Put Up		
EDG-D3160.50	Pressure Sensitive Edging	Black	1/2	.017	250'		
EDG-D3160-1	Pressure Sensitive Edging	Black	1	.017	250'		
EDG-D3170.50	Pressure Sensitive Edging	White	1/2	.017	250'		
EDG-D4160.50	Heat Activated Edging	Black	1/2	.017	333'		
EDG-D4160.75	Heat Activated Edging	Black	3/4	.017	333'		
EDG-D4160187	Heat Activated Edging	Black	3/16	.017	333'		
EDG-D4170.50	Heat Activated Edging	White	1/2	.017	333'		
EDG-D4170.75	Heat Activated Edging	White	3/4	.017	333'		
EDG-Z1523	Hand Iron Applocator for Heat Activated Edging						





KITCO



# **KITCO GLASS CUTTER**

A handy neon tubing cutter which makes its cut in 7 seconds. Ideal when making a number of cuts. It comes with cutting loops for 11mm, 12mm, 13mm, 15mm and 20mm glass. Will not leave rough edges as caused by dull files.

Catalog Number	Description
KIT-KGC	Electric Glass Cutter
KIT-KCH	Cutter Head Only
KIT-KWL-*	Replacement Loops, 5/Pkg.



**Ordering Information** 

KIT-KWL-\*: Substitute "\*" suffix with loop size desired.

Replacement loops available in the following sizes: 8mm, 9mm, 10mm, 11mm, 12mm, 13mm, 15mm, 18mm, 20mm and 25mm.

# **CORKS & RUBBER STOPPERS**

Corks are used to seal the ends of unused glass tubing. Stoppers are used to connect blow hose to glass tubing being formed.

Catalog Number	Description	Min. Order
EGL-9CORK	9mm Cork	100
EGL-10CORK	10mm Cork	100
EGL-12CORK	12mm Cork	100
EGL-13CORK	13mm Cork	100
EGL-15CORK	15mm Cork	100
LAB-R8151000	12mm Rubber Stopper, 1 Hole	1
LAB-R815100	15mm Rubber Stopper, 1 Hole	1
LAB-R81510	18mm Rubber Stopper, 1 Hole	1

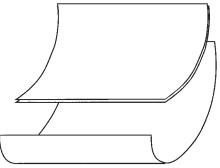


# **FLEXIBLE MAGNETIC SHEETING**

Magnum Magnetic flexible sheeting is durable and economical. It contains no plasticizers and will not dry out and crack. Due to a high intensity multi-pole magnetic arrangement, it produces superior holding power on most metallic surfaces. Die cutting and knife cutting produce clean results easily. These features make this product excellent for advertising specialties, automobile and architectural signage among many other uses. Suitable for outdoor use. Other sizes, colors and types available upon request.

Catalog Number	Dimensions	Color	Put Up
MAG-10M	24" x 10' x .030	Matte White	1 Roll
MAG-25M	24" x 25' x .030	Matte White	1 Roll
MAG-50M	24" x 50' x .030	Matte White	1 Roll
MAG-10G	24" x 10' x .030	Gloss White	1 Roll
MAG-25G	24" x 25' x .030	Gloss White	1 Roll
MAG-50G	24" x 50' x .030	Gloss White	1 Roll
MAG-10BLKM	24" x 10' x .030	Matte Black	1 Roll







EGL ELECTRODES
EGL electrodes have EGL electrodes have consistently raised industry standards for reliability and performance since the introduction in 1930. Along with the quality these electrodes are known for, there have been improvements made on various models such as; heavier gauge, solid nickel, corrosion-proof, seven-strand lead wires. Thicker tubulation walls for easier, stronger, tip-offs. Stronger inner lead wires are used to keep shell centered in the tube and reduce vibration. State-of-the-art inverter welding provides superior shell support and conductivity. After forming, shells receive proprietary nickel plating for uniform, non-porous coverage. Electrodes are fully annealed to relieve stress, preventing cracking. Thicker shell walls heat up evenly, eliminating hot spots promoting uniform conversion of emission coating. Newly developed emission coating is measured precisely for each shell ensuring that all shells "come up" evenly during bombardment. EGL electrodes also feature a patented ceramic collar which centers the shell in the tube, eliminating side ignition, sputtering and blackening. 100% American made.

Catalog	Number	Glass Dim	ensions	Shell Dime	ensions	mA	Notes	Reference
Non-Tubulated	Tubulated	Diameter	Length	Diameter	Length	Rating		Catalog Number
07-DL	T07-DL	8mm	1.25"	3/16"	3/8"	20	NM	8S
07-DL-MICA	T07-DL-MICA	8mm	1.25"	3/16"	3/8"	20	-	07-DL-MICA
12C-DS	T12C-DS	10mm	2"	1/4"	3/4"	20-30	-	105
9CMCPR-DS	T9CMCPR-DS	12mm	2"	5/16"	3/4"	30	C, NM	12CM
9C-DS	T9C-DS	12mm	2.5"	5/16"	1-1/16"	30	-	12L
13SHORT-DS	T13SHORT-DS	13mm	2"	3/8"	9/16"	30	-	13S
9CCPR-DS	T9CCPR-DS	13mm	2.5"	5/16"	1-1/16"	30-45	C, NM	13CL
8CCSPR-DS	T8CCSPR-DS	15mm	2"	3/8"	9/16"	30-45	C	15CS
8CMCPR-DS	T8CMCPR-DS	15mm	2.375"	3/8"	1"	30-60	C, NM	15CM
15CL	T15CL	15mm	2.875"	3/8"	1-1/4"	80	C, NM	15CL
15CL-25/8	T15CL-25/8	15mm	2.625"	3/8"	1-1/4"	80	C, NM	15CL-25/8
19CC-DS	T19CC-DS	19mm	2.875"	1/2"	1-1/4"	120-180	(	19CM
19LCC-DS	T19LCC-DS	19mm	3.125"	1/2"	1-9/16"	200	(	19CL
HIMA800-DS	THIMA800-DS	19mm	2.875"	1/2"	7/8"	300-600	*	HIMA800-DS
NOTE: C = Cer	NOTE: C = Ceramic Collar NM = No Mica * = H0 Coil							





# MASONLITE ELECTRODES

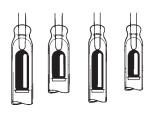
MASQUITE

In order to achieve the highest quality. Masonlite electrodes are deep drawn from pure soft iron and nickel plated in a dedicated plant for quality control and to prevent contamination. Follwing the plating, shells are heated to high temperatures in a vacuum chamber to remove any additional gasses or volatile contaminants which may have been trapped in the metal. Without this process, impurities could remain in the shell which could shorten the life of the tube. The lead wires are high auglity stranded nickel for added flexibility and corrosion resistance.

Masonlite Quicksilver™ electrodes eliminate the need for free mercury in the workroom. The consistent dose is encapsulated in the electrode, no special handling required. Treat the electrode as a conventional non-tubulated electrode. Weld on the tube and process as normal. Mercury is dispensed into tube at the end of the pumping/bombarding process. The tube can be sealed off and moved to the ageing table before the mercury is dispensed thus improving productivity. Dispense when convenient, even days later. All that is required to release the mercury into the tube is a transformer of 60 mA.

When using QuickSilver™ electrodes, use the same type of standard Masonlite tubulated electrode to complete the pair.

Non-Tubulated Catalog Number	Tubulated Catalog Number	Quicksilver Catalog Number	Glass Dimen Diameter	sions Length	mA Rating	Notes
MAS-8/15	MAS-8/15T	-	8mm	1-5/8"	10-20	SS
MAS-10/20C	MAS-10/20CT	-	10mm	2"	15-25	С
MAS-12/30C	MAS-12/30CT	-	12mm	2-1/2"	25-50	С
MAS-13/25C MAS-13/30C	MAS-13/25CT MAS-13/30CT	MAS-13/25CQ MAS-13/30CQ	13mm 13mm	2-1/4" 2-1/2"	20-30 25-50	C
MAS-15/30C MAS-15/50C	MAS-15/30CT MAS-15/50CT	MAS-15/30CQ MAS-15/50CQ	15mm 15mm	2-3/8" 2-3/4"	25-50 50-90	C
MAS-18/90C MAS-18/100C MAS-18/120C MAS-18/250C	MAS-18/90CT MAS-18/100CT MAS-18/120CT MAS-18/250CT	MAS-18/100CQ MAS-18/120CQ	18mm 18mm 18mm 18mm	2-1/4" 2-5/8" 3" 3-1/2"	80-100 90-120 100-180 180-250	( ( (
NOTE: C = Cerar	nic Collar SS = Stair	nless Steel Shell NM =	= No Mica			



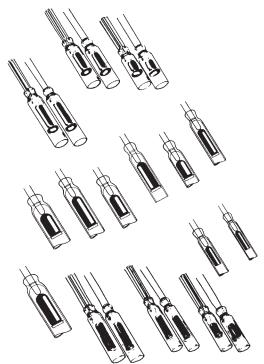




# **ELECTRODE CROSS REFERENCE INDEX**

Eurocom Part Number	EGL Part Number	Masonlite Part Number	Voltarc Part Number
T dir Nomboi			Turr Nombor
-	07-DL-MICA	8/15	-
-	12C-DS	10/20	10V20
50R	9CCPR-DS	12/30C or 13/30C	13V30
30R	9CMCPR-DS	13/25C	13SV3021/4
-	8CS-DS	15/25	-
45R	8CMCPR-DS	15/30C	15V45
-	8C-DS	15/50	-
80R	15CL	15/50C	15V80
75R	3CS-DS	18/60C	-
150R	19CC-DS	18/120C	19V120
250R	19LCC-DS	18/250C	-
120R	-	18/100C	-

NOTE: For tubulated: Eurocom add suffix "P", EGL add prefix "T", Masonlite add suffix "T", Voltarc add suffix "T".



# GTO CABLE (4)

GTO is gas tube sign and oil burner ignition cable up to 15,000 volts. GTO15PAI-10 gray Mini SuperFlex is pliable and strips easily. GTO15-SLVX eliminates the need for GTO sleeving or covering in neon installations due to a built-in integral sleeve design. Packaged in dispenser boxes. GTO10TEC and GTO15TEC is an extremely flexible, durable and reliable GTO cable suitable for any installation including metallic conduit. It is impervious to UV, ozone and sunlight with a life-span of 20 years or more. Packaged on reels.



Catalog Number	Trade Name	Max Temp °C	Color	Wire Gauge AWG	Rating Volts	Mfgr.	O.D. Inches	Put Up	Min. Order
GTO15PAI-OP	Tuf-Hide Noodle Flex	105	Black	14	15,000	Paige	.243	250'	50'
GTO15PAI-10	Mini SuperFlex	105	Gray	14	15,000	Paige	.250	250'	50'
GTO15TECW250	Silitherm Silicone	150	White <sup>(1)</sup>	14	15,000	Tecnolux	.350	250'	250' Roll <sup>(2)</sup>
GTO10PAI-01	Tuf-Hide	105	Black	18	10,000	Paige	.180	250'	250'
GTO10TECW250	Silitherm Silicone	150	White <sup>(1)</sup>	18	10,000	Tecnolux	.290	250'	250' Roll <sup>(2)</sup>
GT015WES-01	Hi-Flex	105	Black	14	15,000	Westrim	.245	250'	50'
GT015WES-02	Hi-Flex	105	White	14	15,000	Westrim	.245	250'	50'
GT015WES-10	Hi-Flex	105	Gray	14	15,000	Westrim	.245	250'	50'
GTO15SLVX-01	Sleeve-X	105	Black	14	15,000	Paige	.230	150'	150' Roll
GTO15SLVX-02	Sleeve-X	105	White	14	15,000	Paige	.230	150'	150' Roll
GTO15SLVX-10	Sleeve-X	105	Gray	14	15,000	Paige	.230	150'	150' Roll
NOTE: (1) Also av	ailable in Black and Gray. C	ustom colors avail	able with quantit	y orders. (2) Also	available in 100	' reels.			

# **BARE COPPER WIRE • TIE WIRE**

22BARE-1/22BARE-9 sold by the pound, 12BARE-500 by the foot. 1 spool min.

Catalog	Description	Wire Gauge	Put
Number		AWG	Up
22BARE-1	Soft Bare Solid Copper Wire	22	1 Lb. Spool
22BARE-9	Soft Bare Solid Copper Wire	22	9 Lb. Spool
12BARE-500	Solid Copper Bond Wire	12	500' Spool



# **NEON GAS • 99.999% PURE**

Excellent for clear red units or for coated tubing.

Catalog Number	Description	Volume (Liters)	Container Type	Mfg.
EGL-NEON VOL-NEON EGL-NEON-2.6 VOL-NEON-2.6 EGL-NEON-25	Neon Neon Neon Neon Neon	1.25 0.8 2.65 2.6 25	Glass Glass Glass Glass Disposable Tank	EGL Voltarc EGL Voltarc EGL
TRA-94100	Neon	100	Tank	Transco

# **ARGON GAS • 99.999% PURE**

For low-voltage fluorescent tubes and fluorescent lamps. Mercury required. Not recommended for outdoor use.

Catalog Number	Description	Volume (Liters)	Container Type	Mfg.
EGL-ARGON	Argon	1.25	Glass	EGL
VOL-ARGON	Argon	0.8	Glass	Voltarc
VOL-ARGON-2.6	Argon	2.6	Glass	Voltarc
EGL-ARGON-25	Argon	25	Disposable Tank	EGL
TRA-93999	Argon	100	Tank	Transco

#### **BLUE GAS • 99.999% PURE**

For warmer climates. Used in clear or fluorescent-coated tubing with added mercury.

Catalog Number	Description	Volume (Liters)	Container Type	Mfg.
EGL-BLUE	Blue	1.25	Glass	EGL
VOL-1050	Blue	0.8	Glass	Voltarc
EGL-BLUE-2.6	Blue	2.65	Glass	EGL
VOL-1050-2.6	Blue	2.6	Glass	Voltarc
EGL-BLUE-25	Blue	25	Disposable Tank	EGL

# **COLD WEATHER GAS • 99.999% PURE**

Best for all weather applications, from sub-zero to tropical regions. The higher percentage of neon provides the heat necessary to completely vaporize mercury under cold weather conditions. Mercury required.

Catalog Number	Description	Volume (Liters)	Container Type	Mfg.
EGL-K4	Blue	1.25	Glass	EGL
VOL-1051	Blue	0.8	Glass	Voltarc
EGL-K4-2.6	Blue	2.65	Glass	EGL
VOL-1051-2.6	Blue	2.6	Glass	Voltarc
EGL-K4-25	Blue	25	Disposable Tank	EGL

#### **SPECIALTY GAS • 99.999% PURE**

Catalog Number	Description	Volume (Liters)	Container Type	Mfg.
VOL-HELIUM	Helium	0.8	Glass	Voltarc
VOL-HELIUM-2.6	Helium	2.6	Glass	Voltarc
EGL-HELIUM-25	Helium	25	Disposable Tank	EGL
EGL-KRYPTON	Krypton	1.25	Glass	EGL
EGL-XENON	Xenon	1.25	Glass	EGL





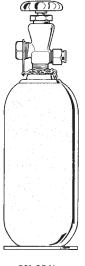








.8/1.25 Liter Glass Flask



EGL 25 Liter Metal Tank



EGL 2.65 Liter Glass Flask

HELIUM: For clear glass tubes, giving a pale flesh-pink color or when using noviol-coated tubing, a warm gold tone. Must be used at a lower pressure than normal (4-6mm typically).

KRYPTON: In coated glass, Krypton (Kr) has much the same effect as Argon. In clear glass, the color could be best described as pale platinum. Should not be filled to pressures higher than 12mm because of the tendency to develop linear discharge.

XENON: Xenon (Xe) is similar to Krypton in color, but principally used in special effects for liner discharge or for high-pressure flash tubes. This is a relatively high-resistance gas.



#### **GASES FOR SPECIALTY SYSTEMS**

**TECHO UX** Townsend

Tecnolux 12 liter aluminum gas cylinders are fully compatible with Eurocom and other European gas transfer systems at an economical price. Cylinders are disposable and require no deposit. A wide variety of gasses are available.

Townsend 8 liter gas cylinders fit all gas transfer systems on Townsend manifolds only.

Catalog Number	Description	Volume (Liters)	Container Type	Mfg.	
TEC-NEON-12	Neon	12	Disposable Tank	Tecnolux	
TEC-ARGON-12	Argon	12	Disposable Tank	Tecnolux	
TEC-H-12	H Gas <sup>(1)</sup>	12	Disposable Tank	Tecnolux	
TEC-80/20-12	80% Argon/20% Neon	12	Disposable Tank	Tecnolux	
TOW-NEON-8	Neon	8	Cylinder	Townsend	
TOW-BLUE-8	Argon/Neon Mix	8	Cylinder	Townsend	
<b>NOTE:</b> (1) 75% Neo	NOTE: (1) 75% Neon/25% Argon, cold weather mix.				



**Tecnolux Gas Cylinders** 

# **GAS TRANSFER SYSTEMS**



In assembling a totally integrated neon fabrication facility, a gas transfer system is a key element. Simply eliminating system shutdowns for flask replacements will justify investing in a system. Gas bottled in cylinders maintains its highest purity. Liter for liter, costs are reduced by purchasing gas in bulk. Since the tanks are capable of being filled to a much higher pressure than glass flasks, 100% of the gas volume will be used rather than approximately 80% when utilizing glass flasks. Once a system is installed, no gas losses are incurred when changing glass flasks with small, immeasurable volumes of remaining gases. No labor charges are incurred for the time taken to change replacement flasks. For example, one 25 liter cylinder will eliminate 25 bottle changes. A system can hold 100% of its gases indefinitely, unlike alass stopcocks which cannot prevent seepage for long periods of time.

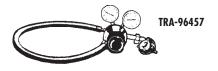
**TRANSCO SYSTEM:** The heart of the Transco gas transfer system, TRA-96457 is the model HPT two-stage cylinder regulator. These high purity 2-stage regulators are recommended for noncorrosive pure gases and mixtures in applications where constant delivery pressures regardless of fluctuations in tank pressure is required. The materials of construction will not contaminate the gas stream and the regulators are highly resistant to inboard diffusion of atmospheric contaminants. A diffusion resistant diaphragm valve is installed in the outlet. These regulators are recommended for the control of high purity carrier gases and are able to withstand vacuums generated during purging operations. The regulator connects to the manifold system via a 30" stainless steel flex bellows hose, glass adaptor flange, centering O-ring and clamp. This system can be purchased to be used with EGL 25 liter gas tanks (CGA 540) or Transco 100 liter gas tanks (CGA 580). Please specify at time of ordering.

**EGL SYSTEM:** The installation and use of the EGL custom-made gas transfer system provides uninterrupted flow of pure gasses. This system employs a precisionmade filling valve which eliminates the use of two glass stopcocks and is virtually maintenance-free. Clean gas flow is guaranteed as compared to the old double-stopcock system which requires constant lubrication and occasionally invites leakage of air into the glass flasks. No entrapped grease vapors are automatically pushed into the neon tubes when glass stopcocks are used. Made with stainless steel hardware and tubing.

TECNOLUX SYSTEM: The TEC-GA102 is an economical and easy to use transfer system for 12 liter cylinders. Its adapter screws onto the cylinder and fits into the compression fitting adapter, TEC-CFA-01, a two-sided glass and o-ring compression fitting or can also be attached to 6mm tubing on manifold using supplied Viton tubing. Each unit is helium leak tested. Cylinder clamp and mounting hardware included. Ideal for making connections between gas transfer system Bellows hose, manifold and/or neon units. TEC-BH-12 is a 12" PTFE Teflon Bellows hose which is ideal for making flexible connections between manifold and gas transfer system or between manifold and neon units. Can be used anywhere a small, flexible, high-vacuum connection is needed. TEC-CFC is a Teflon compression fitting cap which eliminates the risks of meltina compression fittina caps when tippina off from bellows hose or manifold. CFC caps are rated for 500°F continuous use and make ideal fittings for attaching neon units to compression fittings.

Catalog Number	Description	Mfg.
TRA-96457	"HPT" Regulator Kit for 1 Tank	Transco
EGL-GTS	Gas Transfer System for 1 Tank	EGL
TEC-GA102	Gas Metering Valve assembly w/HD Mounting Clamp for 1 Tank	Tecnolux
TEC-CFA-01	Compression Fitting Adapter	Tecnolux
TEC-BH-12	12" Bellows Hose, Teflon	Tecnolux
TEC-CFC	Teflon Compression Fitting Cap	Tecnolux





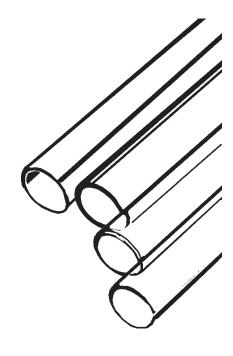


FGI-GTS Shown attached to an EGL 25 liter tank (sold separately)

# **CLEAR LEAD GLASS TUBING**

Clear lead glass tubing is pre-straightened and annealed. Tote Pack is sold in bulk packaging (one pack minimum order). Heavy wall glass is normally used as follows; 15HW for sleeving GTO cable, 19HW for sleeving 12mm electrodes and 24HW for sleeving 15mm electrodes. Sold by the pound in 4' lengths.

Catalog	Size	ft./lb.	Weight/Case
Number	O.D.		(Lbs.)
CLR-5 CLR-6 CLR-7 CLR-8 CLR-9 CLR-10 CLR-12 CLR-13 CLR-15 CLR-15 CLR-20 CLR-25	5mm 6mm 7mm 8mm 9mm 10mm 12mm 13mm 15mm 18mm 20mm	37 25 19 18 16 14 11 10 9 7 6	50 50 50 50 50 50 50 50 40 35
CLR-9-TOTE CLR-10-TOTE CLR-12-TOTE CLR-13-TOTE CLR-15-TOTE CLR-15-HW CLR-19HW CLR-24HW	9mm in Tote Pack	16	1250 Approx.
	10mm in Tote Pack	19	1150 Approx.
	12mm in Tote Pack	11	1000 Approx.
	13mm in Tote Pack	10	1350 Approx.
	15mm in Tote Pack	9	1150 Approx.
	15mm Heavy Wall	4	50
	19mm Heavy Wall	4	40
	24mm Heavy Wall	3	30



#### **CLEAR LEAD-FREE GLASS TUBING**

Lead-free glass tubing is a new alternative to lead glass tubing. Works easily by itself and splices well with lead glass tubing. Sold by the pound in 59" (5') lengths.

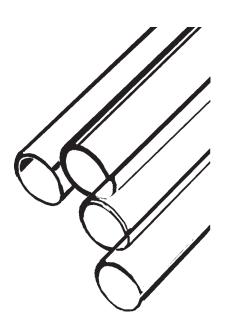
Tec-Tube is a lead-free tubulation glass with a wider 0.D. (5.75mm) than typical tubulation glass. Available in 4.37" lengths with fire polished ends. Sold by the pound. 2460 pieces per box.

Catalog	Size	ft./lb.	Weight/Case
Number	O.D.		(Lbs.)
TEC-CLRLF-10	10mm	15.93	50
TEC-CLRLF-12	12mm	12.98	50
TEC-CLRLF-13	13mm	12	50
TEC-CLRLF-15	15mm	10.23	50
TEC-TUBE	5.75mm	-	28

# **GLASS TUBING DATA COMPARISON**

Viscosity	Lead SG10	Lead-Free Barium Strontium Glass		
Strain Point Annealing Point Softening Point Working Point	392°C 432°C ± 5°C 635°C ± 5°C 985°C	455°C ± 5°C 490°C ± 5°C 675°C ± 10°C 1020°C ± 10°C		
Thermal Expansion	Lead SG10	Lead-Free Barium Strontium Glass		
Linear Expansion Coefficient (1)	9.2°C ± 1.7°C	9.25°C ± 0.10°C		
NOTE: (1) Measured 25°C to 300°C				







#### **VOLTARC COATED GLASS SIGN TUBING**

Voltarc Technologies proprietary Color Guard™ process insures uniform coating thickness along the length of the tube as well as batch-to-batch color consistency. Exacting quality control checks in each phase of production guarantees quality and reliability for which Voltarc has been renowned.

Single coated (standard) lead glass tubing is available in a wide range of colors. Double coated tubing was originated to provide the richest, deepest shades of color obtainable. It is best used for borders and sweeping curves where the brilliance of color can create an attention getting and dynamic contrast with other sign elements. Tight bends are not recommended because bends can cause the coating to "thin-out" at these points.

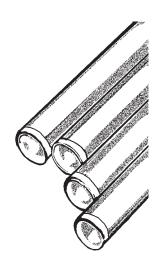
Catalog Number	Color Name	Color w/Argon/Mercury	Color w/Neon
Accent Tri-Phosphor Whites VOL-INCAN-* VOL-AV-* VOL-A30-* VOL-A35-* VOL-SL65-* VOL-ARWH-*	Accent Incandescent Accent Vanilla Accent 30 Accent 35 Starlite Tri6500 Artic White 8300	2400° CRI: 76.5 2800° CRI: 84 3000° CRI: 84 3500° CRI: 85 6500° CRI: 84 8300° CRI: 85.5	Pink (1)
Whites VOL-8300-* VOL-6500-* VOL-4500-* VOL-3500-* VOL-3000-* VOL-PINK-*	8300 Bright White 6500 Snow White 4500 White 3500 White 3000 White Pink White	Brightest Bluest White Snow White Cool White Warm Tone Warm White Pink White	Bright Tangerine Tangerine Tangerine Tangerine Tangerine Tangerine Pale Orange (1)
Standard Colors VOL-GREEN-* VOL-AQUA-* VOL-TURQ-* VOL-LAVNDR* VOL-PURP-* VOL-MCROSE* VOL-BLUE-* VOL-TEAL-* VOL-ULTBL-* VOL-SPKBL-* VOL-PP-*	Green Aquamarine Turquoise Lavender Purple Mercury Rose Blue Teal Ultra Blue Sparkling Blue Paradise Pink	Green Rich Blue Green Turquoise Lavender Purple Bright Rose Blue Teal Bright Blue Brightest Blue (5)	Amber Deep Peach Peach Mandarin Orange Magenta (1) Rose Light Peach Bright Rose Soft Rose Pink (1)
Double Coated Colors (4) VOL-NEOBL-* VOL-NEORBY-* VOL-CLGD2-* VOL-VEPGRN* VOL-CLBRYL* VOL-MAJGD-* VOL-MAJOR-*	Neo Blue Neo Ruby Clear Gold II Veep Green Clear Brite Yellow Majestic Gold Majestic Orange	Deep Blue Violet Gold Lime Green Bright Yellow Egg Yolk Yellow Rich Citrus Orange	Mauve Ruby Amber Yellow-Orange Bright Orange
Specialty VOL-BLKBL-15 (2) VOL-SDI-* (3) VOL-H5100-* VOL-RDRD-* (3)	Blacklight Blue SDI HI-5100 Red Red	Blacklight Blue Reprographic Blue Design White Red	- (1) Tangerine Red

**NOTE:** (1) Not recommended (2) Available in 15mm only, sold by the stick (3) Limited availability (4) Tight bends are not recommended (5) Resists mercury staining

Whites are listed in order from coolest (bluish) to warmest (pinkish) when using argon/mercury. Whites are listed in order from brightest orange to palest orange when using neon.

Accent Tri-Phosphor series coated tubing provides high lumen output with superior lumen maintenance and color rendering. Accent incandescent provides the warmest golden color that lighting designers and specifiers are looking for. Accent Vanilla achieves custom architectural cold cathode light with a previously unattainable, soft "incandescent look" and superior color rendering by comparison to ordinary cold cathode or fluorescent tubes. Accent 30 is the ultimate warm white for sign and lighting applications. Truly a warm, long lasting tri-phosphor blend. Accent 35 is a perfect mid-range warm white specially formulated to achieve a color with just the right MIS of color rendering brightness and warmth. Starlight TRI6500 was designed with a 6500° Kelvin temperature that has become the standard of high performance illumination phosphors. Arctic White 8300 is the bluest of the triphosphor whites. Perfect for sign and channel letter illumination when the intention is to accent bright blue white light. 8' lengths also available in 18, 20 and 25mm diameters.

Sold by the pound in 4' lengths.



#### **Ordering Information**

Items with "\*" suffix indicates O.D., substitute mm size desired.

Most colors available in 8mm to 25mm diameter.

Colors typically stocked in 10, 12, 13 and 15mm diameter.

Some colors stocked in 8, 9 and 18mm diameter.

#### **VOLTARC PACKAGING & FOOTAGE CHART**

	5mm	8mm	9mm	10mm	Diameter 11mm	12mm	13mm	15mm	18mm	20mm	25mm
Feet Per Pound	-	18.2	16	14.2	12.2	11.3	10.5	8.5	7.3	6.3	4.8
Pounds Per Case	25	25	25	25	25	25	25	25	20	19	15

#### **EGL COATED GLASS SIGN TUBING**



EGL's proprietary phosphor coatings dramatically improve adhesion, uniformity, brightness and color stability. This coating virtually eliminates flaking, color wash-out and darkening of bends and splices even in shades of blue. All tubing is individually straightened, fire-polished, washed and dried using EGL's special Sani-Dry™ process to eliminate residue contamination. It is then coated, baked and annealed, reducing glass stress and strain.

Single coated (standard) lead glass tubing is available in a wide range of colors. Double coated tubing was originated to provide the richest, deepest shades of color obtainable. It is best used for borders and sweeping curves where the brilliance of color can create an attention getting and dynamic contrast with other sign elements. Tight bends are not recommended for double coated tubing because tight bends can cause the coating to "thin-out" at these points.

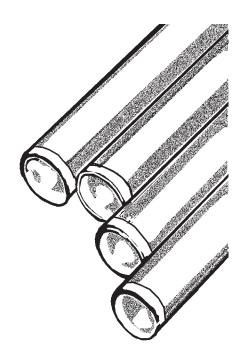
C.L. Designer Series coated tubing is a glass tubing for neon fabrication specifically designed to produce superior illumination in channel letters. Breakthrough research in phosphor development has revealed "rare-earth" chemicals. This discovery led to the creation of phosphor coatings which emit extremely narrow bands of light. EGL has combined rare-earth technology with experience formulating high-performance phosphor coatings. The result is a new generation of exotic neon colors simply called Rare-earths and a line of high-output whites called C.L. Designer Series. C.L. Designer and Rare-earth tubing deliver unprecedented intensity and durability. They provide the perfect light source for channel letter illumination where plastic faces can reduce the light output of standard tubing by as much as 60%. Neon and cold cathode tubes made with C.L. Designer and Rare-earth tubing resist staining and output depreciation over the long-term as well as exhibit exceptional color stability.

Sold by the pound in 4' lengths.

Catalog Number	Color Name	Color w/Argon/Mercury	Color w/Neon
High Output Tri-Phosphor WI EGL-CL24-* EGL-CL30-* EGL-CL35-* EGL-CL41-* EGL-CL45-* EGL-CL65-* EGL-CL71-* EGL-CL83-*	c.L. Designer 24 C.L. Designer 28 C.L. Designer 30 C.L. Designer 35 C.L. Designer 41 C.L. Designer 45 C.L. Designer 45 C.L. Designer 45 C.L. Designer 47 C.L. Designer 83	Produces colors in order from warmest (pinkish) to coolest (bluish).	
Whites EGL-6500H-* EGL-6500-* EGL-4500-* EGL-V4500-* EGL-3500-* EGL-E3000-* EGL-H37-*	6500 HO 6500 Snow White 4500 White V4500 White 3500 White Warm White Pink	Produces colors in order from coolest (bluish) to warmest (pinkish).	Produces colors in varying shades of pink.
Standard Colors EGL-GREEN-* EGL-E2O-* EGL-AQUA-* EGL-SECRS-* EGL-AZURE-* EGL-VIOLET* EGL-PURP-* EGL-CORPK-* EGL-FLMGO-* EGL-BLUE-* EGL-HORBL-* EGL-TRGRN-*	Green E20 Turquoise E21 Aqua E12 Turquoise Seacrest Azure Violet II (5) Purple Coral Pink Flamingo Blue Horizon Blue Tropic Green	Green Bluish Turquoise Turquoise Greenish Turquoise Saturated Bluish Green Saturated Greenish Blue Bluish Purple Purple Pink Saturated Magenta Blue Vibrant Blue (2) Vivid Green	Amber Peach Pink Peach Peach Saturated Orange Saturated Orange Hot Pink (1) Hot Pink (1) Rose Saturated Orange Rose Rose (1) Orange
Double Coated Colors (4)  EGL-NEOBL-*  EGL-CLGD3-*	Neo Blue II Clear Gold III	Deep Blue Golden Yellow	Mauve Tangerine

# **Ordering Information**

Items with "\*" suffix indicates O.D., substitute mm size desired. Most colors available in 7mm to 18mm diameter. Colors typically stocked in 10, 12, 13 and 15mm diameter.



#### **EGL PACKAGING & FOOTAGE CHART**

	Diameter							
	8mm	9mm	10mm	11mm	12mm	13mm	15mm	18mm
Average Feet Per Pound	18	16	13	12	11	10	8.5	7.1
Pounds Per Case	25	25	25	25	25	25	25	20

(4) Tight bends are not recommended (5) Matches Voltarc Purple.

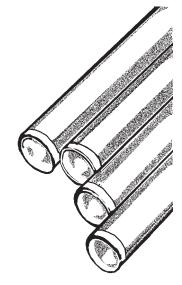


# **TECNOLUX COATED GLASS SIGN TUBING**

Interstate Electric is an authorized distributor for Tecnolux Ultra Clean™ coated tubing. Made with lead-free glass. Sold by the pound in 59" (5') lengths. Stocked in limited sizes and in vibrant colors such as:

.#4 (a tri-phosphor color)
.#8
.#9
.#10
.#11
.#12
.#13
.#14
.#15
.#23
.#24
.#29
.#31
.#39
.#99

Other colors and sizes available upon request.

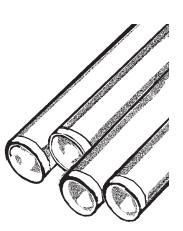


# <u>Jecro Lyx</u>

MASQUITE

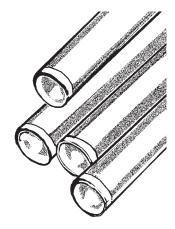
# **MASONLITE COATED GLASS SIGN TUBING**

Interstate Electric is an authorized distributor for Masonlite tubing. Selected colors stocked, other colors available upon request.



# FMS "BRILLITE" COATED GLASS SIGN TUBING

Interstate Electric is an authorized distributor for Brillite tubing. Selected colors stocked, other colors available upon request.





#### TECNOLUX MACHINE-DRAWN COLORED GLASS TUBING

Tecnolux

Neon signs made with Tecnolux colored glass tubing make a powerful impact. Made in Venice, Italy, the phosphors used in coated versions consist of the highest quality blends and in certain cases, "rare earth" phosphors. Each tube of coated glass is individually sealed to preserve the purity of the phosphors. State-of-the-art equipment creates a uniformity in color and dimensions that cannot be achieved by manual production. Tube ends are fire-polished. Glass is sturdy but pliable under heating conditions and specially prepared to reduce stress and breakage. Sold by the 59" (5') stick.

Catalog Number	Color	Color Number	Note		
TEC-RR-C-* TEC-RA-* TEC-RR-UC-*	Ruby Red Neon, Coated Ruby Red Argon, Coated Ruby Red, Un-Coated	118 18 118U	1 2		
TEC-NG-C-*	Novial Gold, Coated	17			
TEC-NG117-*	Gold, Coated	117			
TEC-LY-*	Lemon Yellow, Coated	32			
TEC-NG-UC-*	Novial Gold, Un-Coated	17U			
TEC-CB-C-*	Cobalt Blue, Coated	16	3		
TEC-CB-UC-*	Cobalt Blue, Un-Coated	16U			
TEC-PUR-C-*	Purple, Coated	22			
TEC-EG-C-*	Emerald Green, Coated	35			
TEC-EG-UC-*	Emerald Green, Un-Coated	35U			
TEC-CO-C-*	Citrus Orange, Coated	26			
TEC-CO-UC-*	Citrus Orange, Un-Coated	26U			
TEC-AM-C-*	Aquamarine, Coated	38			
TEC-AM-UC-*	Aquamarine, Un-Coated	38U			
TEC-LG-C-* TEC-LG-UC-*					
TEC-BLKBL-*	Blacklight Blue, Coated	19	4		
NOTE: (1) Should be used with Neon Gas. (2) Should be used with Argon/Mercury.					

(3) Cobalt Blue glass coated Purple. (4) Also available un-coated.

#### **Ordering Information**

Items with "\*" suffix indicates O.D., substitute mm size desired.

Available in 6mm to 25mm diameter.

Colors typically stocked in 6mm through 15mm diameters.



# TECNOLUX PACKAGING, FOOTAGE & WEIGHTS

Diameter (mm)	Approx. Wt. (Lbs.)	Wall Thickness (mm)	Feet Per Pound	Tubes Per Box
20	0.640	1.25	7.60	17
18	0.572	1.25	8.50	19
15	0.470	1.25	10.73	24
13	0.401	1.25	11.00	28
12	0.367	1.25	13.41	30
10	0.299	1.25	16.54	37
9	0.265	1.25	19.09	42
8	0.231	1.25	21.46	48
6	0.137	1.00	36.21	81

#### EGL ACCUWALL MACHINE-DRAWN COLORED GLASS TUBING



Accuwall machine-drawn colored glass tubing opens a new world of design freedom with "classic" vibrant colors. Accuwall tubings consistent wall thickness and outside diameter combined with uniform color make it predictable in every way. You can bend and process the sturdiest and most vivid signage your customers have ever seen in far less time with far less breakage. Available uncoated or coated with EGL's own "rare earth" phosphors. All have fire-polished ends. Sold by the pound in 5' lengths.

Catalog Number	Color	Note
AW-RR-C-* AW-RR-UC-*	Ruby Red, Coated Ruby Red, Uncoated	
AW-NGE50-C-* AW-NGP73-C-* AW-NGS81-C-* AW-CG-* AW-NG-UC-* AW-AG-*	Novial Gold E50, Coated Novial Gold P73, Coated Novial Gold S81, Coated Casino Gold E60, Coated Novial Gold, Uncoated Apple Green, Coated	1
AW-BB-C-* AW-BB-UC-* AW-PUR-C-* AW-RP-*	Bromo Blue, Coated Bromo Blue, Uncoated Purple, Coated Royal Purple, Coated	2 2
AW-EG-C-*	New Emerald Green, Coated	3
AW-OR-C-* AW-TANG-*	Orange, Coated Tangerine, Coated	3 4
AW-AM-C-* AW-AM-UC-*	Aquamarine, Coated Aquamarine, Uncoated	

**NOTE:** (1) Novial Gold glass coated Apple Green.

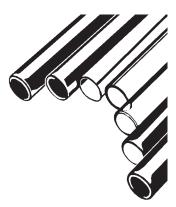
- (2) Bromo Blue glass coated Purple.
- (3) No longer available uncoated.
- (4) Orange glass coated Tangerine.

### **Ordering Information**

Items with "\*" suffix indicates O.D., substitute mm size desired.

Packed in 10 pound cartons.

Colors typically stocked in 10mm, 12mm and 15mm diameters.



#### **ACCUWALL PACKAGING & FOOTAGE CHART**

	10mm	Diameter 12mm	15mm
Average Feet Per Pound	16	14	10



#### **EGL 8' COLD CATHODE LAMP TUBING**

Large diameter glass available in 18, 20 and 25mm diameters, 8' in length. EGL manufactures cold cathode tubing in a variety of colors from tri-phosphor whites to the classic colors they've made for years. Custom color blending is available. Rush orders are usually accepted and delivered in a timely manner. Sold by the stick.

Shown are just a few colors typically requested by customers. Other colors available upon request in case quantity.

Catalog	Color	Qty.		
Number	Name	Per Case		
EGL-2400-825	2400°K White (1)	24		
EGL-2800-825	2800°K White (1)	24		
EGL-3KTC-825	3000°K White (1)	24		
EGL-4100-825	4100°K White (1)	24		
EGL-65K-825	6500°K White (1)	24		
EGL-WW-825	3000 Warm White	24		
EGL-3500-825	3500 White	24		
EGL-4500-825	4500 White	24		
EGL-6500-825	6500 Snowhite	24		
EGL-E40-825	Blue	24		
EGL-HORBL825	Horizon Blue	24		
NOTE:				

# TECNOLUX 8' COLD CATHODE LAMP TUBING

Large diameter glass available in 18, 20 and 25mm diameters in 8' or 10' lengths (actual length of 10' is 118"). Available in colors from tri-phosphor whites to more vibrant colors. Custom colors can be made. Sold by the stick.

Shown are just a few colors typically requested by customers. Other colors available upon request in case quantity.

Catalog	Color	Qty.		
Number	Name	Per Case		
TEC-WT-825	Warmtone #4 <sup>(1)</sup>	28		
TEC-INCND825	Incandescent White #31 <sup>(1)</sup>	28		
TEC-3KTP-825	3000 White #7 <sup>(1)</sup>	28		
TEC-WW-825	Warm White #44	28		
TEC-SB-825	Super Blue #12	28		
TEC-TLG-825	Traffic Light Green #39	28		
TEC-VIOLET825	Violet #15	28		
NOTE:				

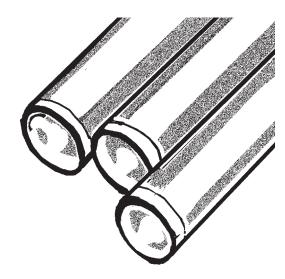
#### **VOLTARC 8' COLD CATHODE LAMP TUBING**

Large diameter glass available in 18, 20 and 25mm diameters, 8' in length. Occasionally available in 6' and 10' lengths (actual length of 10' is 3 meters). Custom color blending is available. Sold by the stick.

Shown are just a few colors typically requested by customers. Other colors available upon request in case quantity.

Catalog	Color	Qty.
Number	Name	Per Case
VOL-3000-825	3000 Warm White	24
VOL-3500-825	3500 White	24
VOL-4500-825	4500 White	24







#### **COLOR SPECIFICATIONS**

Color	Color Rendering Index	Color Point on CIE Chromaticity Diagram	Lumens Per Foot	
Warmtone 2800 K Tri-Phosphor #4 (Incandescent Replacement)	85	X=0.466, Y=0.408	466	
3000 K Tri-Phosphor #7 (Halogen Replacement)	85	X=0.450, Y=0.416	424	
Lumens = Lumens per foot @ 120mA. Short circuit - 100 mA. Operating current @ 20mm Diameter.				



#### **LUMENS PER FOOT**

	251	nm	
Color	60mA	120mA	
3000 Warm White 3500 White 4500 White	287 275 285	425 400 412	
Based upon typical cold cathode 96T8 lamps.			

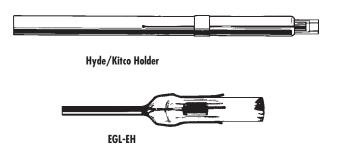
# **ELECTRODE HOLDERS**



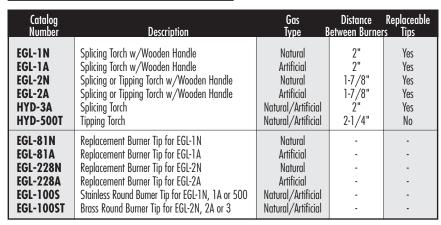


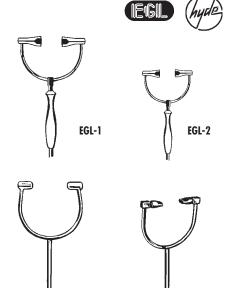


Catalog Number	Fits Electrode Diameter	Mfg.
KIT-KEH-10 HYD-12M-EH KIT-KEH-12 HYD-15M-EH KIT-KEH-15 KIT-KEH-18	10mm 12mm 12mm 15mm 15mm 18mm	Kitco Hyde Kitco Hyde Kitco Kitco
EGL-EH	12-15mm	EGL



# HAND TORCHES & REPLACEMENT TIPS





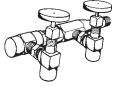




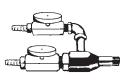


# HAND TORCH COMPONENTS

Catalog Number	Description
HYD-V18/3947	Venturi Mixer w/Valves for HYD-500T
HYD-V18/4249	Venturi Mixer w/Valves for HYD-3A
EGL-HFM-WV	Hand Fire Mixer w/ 1/8" Valves
HYD-HF-MIX	Tubular Hand Fire Mixer
HYD-1488	1/4" Needle Valve



HYD-V18/3947 HYD-V18/4249



**EGL-HFM-WV** 



HYD-500T

**HYD-HF-MIX** 



HYD-3A

HYD-1488



# **CROSSFIRES**

Crossfires listed are for natural gas. Artificial gas versions are available. Hyde crossfires are equipped with a ball joint at the base of each tip for greater flame precision.

EGL offers two types of cannon fires. The BMT-7 provides a knife-shaped flame ideal for splicing, with sufficient heat for bending glass 15mm or less. The S21 provides a broad high-heat flame hotter than 5 point crossfires but more diffused, therefore better for bending than splicing. S21 is also available in an artificial gas version. Hyde versions also available.

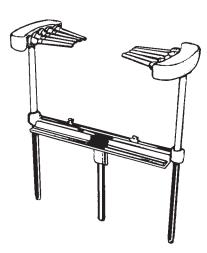
Catalog Number	Description	Gas Type	Mfg.	Note
HYD-CF-5N	5 Point Crossfire 5 Point Crossfire 7 Point Crossfire Cannon Fire, Knife-Shaped Flame Cannon Fire, Broad High-Heat Flame	Natural	Hyde	1
EGL-790-JCN		Natural	EGL	2
HYD-CF-7N		Natural	Hyde	1
EGL-BMT-7		Natural/Artificial	EGL	3
EGL-S21-N		Natural	EGL	3
HYD-CFTN	Replacement Burner Tip for all Hyde Natural Crossfires	Natural	Hyde	
HYD-CFTA	Replacement Burner Tip for all Hyde Artificial Crossfires	Artificial	Hyde	
HYD-CF-BJ	Replacement Ball Joint for all Hyde Crossfires	-	Hyde	
EGL-BMT7-TIP	Replacement Burner Tip for EGL-BMT-7 Cannon Fire	Natural/Artificial	EGL	
EGL-S21N-TIP	Replacement Burner Tip for EGL-S21-N Cannon Fire	Natural	EGL	



<sup>(2)</sup> Includes burners, side pipes, sliding base, T-splitter and crossfire mixer with valves.





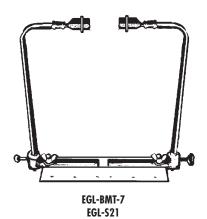


HYD-CF-5 HYD-CF-7



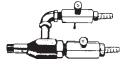


**BMT7-TIP** 



#### **CROSSFIRE COMPONENTS**

Catalog Number	Description
EGL-CFM-WV	Crossfire Mixer with Valves
HYD-CFM	Crossfire Mixer without Valves
HYD-1288	1/2" Needle Valve
HYD-101M	Mixer for Obsolete HYD-101 Cannon Fire



**EGL-CFM-WV** 



HYD-1288



**HYD-CFM** 



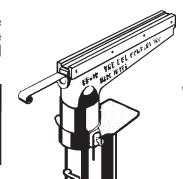
HYD-101M

<sup>(3)</sup> Includes burners, side pipes, sliding base, T-splitter and appropriate mixer with valves.

#### **RIBBON BURNERS**

Ribbon burners are utilized for creating sweeping curve effects and script-type lettering for neon signs. All models equipped with a control slide to adjust flame length. Also available in artificial gas versions. Replacement screens, slides and parts also available. Call for information.

Catalog Number	Dimensions	Gas Type	Mfg.
HYD-RB-06HN	6" Specialty Ribbon Burner Head	Natural	Hyde
HYD-RB-16HN	16" Ribbon Burner Head	Natural	Hyde
HYD-RB-24HN	24" Ribbon Burner Head	Natural	Hyde







Complete 6" or 16" Ribbon Burner Shown with economizer and bench flange/pipe adapter mounted to floor stand

#### RIBBON BURNER COMPONENTS

The EGL-RB-FL combination bench flange/pipe adapter will accept a 1" NPT pipe thread for mounting to the HYD-STAND or can be fastened directly to a bench using the mounting holes provided.

Catalog Number	Dimensions
HYD-RB-E	Economizer by Hyde
EGL-RB-FL HYD-RB-FL HYD-ADP	Bench Flange & Pipe Adapter Bench Flange Adapter Flange to Stand
HYD-STAND	Heavy Duty Floor Stand w/Pipe







**HYD-STAND** 

# GENERAL SPECIFICATIONS FOR HYDE BENDING EQUIPMENT

Gas heating values are measured in Btu per cubic foot. The Btu content of the two most common gases used today are:

Natural Gas = 1040 Btu, Artificial Gas = 2400 Btu.

To obtain Btu per hour, multiply the Btu value by the gas volume (cubic feet per hour as shown in the table below).

To insure efficient operation, Hyde glass working equipment requires sufficient air and gas supplies to furnish the volumes and pressures shown below. Pressures shown should prevail at the burners.

A common cause of poor burner operation is loss of gas and air volume and/or pressure due to pipe lines of insufficient size. Most gas meters are the correct size, however small sized pipe lines to the burners cause incorrect pressure at the burners. Check air pressure and gas volume at each burner for proper operation. Consult your local plumber or gas company for assistance.

	Burner Type	Air Pressure lbs./sq. inch	Air Volume cu. ft. per hour	Gas Pressure inch water col.	Gas Volume cu. ft. per hour
1	Natural Gas Ribbon 16" 24"	Burners 2.0 2.0	1,115 1,200	6.0 6.0	111 123
	Natural Gas Crossfii 5 Point 7 Point 101	1.0 1.0 1.0	190 266 254	2.0 2.0 1.5	17 24 31
	Hand Torches Using <b>3A</b> <b>500T</b>	Natural Gas .35 .35	38 37	4.0 5.0	5.5 4
4	Artificial Gas Ribbor 16" 24"	Burners 2.0 2.0	1,115 1,200	6.0 6.0	48 52
1	Artificial Gas Crossf <b>5 Point</b> <b>7 Point</b> <b>101</b>	res 1.0 1.0 1.0	190 266 254	2.0 2.0 1.5	8 12 11
	Hand Torches Using <b>3A</b> <b>500T</b>	Artificial Gas .35 .35	38 37	4.0 5.0	2.5 2

#### GENERAL SPECIFICATIONS FOR EGL BENDING EQUIPMENT

Chart below is for natural gas. All gas supplies and systems should be installed and checked by a licenced gas fitter for safety purposes.

Burner	Btu	CFH Gas	CFH Air	CFM Air
Type		cubic ft./hr.	cubic ft./hr.	cubic ft./min.
16" RB 24" RB 790 JCN 5 Pt. BMT7 S-21-N #1 Torch #2 Torch #3 Torch	116,000 178,000 20,000 25,000 50,000 6,000 4,000 4,000	111 170 19.25 24 48 6 4	1,115 1,200 150 200 400 50 50	18.58 20 2.5 3.33 6.66 .83 .83

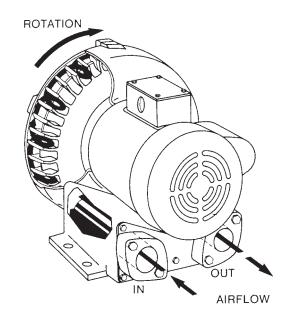
JEGEG ROTRON



# **ROTRON REGENERATIVE BLOWERS**

The impeller blades passing the inlet port draw air or other gases into the blower. The impeller blades then by centrifugal action accelerate the air outward and forward. Here the "regenerative" principle takes effect as the air is turned back by the annular shaped housing to the base of the following blades where it is again hurled outward. Each "regeneration" imparts more pressure to the air. When the air reaches the stripper section at the outlet (the stripper is the part of the blower located between the inlet and the outlet in which the annulus is reduced in size to fit closely to the sides and tips of the impeller blades) the air is "stripped" from the impeller and diverted out of the blower. The pressures or vacuums generated by the one or two spinning, non-contacting, oil-free impellers are equal to those obtained by many larger multi-stage or positive displacement blowers.

Catalog Number	Description
ROT-DR454R58 ROT-DR454R72 ROT-516489 ROT-515092	Blower w/Motor, Single Phase, 115-230V, 50/60 Hz Blower w/Motor, Three Phase, 230-460V, 50/60 Hz Filter Assembly, (1.5" NPT) Pressure Relief Valve
ROT-515132	Replacement Filter Element



#### **BLOWER SPECIFICATIONS**

Model	DR454R58	DR454R72
Model  Part No. Motor Enclosure Type Motor Horsepower Voltage (**) Phase Frequency (Hz) (**) Insulation Class (**) NEMA Rated Motor Amps Service Factor Locked Rotor Amps Max. Blower Amps Recommended NEMA Starter Size Weight (lbs/Kg) Mox. Pressure-In. of water	DR454R58  036856 TEFC 1.5 115/230 1 60 F 17.7/8.85 1.15 96/48 18.9/9.4 1/0 87/39 65/52	DR454R72  036855 IEFC 1.5 230/460 3 60 F 4.5/2.25 1.15 32/16 4.8/2.4 00/00 73/33 65/52
Max. Suction-In. of water Min. Flow-Pressure-SCFM Min. Flow-Suction-SCFM	59/45 0/0 0/0	59/45 0/0 0/0

**NOTE:**  $^{\prime\prime}$  All 3 phase motors are factory tested and certified to operate on 200-230/460 VAC-3 ph-60 Hz and 220-240/380-415 VAC-3 ph-50 Hz. All 1 phase motors are factory tested and certified to operate on 115/230VAC-1 ph-60 Hz and 220-240 VAC-1 ph-50 Hz.

 $^{(2)}$  Maximum operating temperatures: Motor winding temperature (winding rise plus ambient) should not exceed 140°C for Class F insulation or 110°C for Class B insulation. Blower outlet air temperature should not exceed 140°C (air temperature rise plus ambient).

#### **HOUSINGS • PANEL MOUNT**







Panel mount housings are a safe method for making neon electrode connections in raceways. Housings with prefix STA are Borosilicate heat resistant clear glass. Housings with prefix TRA use white high aluming porcelain ceramic. 7500V rated.

TRA-D2 housings are perfect for use in channel letters with housing transformers to conform to UL2161 requirements. 7500V rated.

TRA-1019 is the same white porcelain housing used in housing transformers. Wire terminal included. 5000V rated.

Catalog	Description	Panel Hole	Overall	Housing	Case
Number		Size	Length	Opening	Qty.
STA-100	Large, Closed	1-3/4"	3-5/8"	7/8"	50
TRA-TC100	Large, Closed	1-3/4"	3-5/8"	7/8"	50
STA-200	Small, Closed	1-5/16"	3-1/2"	7/8"	50
TRA-TC200	Small, Closed	1.14"	3.46"	.87"	50
STA-200P	Small, Short, Closed	1-5/16"	2-1/2"	7/8"	100
TRA-TC50	Small, Short, Closed	1.14"	2.55"	.87"	50
STA-300	Open	1-1/2"	3"	1-1/8"	100
STA-300P	Open w/Pigtail Lead	1-1/2"	3"	1-1/8"	100
TRA-D2 TRA-D2-SP	Porcelain w/2 Contact Springs Porcelain w/1 Contact Spring	-	-	-	50 50
TRA-1019	Porcelain Insulator	1-1/4"	2-1/2"	1"	50



TRA-TC100









TRA-1019

STA-200P TRA-TC50

STA-200 TRA-TC200







TRA-D2

### HOUSING BOOTS & CAPS



STA-HC cap fits over the back (wire lead end) of its housing to protect and insulate the wire connection.





"MAS" Masters series of boots enclose the opening at the front of the housing where the neon tubing exits. The "step" design allows for cutting to the proper mm OD size of glass tubing being used. Stocked in Gray. Also available in other colors.

Catalog Number	Description	For Tubing Size (mm)	Case Qty.
STA-HC	For #100 or #200 Housings	-	500
MAS-100-EGH MAS-200-EGH	For #100 Housings Standard Neo-Lite Brand #200 Housings Only	12, 15, 18 10, 12, 15	10/150 10/250
MAS-303-EGH	For #200 Housings by Westrim or Transco. All Through Wall Types	12, 15, 18	10/250









MAS-303-EGH

#### **GLASS CUP INSULATORS**



# **ABSKO**

The G-CUP is an electrode insulator made of borosilicate glass. It is shaped to fit over a 15mm (max) electrode and its GTO cable encased in a glass sleeve. It is useful to insulate double backed electrodes in channel letters and on boarder tubing runs. Also for use with ABS-CPA conduit plug assemblies for connection of GTO cable. Includes stainless steel hanger spring and o-ring.

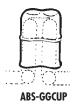
The GGCUP fits over 2 adjacent electrodes as is common in border tubing runs. The stainless steel hanger spring is for securing the GGcup.

The G2 housing is economical and used for making safe electrical connections between two neon tube electrodes. Complies with UL2161 ground fault requirements. This housing will accept the smallest neon electrode up to a 19mm cold cathode electrode. Equipped with a stainless steel dual spring assembly to allow for easy field removal of tubes for service. The G2 housing directly replaces bulky porcelain units. This housing solves the problem of shorting out in the rear of the housing. 7500V rated. 7/8" Electrode centers. 3" height from base.

Catalog Number	Description	Put Up
ABS-GCUP	Glass Cup w/O-Ring and Spring	100
ABS-RING	Replacement O-Ring	100
ABS-SPRING	Replacement Mounting Bracket	100
ABS-GGCUP	Double Glass Cup w/Spring	50/500
ABS-GGSPRING	Replacement Spring Hanger	50/500
ABS-G2	Glass Housing for 2 Electrodes	50/500











# **HOUSINGS • THROUGH-WALL TYPES**





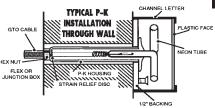


The through-wall type housing is the best way to penetrate walls with neon tubing. Available with a threaded bushing to enable easy installation in a handy box or a coupling for direct attachment to your rigid or flexible connector on the rear of the housing. 1-2-3 spring connector facilitates an easy make up for the GTO cable. On most individual letters made of metal channel, a 1-3/8" hole is drilled or punched in the back of the letter. Attach GTO cable to 1-2-3 spring connector and push cable through housing. Drill a 1-1/2" hole in the surface the letters are to be mounted upon and attach letter. PKF-FL consists of a PKF housing complete with a built-in front mounting plate. PK glass housings feature a silicone plug insert to protect and prevent failures of GTO cable at the rear of the through-wall housing.

Catalog Number	Description	Put Up
PKF	PK Glass Housing w/Female Hub	25
TRA-TC2000B	TC2000 White Porcelain Housing w/Female Hub	25
PKM	PK Glass Housing w/Male Hub	25
TRA-TC2000A	TC2000 White Porcelain Housing w/Male Hub	25
PKF-FL	PKF Housing with One-Piece Shell and Flange Combo	25





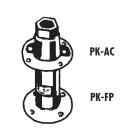


#### **ACCESSORIES FOR THROUGH-WALL HOUSINGS**



A through-wall housing can be installed outside. By placing a cap over it's end, it's protected from rain, snow, dust and bugs allowing for many outdoor applications. Both caps listed below are interchangeable.

Catalog Number						
PK-CAP TRA-2000CAP	PK Silicone Brown Cap TC2000 Silicone Gray Cap	100 100				
PK-AC PK-FP PK-SMB PK-DMB	Adjustable Mounting Clamp Front Mounting Plate Single Unit Mounting Bracket Dual Unit Mounting Bracket	25 25 25 25 25				









PK-DMB

ΡΚ-CΔΡ

Shown installed on a housing

PK-SMB

REPLACEMENT PARTS FOR THROUGH-WALL HOUSINGS

Catalog Number	Description	Put Up
PK-I	Glass Insert Only	25
PK-123	Connector Spring Button Assembly	100
PK-SRC	Strain Relief Clip	100
PK-G	Gasket Only	1



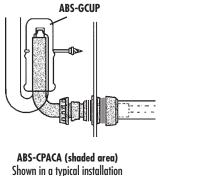


#### THROUGH-PANEL CONDUIT PLUG ASSEMBLY

The ABS-CPACA conduit plug assembly is a simple 4-part assembly used to safely penetrate a panel for use with neon double-backs in wet, damp or dry locations. This assembly is weather-sealed for use wherever exposed to rain or snow. A patented plug-seal fits inside the 1/2" EMT connector, tightly sealing the opening against weather. GTO wire is never exposed. The assembly assures low maintenance and easy field removal. Replacement parts are listed below as well as a conduit plug front plate which reduces an old housing opening to the size needed to mount the conduit plug assembly.

Catalog Number	Description	Put Up
ABS-CPACA	Conduit Plug Assembly, Complete	25
ABS-CPASG ABS-CPAGE ABS-CPAIB ABS-CPACF ABS-CPAFP	Silicone Grommet Glass Elbow Insulating Bushing Special EMT Connector Conduit Plug Front Plate	25 25 25 25 25 25







**ABS-CPAFP** 

# **ELECTROBITS PASSTHRU THROUGH-WALL CABLE CONDUIT KIT**



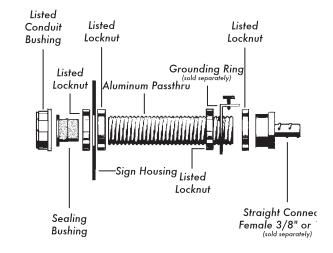
Electrobits Passthru assemblies can be used to protect the passage of GTO cable through walls, ceilings, raceways, channel letters and sign enclosures. For use with neon transformer secondary circuit high voltage wiring in dry or damp locations. Passthru installs in a 7/8" hole.

Each Passthru assembly consists of a threaded 1/2" aluminum conduit piece at specified length, four locknuts, two plastic bushings and one sealing bushing. Ground ring sold separately. The 1" Passthru PT1 has only two locknuts, one plastic bushing and one sealing bushing per unit.

The ELE-RNGR Passthru ground ring provides a ground bonding point for the Passthru assembly. ELE-SCF12/SCF38 straight Passthru female connectors are used to connect flexible metal conduit to the Passthru conduit. Made of die cast zinc with female 1/2" or 3/8" NPT threads on one side and an EZ-ON twist adapter on the other. The ELE-90CF12 is a 90° 1/2" NPT Passthru connector. ELE-SRPT provides a moisture seal that prevents water from entering through the back of a sign enclosure where the Passthru enters.

Other Passthru lenaths and field cut kits also available. Minimum order is put up quantity.

Catalog Number	Description	Put Up	
ELE-PT1 ELE-PT2 ELE-PT4 ELE-PT6 ELE-PT8 ELE-PT10 ELE-PT12	1" Passthru Kit 2" Passthru Kit 4" Passthru Kit 6" Passthru Kit 8" Passthru Kit 10" Passthru Kit 12" Passthru Kit	50 25 10 10 10 10	
ELE-RNGR	Passthru Ground Ring		
ELE-SCF12 ELE-SCF38 ELE-90CF12	1-1/2" Straight Female Connector 3/8" Straight Female Connector 1/2" 90° Female Connector		
ELE-SRPT	Passthru Sealing Ring		



#### **INSULATED CABLE BUSHINGS**

For protecting and insulating GTO-15 cable passing through panels. ABS-CASINO casino bushing is a slim profile borosilicate glass bushing that may be used to pass GTO cable, GTO and GTO cover when used in dry or damp locations. When used as a neon housing it may be used in wet locations. Casino bushing will accommodate up to a 15mm electrode. Requires 1" drilled hole. 3/4" electrode opening. UL Recognized (UR) for dry locations.

Catalog Number	Description	Color	Fits Opening	Length	Mfgr.	Put Up
MUL-20 MUL-20-1 MUL-30	Glazed Porcelain w/Lockring Spring for MUL-20 Glazed Porcelain w/Lockring	White - White	1/2 KO 3/4 KO	1-1/8" - 1-5/16"	Multi Multi Multi	100 100 100
FMS-18 FMS-18-WASH FMS-18-CLIP	Glass w/Springclip & Washer Replacement Washer for FMS-18 Replacement Clip for FMS-18	Clear	3/4"	4"	FMS FMS FMS	100 100 100
ABS-CASINO	Glass w/Metal Ferrule	Clear	1"		Absko	25
WES-BU-1/2	Un-Glazed Porcelain w/Locknut	White	1/2 KO		Westrim	100

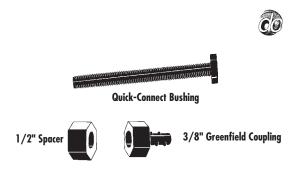
#### ABSKO SE FMS **MULTI-ELECTRIC**



#### QUICK-CONNECT THROUGH-WALL CABLE INSULATORS

For protecting and insulating GTO-15 cable passing through walls. Black thermoplastic. Refer to Flexible Conduit section for 3/8" non-metallic Greenfield flex.

Catalog Number	Description	Put Up
DIV-101-A DIV-101-B DIV-101-C DIV-101-D DIV-101-E DIV-101-F	2" Quick-Connect Bushing 4" Quick-Connect Bushing 6" Quick-Connect Bushing 8" Quick-Connect Bushing Quick-Connect J/2" Spacer Quick-Connect 3/8" Greenfield Coupling	100 50 50 50 100 100

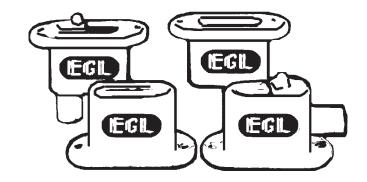


# **COLD CATHODE HOUSINGS** (9)



EGL cold cathode lamp housing terminals are UL-approved. Single (feed) terminals and double (intermediate) terminals are offered in surface-mount configurations with side access ports as well as recess-mount configurations with bottom access ports, for routing high voltage feed wires up to 9/16" in diameter. Housings are of white glazed porcelain ceramic and are equipped with spring bronze lamp contacts to accommodate right angle 19mm brass capped electrodes of cold cathode lamps in 25, 20 and 18mm diameters.

Catalog Number	Description
EGL-211R	Recessed Housing
EGL-211RT	Recessed Housing, Terminal End
EGL-211S	Surface Mount Housing
EGL-211ST	Surface Mount Housing, Terminal End



# (IEGIL

# **EGL COLD CATHODE HOUSING DIMENSIONS**

Socket Type	Center to Center of Elect. w/Spacer	Center to Center of Elect. w/o Spacer	Center of Lamp to Surface	Lamp Tolerance ±	Socket Height from Surface	Interior Depth	Interior Width	Interior Length
211S	1-1/4"	]"	4"	1/8"	2-5/8"	2-1/8"	15/16"	2-1/2"
211ST	1-1/4"	-	4"	1/8"	2-5/8"	2-1/8"	15/16"	2-1/2"
211R	1-1/4"	]"	1-15/16"	1/8"	7/16"	2-1/8"	15/16"	2-1/2"
211RT	1-1/4"	-	1-15/16"	1/8"	7/16"	2-1/8"	15/16"	2-1/2"

Socket Type	Overall Flange Width	Overall Flange Length	Flange Thickness	Overall Body Width	Overall Body Length	Mounting Hole Centers	Height to Connection
211S	2-5/16"	4-5/8"	7/16"	1-7/16"	3-1/8"	3-7/8"	-
211ST	2-5/16"	4-5/8"	7/16"	1-7/16"	3-1/8"	3-7/8"	1-1/4"
211R	2-5/16"	4-5/8"	7/16"	1-7/16"	3-1/8"	3-7/8"	-
211RT	2-5/16"	4-5/8"	7/16"	1-7/16"	3-1/8"	3-7/8"	1-1/4"

# COLD CATHODE FEED RECEPTACLE ASSEMBLY (9)

ABS-CCFR is a multi-directional feed receptacle for cold cathode lighting. It consists of an uneven dual bored ceramic housing. Dual spring inside connects electrode and GTO wires. All wiring is fully contained inside the housing. Has a bonding wire attachment between the base and the bonding wedge. Can be completed with ABS-CPACA Conduit Plug Assembly. UL Listed for use indoors and in damp locations.

Catalog Number	Description	Put Up
ABS-CCFR	Cold Cathode Feed Receptacle.	10

# **DIMENSIONS**

Overall	Large	Small	Center to
Dimensions	Opening	Opening	Center
2-5/8" x 1-1/2" x 2-3/4"	1" I.D.	7/8" I.D.	

#### **ABSKO**



Catalog Number

FMS-22-01-HO

FMS-22-01

FMS-22-02

FMS-22-A2

FMS-1-01A

FMS-1-02

# **FMS FLASHERS • ON-OFF TYPES**

Circuits

2

2

1

2

Action

On-Off

On-Off

On-Off

Alternate

On-Off

On-Off

FM5%

FMS Model 22 flashers are a reliable and economical way to add on-off, alternating or color changing effects to a sign or other device. Contacts are rated to handle 15 amps. Model 22 high output flashers are constructed with extra insulation and an increased point opening to minimize arcina when used in high initial draw applications such as flashing ballasts. All parts are replaceable.

Model 1 flashers are the most basic available. Flashers are powered by a synchronous motor that drives 1 or 2 cams 12 rpm. Standard guarter/guarter cam cut yields 24 on-off flashes per minute. Other cams available upon request. 115V • 50/60Hz

Flashes/

cct/min.

20-30

20-30

20-30

20-30

24

24

Cam Cut

50/50 Synchronous

50/50 Synchronous

50/50 Synchronous

50/50 Alternating

Quarter/Quarter

Quarter/Quarter



Model 22

<u>DIMENSIOI</u>	<u>NS</u>	
Model Number	Dimensions	
22 1	5" x 4.5" x 3" 3.5" x 4" x 3"	



Model 1

3

# FMS BORDER CHASERS & SCINTILLATORS

Model 33 chasers are most commonly used on flashing incandescent bulb signs where "dark spots" chase around a border or where directional motion is incorporated into a field of bulbs. It can be used to chase neon, though it must be incorporated on the primary side of any transformers. Speed can be field adjusted using a screw driver. All parts are replaceable. Model 33 chasers are ruggedly constructed to provide years of smooth, quiet, trouble free service. Contacts are rated to handle 10 amps each and are accessible for easy replacement. Available with 3, 4 or 5 circuits. Larger chasers available by special order.

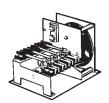
Model 66 chasers are generally used to create a scintillating or "twinkling" action in fields of flashing bulbs. Chasers can also be wired to create a chasing action. These units are constructed of very heavy duty materials to stand up under constant use with heavy loads. All parts are replaceable. The flashing speed of the model 66 can be field adjusted using a screw driver. Flasher is supplied with a shade on each motor and as shades are removed the flashing speed decreases. When operating with shades on (430 flashes per circuit per minute) the contacts on all Model 66 units are rated at 12.5 amps each. When operating with shades off (250 flashes per circuit per minute) the contacts on the 3 and 4 point units are rated at 20 amps each, while the contacts on the 5 and 6 point units are rated at 17.5 amps each.

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Catalog Number	Circuits	Flashes/ cct/min.	Action
FMS-33-C3	3	210-270	Chase
FMS-33-C4	4	210-270	Chase
FMS-33-C5	5	190-215	Boarder Chaser
FMS-33-C6	6	210-250	Boarder Chaser
FMS-66-C3	3	250-420	High Speed Chase
FMS-66-C4	4	250-420	High Speed Chase
FMS-66-C5	5	250-420	Scintillate
FMS-66-C6	6	250-420	Scintillate

# **DIMENSIONS**

Model Number	Dimensions	Weight (Lbs.)
33-C3, C4	6.5" x 5" x 4.75"	5
33-C5	8" x 5" x 4.75"	6
33-C6	8" x 5" x 5"	7
66-C3, C4	7" x 6" x 4"	7
66-C5, C6	7.25" x 9" x 4"	10



Model 33 4 Circuit



Model 66 4 Circuit

# **FMS HIGH VOLTAGE ANIMATORS**



Model 55 animators are specifically designed to distribute the secondary voltage of a neon transformer. Unit will handle from 7,500 to 15, 000 volts and distribute this high voltage to up to 8 circuits from a single transformer. For this reason the model 55 is referred to as a "neon animator". Secondary current is 30mA. Speed can be adjusted from 35 to 300 circuit flashes per minute. All parts are replaceable. 115V • 50/60Hz

Catalog Number	Contacts	Circuits
FMS-55-A4F	4	2 or 4
FMS-55-A6F	6	2, 3 or 6
FMS-55-A8F	8	8

# **DIMENSIONS**

Model Number	Dimensions	Weight (Lbs.)		
55	6.5" x 4.5" x 7.375"	7		



Model 55

# FMS SPELLERS

(I)

FMS///

Model 33 spellers are designed for applications where electric circuits are to be flashed in custom sequences such as with spelling or other animation. Variable in both cycle speed and cam cut. Spellers are some of the most versatile sign controllers available. Flashing sequence on each speller is custom made to customer specifications. Units can be built with as few as one circuit or as many as necessary to accommodate the requested flashing sequence. Neon can be controlled by installing the speller on the primary side of transformers. Each contact is rated to handle 15 amps. Please specify sequence at time of order. House sequence 1.

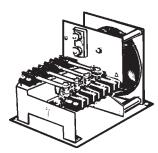
115V • 50/60Hz

Catalog Number	Speed	Seconds /Cycle
FMS-33-S * F	Fast	2-8
FMS-33-S * M	Medium	4-20
FMS-33-S * S	Slow	8-40
FMS-33-S * XS	Extra Slow	18-90

# **Ordering Information**

Substitute "\*" with the number of circuits desired. i.e. FMS-33-S4F = 4 circuit, fast speed speller.

Not all speeds are available in every circuit configuration.



# **GUIDE FOR CONSTRUCTING SPELLER SEQUENCE**

The most requested and used sequences are shown below. Almost any desired sequence can be constructed. "Cycle" refers to the time required for the flashing action to go through its complete performance and start to repeat. "Time of Cycle" is expressed in seconds. "Circuit" refers to the current controlled by one cam and one set of contact points. The time on for a circuit is indicated by an "X" in the box, time off is indicated by a blank box.

				Time	of C	ycle		
	1	χ	χ	χ	Х	χ	χ	
÷	2		χ	χ	χ	χ	χ	at
Circuit	3			χ	χ	χ	χ	Repeat
	4				χ	χ	χ	
	5					χ	χ	

SEQUENCE 1 1 on, 2 on, 3 on, 4 on, 5 on, all off, all on, all off, repeat.

			Time	of C	ycle		
	1	χ	χ	Х	χ	Х	
害	2		χ	χ	χ	χ	at
Grait	3			χ	χ	χ	Repeat
	4				χ	χ	
	5					χ	

SEQUENCE 2 1 on, 2 on, 3 on, 4 on, 5 on, all off, repeat.

			Time	of C	ycle		
	1	Χ					
信	2		χ				at Set
Circuit	3			χ			Repeat
	4				χ		
	5					χ	

SEQUENCE 3
1 on, 1 off/2 on, 2 off/3 on, 3 off/4 on,
4 off/5 on, 5 off, repeat.

				Time	of C	ycle			
	1	χ							
害	2		χ						at
Circuit	3				χ				Repeat
	4						χ		
	5							χ	

SEQUENCE 4
1 on, 1 off/minimum off, 2 on, 2 off/minimum off, 3 on, 3 off/minimum off, 4 on, 4 off/minimum off, 5 on, 5 off/minimum off, repeat.

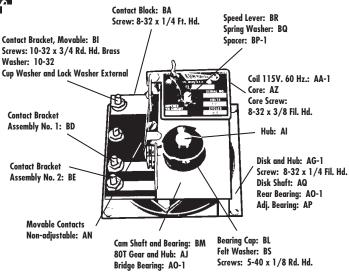
	Time of Cycle													
	1	χ	Χ	χ	χ	χ	χ	χ	χ	χ	χ	χ		
	2		χ	χ	χ	χ	χ	χ	χ	χ	χ			
Circuit	3			χ	χ	χ	χ	χ	χ	χ				Repeat
	4				χ	χ	χ	χ	χ					~
	5					χ	χ	χ						
	6						χ							

SEQUENCE 5
Wipe on and wipe off lighting effect, all off, repeat.

# FMS FLASHER, SPELLER & ANIMATOR PARTS

FMS%

Prefix part number with "FMS-" for catalog number.



Insulating Block: BY Coil 115V. 60 Hz.: AA-1 Insulating Tube: BX-1 Core: AZ Screws: 8-32 x 1 Rd. Hd. Brass Washer: 8-32 Washer: 10-32 Internal External Lock Screw: 8-32 x 3/8 Fil. Hd. Cup Washer: 10-32 Disk and Hub: AG-1 **Contact Block** Rear Bearing AO-2 Screw: 8-32 x 1/4 Fil. Hd. 4 Point: BV Disk Shaft: BZ 5 Point: BV5 Rear Bearing AO-2 6 Point: BV6 Adj. Bearing: AP 8 Point: BV8 10 Point: BV10 Total number of teeth on external Gears must add up to 88 Movable Contacts: AM 28T Pinion and Bearing: CP Stationary Contacts: DA 16T Pinion and Bearing: CO 8T Pinion and Bearing: CQ Shafts: Speed: Point: 60T Gear and Hub: CT CJ-2 C&F 1-4 72T Gear and Hub: CU CJ-3 M, S&XS 1-3 80T Gear and Hub: AJ CJ-4 C&F Screws: 5-40 x 1/8 Rd. Hd. CJ-1 M, S&XS 5 CI-4 M. S&XS 6 CJ-5 M. S&XS 7-8 1-3/8 Cam Movable Contact Block Support: CV M, S&XS 9-10 CJ-6 Stationary Contact Block Support: CW **CJ-7** S&XS 11-15 CJ-8 S&XS 16-20 2-3/16 Cam Movable Contact Block Support: CV-AY-1 NOTE: Speed of flashers is indicated on name plate. Stationary Contact Block Support: CV Screws: 8-32 x 3/16 Fil. Hd. Adj. Bearing: AP Top: 8-32 x 1/2 Rd. Hd. Screws Bottom: 8-32 x 1/4 Ft. Hd. Undercut

Magnet Assembly = BT-1

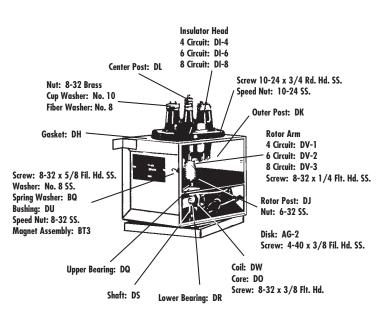
# Parts for Model 22 Types

Pole Piece Assembly = BN-1

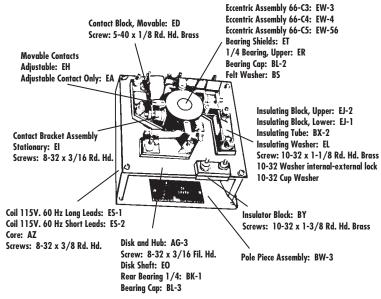
# Parts for Model 33 Types

Pole Piece Assembly = BN-2

Magnet Assembly = BT-2



Parts for Model 55 Types



Parts for Model 66 Types

# **ROCOX SOLID STATE FLASHERS** (4)

Rocox variable speed solid state flashers are totally silent in operation with easy speed control making Rocox flashers ideal for indoor or outdoor operation. Flashers come encased in a weatherproof "bell" box making it unnecessary to enclose in another box. Speed range is 50-600 flashes per circuit per minute. Not to be used in conjunction with flashing ballasts. When flashing transformers, a Rocox snubber is needed for each transformer. A Rocox snubber is built into all 1 and 2 circuit models. Available in voltage ranges from 24V on up and also in 20 amp versions.

115V • 50/60Hz

Catalog Number	Circuits	Amps /Circuit	Watts
ROC-110	1	10	1,150
ROC-210	2	10	1,150

# **ROCOX SOLID STATE CHASERS** (9)

Rocox solid state chasers include the same features as the flashers above with the following additions; Chasers are fast enough so that 1 on, 2 or 3 off, look as good or better than 3 on, 1 off which delivers an electricity savings of 50% to 65%. To replace a mechanical chaser, no wiring changes are needed. Spellers are also available in any number of circuits.

115V • 50/60Hz

Catalog Number	Circuits	Amps /Circuit	Watts
ROC-310	3	10	1,150
ROC-320	3	20	2,300
ROC-410	4	10	1,150
ROC-420	4	20	2,300

# **ROCOX SOLID STATE CHASERS WITH SPECIAL ACTIONS** (9)

Rocox solid state chasers with special actions include the same features as the flashers above with the following additions; Chasers are ideal when special flashing effects are needed. To change the action, simply un-plug the control module at the top of the base and plug in a different module. The same module will control a 3 or 4 circuit, 10 or 20 amp chaser. Bases also available in 20 amp versions.

115V • 50/60Hz

Catalog Number	Circuits	Amps /Circuit	Watts
ROC-310BASE ROC-410BASE	3 4	10 10	1,150 1,150
ROC-2 ROC-3 ROC-4 ROC-5	Normal Flow 1 Direction Normal Flow 1 Direction-Stop-Repeat Normal Flow 1 Direction-Bounce-Repeat Normal Flow 1 Direction-Normal Flow Reverse-Repea		

# **ROCOX ACCESSORIES (9)**

The ROC-120-S slave is for loads greater then 20 amps per circuit. To be used with a Rocox flasher or chaser. The flasher or chaser controls the action of the lights driven by either the flasher or chaser and the slave unit. The slave's power line comes from a separate circuit thus preventing overloading the flasher or chaser and circuit breaker. Enclosed in a weatherproof "bell "box. When flashing transformers, a Rocox snubber is needed for each transformer. A Rocox snubber is built into all 1 and 2 circuit models. 115V • 50/60Hz

Catalog Number	Circuits	Amps /Circuit	Watts
ROC-120-S	1	20	2,300
ROC-SNUB	Snubber		-

# Rocox





10 Amp. Unit

20 Amp. Unit

# **DIMENSIONS**

Description	Dimensions
10 Amp Flashers, Chasers, Slave	4-1/2" x 3-1/2"
20 Amp Flashers and Chasers	4-1/2" x 5-1/2"



10 Amp. Base Shown with control module



ROC-120-S

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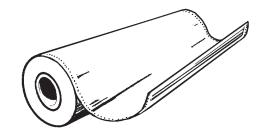
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# SEEMEE IV PREMIUM FLEXIBLE SIGN FACE SUBSTRATE

Seemee IV is the ultimate flexible substrate for translucent sign applications. It can be decorated with self-adhesive film, spray paint, screen printing, digital printing and heat transfer materials. It has excellent UV protection, fire retardant properties and anti-mildew additives. Printable on both sides with brilliant colors. The topcoat for Seemee IV also increases the product's life span and gives it excellent receptivity with self-adhesive film.

Available in roll widths shown below without seams eliminating cutting loss and weak seams. Sold by the foot.

Catalog Number	Description /Width	Put Up Roll
SEE-4-3.5 SEE-4-4.5 SEE-4-5.5 SEE-4-6.5 SEE-4-7.5 SEE-4-8.5 SEE-4-10.5 SEE-4-12.5	White Seemee IV, 3'-6" White Seemee IV, 4'-6" White Seemee IV, 5'-6" White Seemee IV, 6'-6" White Seemee IV, 7'-6" White Seemee IV, 8'-6" White Seemee IV, 10'-6" White Seemee IV, 12'-6"	164' 164' 164' 164' 164' 164' 164'
SEE-4-4.5 SEE-4-5.5 SEE-4-6.5 SEE-4-7.5 SEE-4-8.5 SEE-4-10.5	White Seemee IV, 4'-6" White Seemee IV, 5'-6" White Seemee IV, 6'-6" White Seemee IV, 7'-6" White Seemee IV, 8'-6" White Seemee IV, 10'-6"	164' 164' 164' 164' 164'



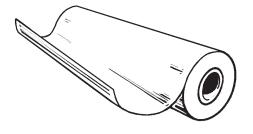


# ARLON/SIGNTECH FLEXIBLE FACE SUBSTRATE

Arlon/Signtech manufactures high quality flexible face materials. NFX series is top-coated to accept vinyl applications. Custom cut and seamed faces are available and delivered in a timely manner. Available upon request.



Panaflex series 945 flexible face material is a white translucent vinyl that is smooth, durable and stable. It is designed to be decorated with Scotchcal series 3650, 3630 and 3680 films. 3M guarantees this type of decoration for 5 years subject to some conditions. Panaflex 7' and wider is seamed cross-width on 78" centers. Cut to size lengths are available, but widths of 7' or wider must be cut in 78" increments. We suggest the Ultralon IV vinyl material shown above for wide seamless applications.



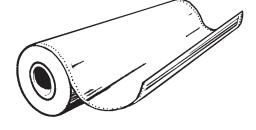


# COOLEY FLEXIBLE VINYL FACES

Cooley manufactures high quality flexible faced materials for backlit signs and awnings and a full spectrum of products including reinforced polymer membranes, banner and billboard material, decorating products and many more related products for the sign making, outdoor advertising and point-of-purchase markets.

Coolthaane Cooley-Brite Custom Colored Cooly-Brite Cooly-Brite II Cooly-Brite Lite **Custom Striping** 

Cooly-Brite SM-42 White Sign Membrane First Face 4-in-1 Cooley Magic Cooley Cleaning Products Coolmask



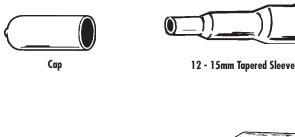


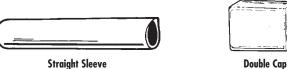


# **DIVERSIFIED ELECTRODE INSULATORS**

Caps are used to insulate connections between the electrode and GTO cable. Room for GTO cable return provided. Sleeves are used to insulate connections between two back-to-back electrodes. Tapered sleeves are used to insulate connections between the electrode and GTO cable.

Catalog Number	Description	Color	Put Up
DIV-C-10 DIV-C-12 DIV-C-12B DIV-C-13 DIV-C-15 DIV-C-15B DIV-C-D DIV-S-12 DIV-S-13 DIV-S-15 DIV-102-SS	10mm Cap 12mm Cap 12mm Cap 13mm Cap 15mm Cap 15mm Cap 15mm Double Cap 12mm Straight Sleeve 13mm Straight Sleeve 15mm Straight Sleeve	Gray Gray Black Gray Black Gray Gray Gray Gray	25 25 25 25 25 25 25 25 25 25





# **ELECTROBITS ELECTRODE INSULATORS**



Catalog Number	Description	Put Up
ELE-ECO- * ELE-EC3- * ELE-EC6- * ELE-EC9- * ELE-LS3- * ELE-S50- * ELE-SS2- * ELE-SS3- * ELE-SS3- * ELE-SS5- * ELE-SS5- *	10mm End Cap 12-13mm End Cap 15mm End Cap 16mm End Cap 19mm End Cap 13mm Long Sleeve, 6" 15mm Long Sleeve, 6" 10mm Tapered Sleeve 13mm Tapered Sleeve 13mm Tapered Sleeve	100 100 100 100 100 50 50 100 100 100
ELE-SS9- *	19mm Tapered Sleeve	100

# **Ordering Information**

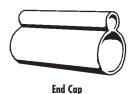
Items with "\*" suffix indicates color. Substitute 01 for Black, 02 for White or 10 for Gray. Other colors are available by special order.





Tapered Sleeve

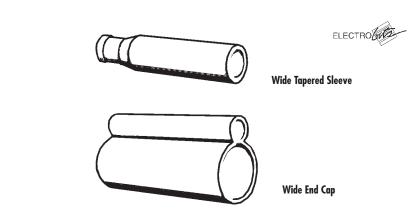
ELECTRO



**ELECTROBITS WIDE ELECTRODE INSULATORS** 

Electrobits wide end caps and tapered sleeves are specially designed to slide over GTO cable, 3730 series GTOSLEEVING and the electrode for easier mounting on portable signs and channel letters. An internal ring on the wide tapered sleeve makes the product weather-tight. 3730 series GTOSLEEVING and other types of GTO cable insulators can be found on the following page.

Catalog Number	Description	Put Up
ELE-EC3W- * ELE-EC5W- * ELE-EC6W- * ELE-SS3W- * ELE-SS5W- * ELE-SS6W- *	13mm Wide End Cap 15mm Wide End Cap 16mm Wide End Cap 13mm Wide Tapered Sleeve 15mm Wide Tapered Sleeve 16mm Wide Tapered Sleeve	100 100 100 100 100 100



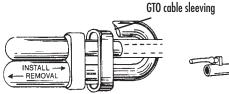
### **Ordering Information**

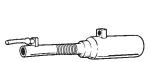
Items with "\*" suffix indicates color.
Substitute 01 for Black, 02 for White or 10 for Gray.
Other colors are available by special order.

# **MASTERS ELECTRODE INSULATORS** (9)

Masters Technology's Water-Tite® foldable tapered sleeves are made to fold-back if desired. The two piece Water-Tite® insulator boot forms an air tight seal over the electrode/GTO connection. Both are water tight when used in conjunction with Masters GTO cable sleeving found below. Other sizes and colors available upon request.

Catalog Number	Description	Color	Put Up
MAS-WPEC-15G	15mm Tapered Foldable Sleeve	Gray	10/150
MAS-WESB-15G	15mm Two-Piece Insulator Boot	Gray	75





**Tapered Foldable Sleeve** 

Transco

# TRANSCO SOFT SILICONE TAPERED ELECTRODE INSULATORS

Catalog Number	Description	Color	Put Up
TRA-75-12-01	12mm Soft Silicone Tapered Sleeve	Black	100
TRA-75-12-10	12mm Soft Silicone Tapered Sleeve	Gray	100
TRA-75-15-01	15mm Soft Silicone Tapered Sleeve	Black	100
TRA-75-15-10	15mm Soft Silicone Tapered Sleeve	Gray	100



Two Piece Boot

**Soft Silicone Tapered Sleeve** 

# **GTO CABLE INSULATORS**

Electrobits 3830 GTOSLEEVING™ can be used with Electrobits regular end caps and tapered sleeves. 3730 GTOSLEEVING™ should be used with Electrobits wide end caps and wide tapered sleeves. 3870 GTO covering has a wall thickness of 1.8mm (.070") and acts as an effective corona barrier. All three products may be used in channel letters with any sign face material. For indoor use. If used outdoors, it must be used in a listed sign enclosure.

Masters Technology's GTO cable sleeving can be used with the two piece electrode insulator boots and tapered sleeves to assure a water tight installation or may be used wherever permitted by the National Electric Code. Sold by the roll.

Catalog Number	Description	Mfgr.	Roll Length
ELE-3830-*	GTOSLEEVING® for End Caps and Tapered Sleeves	Electrobits	100'
ELE-3730-*	GTOSLEEVING® for Wide End Caps and Wide Tapered Sleeve	Electrobits	100'
ELE-3870-*	GTOCOVERING® Used to Protect GTO Cable	Electrobits	250'
MAS-GTOS-*	GTO Sleeving	Masters	50'





# Ordering Information

Items with "\*" suffix indicates color.
Substitute 01 for Black, 02 for White or 10 for Gray.
Other colors are available by special order.

# **GTO CABLE CONNECTORS** (4)

Electrobits ILS1000 in-line splice connectors are used to insulate the splicing of two GTO cables in all applications. It is simple to use as it is a body that splits to reveal an internal gang box made of flame retardant plastic, 12,000V 30mA max. Most GTO cables must be covered with either GTOSLEEVING® or GTOCOVERING®. The ILS2000 in-line splice connector is a compact in-line splice connector; GTO cables must be covered with GTOSLEEVING®. The HVC or high voltage connector is a zinc die cast body with a flame retardant Pyrolene™ II cap. A spacer inside the cap allows for a safe and properly spaced connection of two GTO cables. Equipped with grounding screw and mounting bracket. All Electrobits connectors are suitable for damp locations. The PET-PK-HV Hi-Volt connector is a porcelain and metal junction box.

Number	Description	Mfgr.	Put Up
ELE-ILS1000 (1) ELE-ILS2000 ELE-HVC1000 ELE-HVC1001 PET-PK-HV	In-Line Splice Connector In-Line Splice Connector High Voltage Connector, Accepts 3/8" Conduit High Voltage Connector, Accepts 1/2" Conduit Porcelain Hi-Volt Connector	Electrobits Electrobits Electrobits Electrobits Transco	25 25 10 10 50





In-Line Splice Connector
Shown in use with GTOSLEEVING®



**Hi-Volt Connector** 



High Voltage Connector
Shown with conduit attached



ILS1000 In-Line Splice Connector Shown in use with GTO



# **SUPERVISION FLEX-LED STRIPS**

Flex-LEDs are a 12VDC low voltage, flexible, monochromatic, LED strip designed specifically for illuminating channel or back-lit letters and logos. Also well suited for linear lighting strips, architectural coves, display cases or other applications where an energy efficient light source is required.

Flex-LEDs have a 1.5" bend radius. Strips can be cut into 3" sections along dotted lines found on strip. A jumper socket is located approximately every 3" and can be used to "jump" power to and from each piece or strip.

Catalog Number	Description	Watts/Ft	Put Up
SV-FLED-CR SV-FLED-W SV-FLED-A SV-FLED-B SV-FLED-G SV-FLED-R	Clear Red Flex-LED 12" Strip White Flex-LED 12" Strip Amber Flex-LED 12" Strip Blue Flex-LED 12" Strip Green Flex-LED 12" Strip Ruby Red Flex-LED 12" Strip	1.5 2.8 1.5 2.8 2.8 1.5	10 10 10 10 10

# **SUPERVISION FLEX-LED POWER SUPPLIES**

Catalog Number	Description	Connection	Put Up
SV-EVPS25 SV-EVPS60 SV-EVPS150	25 Watt Power Supply 60 Watt Power Supply, ETL Listed 150 Watt Power Supply, ETL Listed	Plug-In Hardwire Hardwire	1 1 1
SV-EVPSUL60	60 Watt Power Supply, UL Listed	Hardwire	1

# **SUPERVISION FLEX-LED ACCESSORIES**

Mounting clips sold in increments of 30.

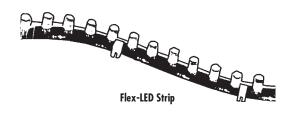
Catalog Number	Description	Length	Put Up
SV-FXPC8 SV-FXPC12 SV-FXPC24 SV-FXPC48	Jumper Cable Jumper Cable Jumper Cable Jumper Cable	8" 12" 24" 48"	10 10 10 10
SV-FXPC120	Power Cable	120"	10
SV-FX-CLIP	Mounting Clip	-	30

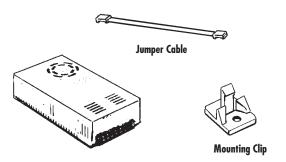
# **SUPERVISION FLEX-LED DEMO KITS**

Catalog Number	Description	Put Up
SV-EVSK SV-EVRK	Starter Kit w/10 Clear Red FLEX-LED Strips Rainbow Starter Kit w/7 Different Color Strips	1









# **TECHNICAL SPECIFICATIONS FOR FLEX-LED STRIPS**

Input Current Max.	108mA per Strip
Power	1.5 Watts per 12" (305 mm) w/Red, Clear Red, Amber 2.5 Watts per 12" (305 mm) w/Green, Blue, White
Maximum Strips per Run	16
Number of LEDs	25 Red, Clear Red, Amber 24 White, Blue, Green
PCB Length	12" (305 mm)
Input - Voltage	12VDC
Connector Power Rating	3A

LED Type	AllnGap (Red, Clear Red,, Orange, Amber) High Flux InGaN (Green, Aqua, Blue, White) High Flux
PCB Material	UL 94-V0 FR-4 G10 Fiberglass
LED Spacing	0.5" (13 mm)
PCB Width	0.4" (10 mm)
PCB Thickness	0.037" (0.94 mm)
Optical Data	100° Beam Spread
Environmental Specs.	-65°F to 130°F, 0-100% Humidity (No Direct Rain)
Lamp Life	100,000 Hours: Red, Clear Red, Orange, Amber 60,000 Hours: White: Green, Aqua, Blue, White

# PERMLIGHT 700 SERIES LED LED'R LIGHT MODULES 39

PERMLIGHT

Permlight low voltage 12VDC LED systems are suitable for indoor and outdoor applications. All system modules are coated with a silicone conformal coating which aids in protection when exposed to high humidity or other harsh environments. Through enhanced protection with improved resistance to UV light in an exposed application coating does not affect light output. Available in several configurations:

Catalog Number	Module Type	Color/Wavele Name	ngth nm	Volt (Vdc)	Current (Amp)	Power (Watt)	Dime Length	nssions (I Width	Inch) Height	Put Up
PER-750-R630 PER-750-R615 PER-750-A590 PER-750-G525 PER-750-B470 PER-750-W9	Direct Light, 5 LED Direct Light, 5 LED Direct Light, 5 LED Direct Light, 9 LED Direct Light, 9 LED Direct Light, 9 LED	Ruby Red Clear Red Amber Ruby Red Blue White	630 615 580 525 470 475	12 12 12 12 12 12	0.05 0.05 0.05 0.03 0.03 0.03	0.6 0.6 0.6 0.36 0.36 0.36	8.4 8.4 8.4 8.4 8.4	0.5 0.5 0.5 0.5 0.5 0.5	0.15 0.15 0.15 0.15 0.15 0.15	200 200 200 200 200 200 200
PER-760-R630 (1) PER-760-G525 PER-760-B470 PER-760-W9 PER-765-R630 PER-765-R615 PER-765-A590	Mini Direct Light, 2 LED Mini Direct Light, 3 LED Mini Direct Light, 3 LED Mini Direct Light, 3 LED Mini Direct Light, 4 LED	Ruby Red Green Blue White Ruby Red Clear Red Amber	630 525 470 475 630 615 590	5 12 12 12 12 12 12	0.05 0.03 0.03 0.03 0.05 0.05 0.05	0.25 0.36 0.36 0.36 0.6 0.6	2.7 2.7 2.7 2.7 2.7 3.8 3.8 3.8	0.5 0.5 0.5 0.5 0.5 0.5 0.5	0.15 0.15 0.15 0.15 0.15 0.15 0.15	200 200 200 200 200 200 200 200
PER-703-R630 PER-703-R615 PER-703-A590	Side Light, 5 LED Side Light, 5 LED Side Light, 5 LED	Ruby Red Clear Red Amber	630 615 580	12 12 12	0.05 0.05 0.05	0.6 0.6 0.6	1.125 1.125 1.125	1.25 1.25 1.25	0.15 0.15 0.15	200 200 200
PER-722-W PER-722-B PER-722-G PER-702-A PER-702-R	Reflect Light, 5 LED Reflect Light, 5 LED Reflect Light, 5 LED Reflect Light, 5 LED	White Blue Green Amber Clear Red	475 470 525 580 615	12 12 12 12 12	0.03 0.03 0.03 0.05 0.05	0.36 0.36 0.36 0.6 0.6	1.125 1.125 1.125 1.125 1.125	1.25 1.25 1.25 1.25 1.25	0.15 0.15 0.15 0.15 0.15	200 200 200 200 200 200

NOTE: (1) 5 Volt system requiring a 20-5D converter.



7.7

41 47

Mini Direct Light Module

Direct Light DL (750): 5 to 9 LEDs (depending on color) mounted on an 8.4" elongated printed circuit board with soldered leads. Pre-wired, spaced 3" apart with pre-applied pressure-sensitive VHB tape for ease in installation and retrofit applications.

Mini Direct Light (760/765): 2 to 4 LEDs (depending on color) mounted on a 2.7" or 3.8" elongated printed circuit board with soldered leads. Pre-wired, spaced 3" apart with pre-applied pressure sensitive VHB tape for ease in installation and retrofit applications.

Reflect Light (702/722): A 5 LED assembly mounted on a 1.25" x 1.25" printed circuit board with soldered leads. Pre-wired, spaced 6" apart with pre-applied pressure sensitive VHB tape for retrofit applications. May be installed in channel letters with returns as shallow as 2" and narrow as 1/2".

Side Light (703): A 5 LED assembly mounted on a 1.25" x 1.25" printed circuit board with soldered leads. Pre wired, spaced 6" apart with pre-applied pressure sensitive VHB tape for retrofit applications. May be installed in channel letters with returns as shallow as 2" and narrow as 1/2". Once applied to the return of a letter, LEDs glow against the opposing wall of return.

# PERMLIGHT LED'R LIGHT POWER SUPPLIES

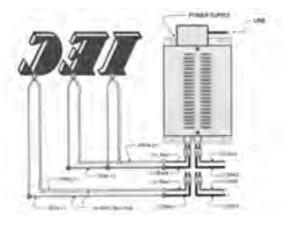
120 Volt AC primary.

Catalog Number	Power	Description	Туре	Location Rating	Dimen Length	ssions (Ir Width	nch) Height
PER-250-12D	240 Watts	4 Circuit	Plug-in	Dry	9.4	6	2.7
PER-250-12DC (2)	240 Watts	4 Circuit	Hardwire	Damp	9.4	6	2.7
PER-60-12D	60 Watts	1 Circuit	Hardwire	Damp	8.75	2.8	2.2
PER-1512D-WR	1.5 Amps	-	Plug-in (3)	Dry	3.15	2.1	1.6

**NOTE:** (2) Also available in 220V and 277V versions. (3) Wall regulated, also available in hard-wire version.

# PERMLIGHT LED'R LIGHT ACCESSORIES

Catalog Number	Description	Put Up
PER-700-WRC2	Wire, Class 2, 14AWG/2 (sheathed) 100' Roll	1
PER-700-WC	Wire Connector	Pkg. 25
PER-700-WN	Wire Connector, Silicone Filled	Pkg. 20
PER-700-SC	Silicone Spray Coating	1



Typical Connection

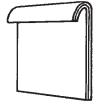


# PLASCOTRIM LETTER TRIM

Plasco plastic trim is produced from a cellulose acetate butyrate (CAB) with a metal foil embedded into the trim producing an adhesion with the plastic material by special process. The result is a brilliant finish that's easy to cut and cement. Plascotrim has an open "J" cross section making it flexible. It can be cut with standard hand shears or pruning shears. For forming angles, a hand notcher or the AME-NIC will cut the lip of the trim to make a smooth corner. Supplied in 165' rolls to facilitate continuous mounting without splices and without waste. Rolls can be stacked for easy storage. 1" trim in 10' lengths also available in bundles of 200'. Sold by the foot.

Catalog			Put
Number	Color	Size	Up
101-165 102-165 103-165 111-165 115-165 120-165	Black White Red Bronze Gold Silver/Chrome	5/16" 5/16" 5/16" 5/16" 5/16" 5/16"	165' 165' 165' 165' 165'
201-165 202-165 203-165 207-165 211-165 215-165 220-165	Black White Red Blue Bronze Gold Silver/Chrome	3/4" 3/4" 3/4" 3/4" 3/4" 3/4"	165' 165' 165' 165' 165' 165' 165'
301-165 302-165 303-165 315-165 301-10 301F-10 302-10	Black White Red Gold Black Flat Black White	]" ]" ]" ]" ]"	165' 165' 165' 165' 10' 10'
401-165 402-165 411-165 415-165 420-165	Black White Bronze Gold Silver/Chrome	1-3/8" 1-3/8" 1-3/8" 1-3/8"	165' 165' 165' 165' 165'
501-165 515-165	Black Gold	2" 2"	165' 165'





Plascotrim / "J" Trim

# 

# JEWELITE LETTER TRIM

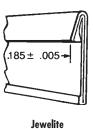
WZ<sup>t</sup>

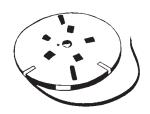
Jewelite® is a foil laminated in pigmented, color stable butyrate. The lip portion is filled to give rigidity. Form fits to any style letter. Sold in 150' flat dispenser reels. 1" and 2" trim is also supplied in 10' lengths, 100' per bundle. Sold by the foot.

Jewelite "J" trim has the same characteristics as Plascotrim letter trim. Supplied in 165' rolls. Sold by the foot. Other colors also available.

Catalog Number	Color	Size	Put Up
AME-213-150 AME-215-150	Duranodic Bronze 313 Gold	3/4" 3/4"	150' 150'
AME-201J-165 AME-202J-165 AME-207J-165 AME-211J-165 AME-215J-165	Black "J" Trim White "J" Trim Blue "J" Trim Bronze "J" Trim Gold "J" Trim	3/4" 3/4" 3/4" 3/4" 3/4"	165' 165' 165' 165' 165'
AME-301-150 AME-302-150 AME-303-150 AME-304-150 AME-305-150 AME-307-150 AME-309-150 AME-311-150 AME-313-150 AME-313-150 AME-315-150 AME-320-150	Black White Red Orange Yellow Blue Burgundy Bronze Duranodic Bronze 313 Gold Chrome/Silver Brushed Chrome	]" ]" ]" ]" ]" ]" ]" ]" ]"	150' 150' 150' 150' 150' 150' 150' 150'
AME-301-10 AME-302-10 AME-303-10 AME-306-10 AME-307-10 AME-308-10 AME-309-10 AME-310-10 AME-311-10 AME-313-10 AME-313-10 AME-315-10 AME-320-10	Black White Red Green Blue Brown Burgundy Ivory Bronze Duranodic Bronze 313 Gold Chrome/Silver	]" ]" ]" ]" ]" ]" ]"	10' 10' 10' 10' 10' 10' 10' 10' 10' 10'
AME-501-100 (1) AME-502-10 AME-503-10 AME-511-100 (1) AME-515-10 AME-520-10	Black White Red Bronze Gold Chrome/Silver	2" 2" 2" 2" 2" 2"	100' 10' 100' 10' 10'

**NOTE:** (1) 100' Flat dispenser reel.





Dispenser Reel

# **LETTER TRIM ACCESSORIES**

WZ<sup>1</sup>

The AME-NIC "nicker" letter trim tool is very useful for notching trim ends to allow a smooth, uniform bend. Re-designed blade and anvil allows a strong, dependable cut.

Wagner powerful handle magnets are ideal for holding Jewelite trim and other letter trim in position during assembly. Available in 5 styles which reduce assembly time in the shop. Permanent magnetism guaranteed.

Catalog Number	Description	Length	Ext. Side Lt.	Dimensior Width	ns (Inches) Magnet Ht.	Handle Ht.	Total Ht.
AME-NIC	Letter Trim Tool	-	-	-	-	-	-
WAG-25# WAG-50# WAG-HMC503 WAG-HMC503B WAG-HMC504	Magnet w/25 lbs. Pull Strength Magnet w/50 lbs. Pull Strength Magnet w/50 lbs. Pull Strength, One Extended Side Magnet w/50 lbs. Pull Strength, One Extended Side Magnet w/50 lbs. Pull Strength, Two Extended Sides	1 2 3-3/8 3-1/2 4	- 1 1-1/4 1	3/4 3/4 3/4 3/4 3/4	] ] ] ] ]	1 1 1 1	2 2 2 2 2











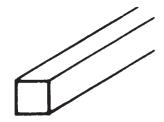




# **ACRYLIC HANGER BAR**

Hanger bar is a clear acrylic bar for supporting sign faces.

Catalog Number	Description	Length
INT-0100	Hanger Bar, 1/2" x 1/2"	10'



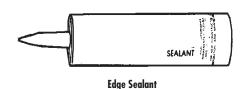


# **OMEGA EDGE CAP**

Omega edge cap is made of solid PVC. It gives a nice finished look to almost any sign. When properly applied will also protect Laminators brand pre-finished board from the adverse affects of weathering. Sold by the 8' piece. Other colors also available.

Omega edge sealant should be used inside of the capping when used outdoors on board products.

Catalog Number	Description	Color
LAM-U01-1/4 LAM-U01-1/2 LAM-U02-1/4 LAM-U02-1/2	1/4" U-Channel 1/2" U-Channel 1/4" U-Channel 1/2" U-Channel	Black Black White White
LAM-12760	Omega Edge Sealant, 10.1 oz.	Caulk Tube





**€** Let-R-Edge\*

# **CHANNELUME & LET-R-EDGE**

Interstate Electric is an authorized distributor for Channelume and Let-R-Edge. It is a finished aluminum edging for giving depth to channel letters. A butyrate strip is bonded to the edge to provide a compatible surface to cement to the plastic letter face. A gasket of foam is applied at the back to keep dirt from entering the joint at the letter backing. Let-R-Edge is slightly more flexible than Channelume. Available in a variety of 5" wide colors upon request.

# **CHANGE-AD FLAT CHANGEABLE LETTERS & NUMERALS**

Change-Ad flat changeable letters have the characters screened on to clear plastic backgrounds. Letter styles available are Modern, ADM and AD. AD characters are the same as ADM but are screened to give a three-dimensional effect. Movie theater rating symbols as well as custom word plates are also available. Letters are screened onto acrylic unless polycarbonate or DR backgrounds are specified. Standard colors listed below. Custom colors are available in all styles. A Modern Condensed style is available in limited sizes. Gas pricing numerals and wordplates are also available.

Catalog Number	Description /Width	Standard Colors	Modern	Styles AD	ADM
CHA-2 CHA-3	2" Character Letter 3" Character Letter	Black, Red, Blue, Yellow, White	X X	-	-
CHA-4 CHA-6 CHA-8 CHA-10	4" Character Letter 6" Character Letter 8" Character Letter 10" Character Letter	Black, Red, Blue,	X X X X	X X X	X X X
CHA-12 CHA-15 CHA-17	12" Character Letter 15" Character Letter 17" Character Letter	Green, Brown	X X X	X X X	-



# ABCDEFGHIJKLM NOPORSTUVWXYZ 1234567890

Modern Style

# ABCDEFGHIJKLM NOPQRSTUVWXYZ 1234567890

**AD Style** 

# ABCDEFGHIJKLM NOPQRSTUVWXYZ 1234567890

**ADM Style** 

All styles include complete character library (i.e.; commas, parenthesis, exclamation points, etc.)

Thickness of plastic: 2" to 10" = .080 12" and up = .100 Also available in .125

# **CHANGE-AD TRACK & ACCESSORIES**

Change-Ad clear letter track is manufactured from high impact DR acrylic which is extremely weather resistant. Tracking automatically spaces lines of copy. Can be installed using nylon rivets, plastic cement or opti-clear tape. Available in 8', 10' and 12' lengths. Sold by the foot.

Letter changers use suction cup(s) to grab the letters. Dual cup heads are available. All parts are replaceable. Poles are telescopic and nest down to a size of 6' or 8' for easy transport.

Nylon rivets work best if spaced 6" apart using a 3/16" drill bit when installing track.

Convenient letter storage cabinets keep letters safe and organized while transporting or when not in use.

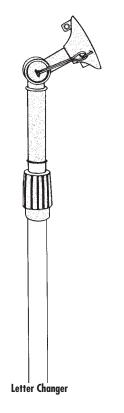
Catalog Number	Description						
CHA-T-*	Clear Top Track						
CHA-B-*	Clear Bottom Track						
CHA-M-*	Clear Mutual Track						
CHA-612	Changer w/6' to 12' Pole						
CHA-618	Changer w/6' to 18' Pole						
CHA-824	Changer w/8' to 24' Pole						
CHA-RIVET	Nylon Rivet						
CHA-4CAB	Storage Cabinet for 300 - 4" Letters						
CHA-6CAB	Storage Cabinet for 300 - 6" Letters						
CHA-8CAB	Storage Cabinet for 250 - 8", 10", 12" Letters						

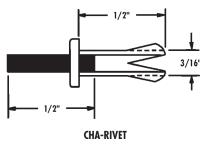
# Using Top, Mutual and Bottom Track System Using Top and Bottom Track System Using Top and Bottom Track System Visible Opening Visible Opening Visible Opening

# **Ordering Information**

Items with "\*" suffix indicates length in feet. Substitute 8, 10 or 12.

Track S	Spacing Chart
Letter Size	Visible Opening
2	2-1/4"
3	3-1/4"
4	4-1/4"
6	6-1/4"
8	9-1/4"
10	11-1/4"
12	13-1/4"
15	16-1/4"
17	18-1/4"







**Letter Storage Cabinet** 



# **CHANGE-AD CHANGEABLE LETTERS FONT LIST**

Listed are standard font sets of characters. Custom fonts are also available.



# **COMMERCIAL FONT (Letters & Numerals Included)**

				••••							
Letter	100	150	200	250	otal Nun 300	nber of ( 350	haracte 400	rs in Set 450	500	550	600
A B C D E F G H I J K L M N O P Q R S T U V W X Y Z	5 3 3 3 6 4 4 4 4 5 2 2 4 4 4 5 2 2 1 2 1 2 2 1 2 2 2 2 2 2 2 2 2 2 2	8 4 4 4 4 10 4 4 4 8 8 2 4 6 6 6 6 6 6 6 8 2 2 2 2 2 2 2 2 2 2 2 2	10 6 6 6 12 6 6 6 6 12 4 6 8 8 8 8 12 8 8 8 8 10 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	12 6 6 6 16 6 8 8 12 6 6 10 8 8 8 14 8 8 8 14 8 8 8 10 6 6 6 6 6 6 6 6 6 6 6 7 8 8 8 8 8 8 8 8	12 8 8 8 8 18 8 8 10 6 8 10 10 14 10 10 10 12 6 6 4	14 10 10 10 20 8 8 8 8 20 6 10 12 12 12 12 18 14 4 14 14 14 18 6 6 4	20 10 10 10 24 12 12 12 12 24 8 12 16 14 14 14 20 8 8 8 4 8 8	20 12 12 12 26 12 14 10 12 18 16 6 6 14 14 14 14 20 10 10 10 10 6	22 14 14 14 30 14 16 14 28 12 22 21 18 8 16 16 8 16 16 16 22 11 2 4 10 6	26 16 18 16 34 14 16 16 32 12 12 24 20 30 18 8 20 20 20 20 20 20 21 12 14 14 16 16 16 16 16 16 16 16 16 16 16 16 16	28 18 20 18 40 16 18 18 36 12 22 22 22 22 22 22 20 20 20 20 21 46 6 11 8
\$	1 0	2 2	2	4	4	4	4	4	4	4	6 6
1 2 3 4 5 6 7 8 9	1 1 1 1 1 1 1 1 1 1 1	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	4 4 4 4 4 4 4 4	6 6 6 6 6 6 6	6 6 6 6 6 6 6 6	6 6 6 6 6 6 6 6	8 8 8 8 8 8 8	8 8 8 8 8 8 8	8 8 8 8 8 8 8 8 8	8 8 8 8 8 8 8 8 8 8

# **LETTER FONT (Letters Only)**

				Ī	otal Nu	nber of (	Characte	rs in Set			
Letter	100	150	200	250	300	350	400	450	500	550	600
Α	8	10	14	19	22	24	28	30	34	38	42
B	4	6	8	10	12	14	16	18	20	22	24
Č	<b> </b>	6	8	10	12	14	16	18	20	22	24
Ď	4	6	8	10	12	14	16	18	20	22	24
	8	14	16	21	26	30	34	39	42	45	48
E F		5	7	8	10	12	12	16	16	17	18
G	3 3 3	5	7	8	10	12	12	16	16	17	18
H	3	5 5	7	8	10	12	12	16	16	17	18
	6	10	12	16	20	22	26	30	33	35	42
j	2	3	4	5	6	7	8	9	10	11	12
K	2	3 3 7	4	5	6	7	8	9	10	11	12
L	5		10	12	14	17	20	21	25	27	30
M	4	5 7	8	8	10	12	14	15	18	19	21
N	5		10	12	14	17	20	21	24	27	30
0	6	9	10	15	18	20	24	27	30	33	36
P	4	6	8	10	12	14	16	18	20	22	24
Q	1	2 7	2	3	4	4	4	6	6	6	6
R	5		10	12	14	17	20	21	24	28	30
S T	5 5	7	10	12	14	17	20	21	24	28	30
		7	10	12	14	17	20	21	24	28	30
U	4	6	8	10	12	14	16	18	20	22	24
٧	2	3	4	5	6	7	8	9	10	11	12
W	3	4	6	7	8	10	12	12	14	16	18
X	1	2	3	4	4	5	6	6	8	8	9
Y	2	3	4	5	6	7	8	9	10	12	12
Z	1	2	2	3	4	4	4	6	6	6	6

# **WAGNER ZIP-CHANGE LETTERS**

Wagner Zip-Change® letters are flat, changeable and self spacing. Letters are screened onto clear acrylic unless high impact is specified. Available in Half-Tone or Solid Stroke styles. Both are available in condensed versions which permit 30% more letters on a sign compared to standard width. Movie theater rating symbols as well as custom word plates are also available. Word plates of most common commercial words and abbreviations are readily available. Standard colors and sizes are listed. Custom colors and sizes are available as well as gas pricing numerals and word plates.

Catalog	Description									
Number	/Width	Colors	Half-Tone	Solid Stroke	Half-Tone Cond.	Solid Stroke Cond.				
ZIP-4 ZIP-6 ZIP-8 ZIP-10 ZIP-12	4" Character Letter 6" Character Letter 8" Character Letter 10" Character Letter 12" Character Letter	Red, Black, Blue, Green	X X X X	X (2) X (2) X (2) X (2) X (2)	χ (1) χ (1) -	- χ (1) χ (1) -				
NOTE:	(1) Available in Black only. Numerals also available in Red.									
	(2) Available in Brown	(2) Available in Brown and White also.								

WAGNER ZIP CHANGEABLE & DIMENSIONAL LETTERS FONT LIST



**Half-Tone** 





Solid Stroke Condensed

Listed are standard font sets of characters. Custom fonts are also available.

# **COMMERCIAL FONT (Letters and Numerals Included)**

Letter	100	150	200	Z50	otal Nun 300	nber of ( 350	Character 400	rs in Set 450	500	550	600
A B C D E F G H I J K L M N O P Q R S T U V W X Y Z	6 2 2 2 2 6 2 2 2 2 2 2 2 2 2 2 2 2 4 4 4 4	8 4 4 4 4 10 4 4 4 6 6 6 6 8 6 2 2 2 2 2 2 2 2 2 2 2 2 2 2	10 6 6 6 6 6 12 6 6 6 8 8 8 8 10 8 8 8 8 10 4 4 4 4 4 2 4 4 4 4 4 4 4 4 4 4 4 4 4	12 8 8 8 16 6 6 6 6 6 12 6 6 6 10 8 8 8 12 8 8 8 8 10 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6	12 8 8 8 8 18 8 8 10 12 10 4 10 10 10 10 10 4 4 4 4 4 4 6 4 4 6 4 4 6 4 6 4 6 4 6	14 10 10 20 8 8 8 8 10 12 12 12 16 14 4 4 14 14 14 14 14 14 14 14 16 6 6 4 6	18 10 10 10 24 12 10 10 24 10 12 16 14 18 16 4 16 16 16 16 18 8 8 4 8	20 12 12 12 26 12 12 10 24 10 12 18 16 16 6 16 16 16 16 16 16 16 16 16 16 1	22 16 16 16 30 14 14 12 28 12 12 22 21 18 18 18 24 16 8 16 16 16 17 18 18 18 24 19 10 10 10 10 10 10 10 10 10 10 10 10 10	26 18 18 18 34 14 14 14 14 32 12 12 20 20 20 20 20 20 20 20 20 20 20 20 20	28 20 20 40 16 16 16 16 22 22 30 20 8 20 20 20 8 21 44 14 6 11 6 12 8
\$	2 2	2	2 2	4 4	4	4	4 4	4	4	4	6
1 2 3 4 5 6 7 8 9	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	4 4 4 4 4 4 4 4	6 6 6 6 6 6 6 6	6 6 6 6 6 6 6 6	6 6 6 6 6 6 6 6 6	8 8 8 8 8 8 8	8 8 8 8 8 8 8	8 8 8 8 8 8 8	8 8 8 8 8 8 8

# **LETTER FONT (Letters Only)**

				I		nber of (					
Letter	100	150	200	250	300	350	400	450	500	550	600
Α	8	10	12	18	20	22	24	28	30	34	38
В	4	6	8	10	12	14	16	16	18	18	20
C	4	6	8	10	12	14	16	16	18	18	20
D E F	8	6	8	10	12	14	16	18	20	22	24
E	8	10	16	18	24	26	32	32	34	36	38
F	2	4	6	6	8	10	12	14	16	18	20
Ğ	2	4	6	6	8	10	12	14	16	18	20
Ĥ	7	4	6	6	8	10	12	14	16	18	20
	0	10	12 4	16	18	22	24 8	26	30	30	36
J K	2 2 2 6 2 2	2	6	4 6	6 8	10	12	10 14	10 16	14 18	14 18
L	4	6	10	10	14	16	20	20	22	24	26
Μ̈	4		8	8	12	12	16	18	20	18	20
N	6	4 8	10	14	16	18	20	24	26	26	28
	6	8	10	14	16	18	20	24	26	28	32
0 P	4	6	8	10	12	14	16	16	20	24	26
Q	2	2	2	4	4	4	4	6	6	10	10
R	2 6	10	10	16	16	20	20	24	26	30	34
R S T	4	8	10	12	14	18	20	22	24	26	28
T	4	8 8 8 2	10	12	14	18	20	24	24	28	28
Ü	4	8	8	12	12	16	16	16	18	18	18
V	2 2	2	4	4	6	6	8	12	12	16	18
W	2	4	6	6	8	10	12	12	1,6	16	18
X	2 2	2 4	2	4	4 8	10	4	6	6	8	8
Y	2	2	2	4	4	4	12 4	14	18 6	18 8	20 8
&	2	2	2	4	4	4	4	4	6	8	10



# **WAGNER ZIP TRACK & ACCESSORIES**

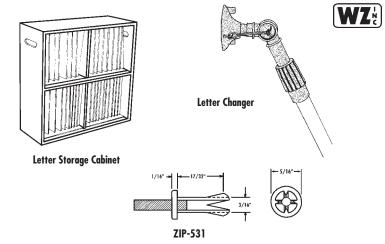
Wagner Zip track is manufactured from DR acrylic. It can be installed with nylon rivets or plastic cement. Available in 8', 10' and 12' lengths. Sold by the foot.

Change-Ad letter changers are stocked but various Wagner letter changers are also available by special order.

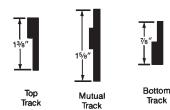
Nylon rivets are recommended for fastening track to sign faces. To fasten track to .125 background, drill .191 diameter hole. To fasten track to .250 background, drill .219 diameter hole.

Convenient, lightweight and portable letter storage cabinets keep letters safe and organized while transporting or when not in use.

Catalog Number	Description
ZIP-PT- *	Zip Clear Top Track
ZIP-PB- *	Zip Clear Bottom Track
ZIP-PM- *	Zip Clear Mutual Track
CHA-612	Letter Changer w/6'-12' Pole
CHA-618	Letter Changer w/6'-18' Pole
CHA-824	Letter Changer w/8'-24' Pole
ZIP-531	Large Nylon Rivet
ZIP-46CAB	Storage Cabinet for 300 4" to 6" Letters
ZIP-8CAB	Storage Cabinet for 300 8" Letters
ZIP-10CAB	Storage Cabinet for 300 10" Letters



Track S	Spacing Chart
Letter Size	Visible Opening
3	3-1/4"
6	4-1/4" 6-1/4"
8	9-1/4"
10	11-1/4"
12	13-1/4"
15	16-1/4"
17	18-1/4"



### **Ordering Information**

Items with "\*" suffix indicates length in feet. Substitute 8, 10 or 12.

# **WAGNER ZIP-LITE REVERSE LETTERS**

Zip-Lite® reverse letters are a totally new idea in signs that does not look like typical changeable copy message signs. Each letter is printed on the first surface of .080 high impact material, entirely black or bronze except for a clear un-printed area and sealed with a clear protective coating to protect it from scratching and fading. It is necessary to order a set of three different size Zip-Lite® blanks/spacers. These fill in the spaces between words and at the ends of words.

Zip-Lite® reverse letters are so new that Wagner was issued a patent on the strips that prevent light leaks. Unlike other reverse print letters, Zip-Lite® letters can be changed from the ground with a Zip-Changer. The color of the background you choose will appear through the clear Zip-Lite® letter, white or yellow being the most popular.

The 4", 6", 8", 10" and 12" letters are printed on panels that measure 4.7/8", 6.7/8", 9.7/8", 11.7/8" and 13.7/8". Zip-Lite® letters will work only with Zip-Lite® track. No other track is compatible. Special Zip-Lite® DR mutual track was developed for use with these letters. This track can be cemented or riveted to any flat or corrugated sign background. Zip-Lite® track is available in 8', 10' and 12' lengths.





# WAGNER DIMENSIONAL LETTERS & ACCESSORIES

Wagner dimensional changeable letters have slots which engage with plasti-bar clear high impact acrylic track. Track eliminates any chance of the letters shifting. Characters are available in red or black.

Increase the effectiveness of every changeable copy board and marquee with long lasting Wagner letters. Continued product improvement has resulted in a thicker, more brilliant, changeable letter. To attract even more attention to your copy board display, use different color and size combinations. Prices or product names could be in one color and size, while the balance of the copy is in another.

The black letter in all sizes is more than durable, it's just about impossible to break. The 4", 6", 8" and 10" are guaranteed for 3 years. No other changeable letters available are as sturdy or as easily readable because of the deep return or wide stroke and matte finish of the standard Wagner letter.

Manufactured from outdoor grade, high impact plastic, letters are available in 4", 6", 8", 10" and 17" heights.

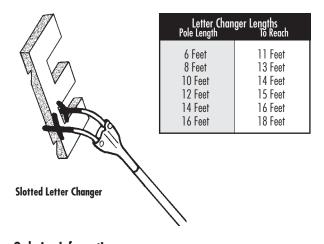
Letter changers use a mechanical grip to hold letters.

WAG-W-8CAB holds 300  $\,$  6" or 250  $\,$  8" or 10" Wagner dimensional letters on five shelves. Measures 42" x 42" x 13" and weighs 40 pounds.

Catalog Number	Description
WAG-4-* WAG-6-* WAG-8-* WAG-10-* WAG-17-*	4" Dimensional Letter 6" Dimensional Letter 8" Dimensional Letter 10" Dimensional Letter 17" Dimensional Letter
WAG-P-8	8' Clear Track
WAG-P-10	10' Clear Track
WAG-SLC-**	Slotted Letter Changer
WAG-W-8CAB	Storage Cabinet for Dimensional Letters







# **Ordering Information**

Items with "\*" suffix indicates color. Substitute B for Black, R for Red.

Items with "\*\*" suffix indicates pole length in feet. Substitute 6, 8, 10, 12, 14, 16.

# **BEVELITE/ADLER • GEMINI • LETTERS & ACCESSORIES**

Interstate Electric is an authorized distributor of all Gemini letters and accessories. Available upon request. Within the complete line of Change-Ad and Wagner letters and accessories we already offer, any item is readily available.



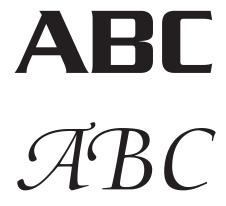
**GEMINI** 

Metal arts

# METAL ARTS CAST METAL LETTERS, GRAPHICS & PLAQUES

Metal Arts offers the services of highly skilled craftsmen to produce the finest quality letters in standard or custom styles of bronze, yellow brass or aluminum in a large variety of finishes. Their design department can also supply any special style of letter or logo from customer supplied artwork. Metal Arts also makes a variety of beautifully detailed graphics and plaques. Please call for further information.

Standard Material / Finishes	Description
#10 Satin Brite Aluminum	Faces are belt polished to a fine satin finish. Sides are sandblasted and finished with two coats of high grade clear lacquer coating.
#20 Acrylic Baked Enamel	Two heavy coats of high grade acrylic urethane enamel. Baked at 200°F.
#30 Satin Alumilite	Faces and sides are belt polished to a fine satin finish then completed with a patented clear anodized finish.
#40 Colored Anodic Finishes	Same as #30 Satin Alumilite except finish to be Kalcolor, Duranodic or Permanodic in Light, Medium or Dark Bronze, Gold and Black. NOTE: Although anodic finishes are very durable, variation in color may exist.
#50 Satin Bronze or Yellow Brass	Faces are belt polished to a fine satin finish. Sides are sandblasted and finished with two coats of high grade clear lacquer coating.
#60 Oxidize Bronze	Letters are the same as #50 Satin Bronze but are chemically oxidized to a dark statuary color, hand rubbed and protected with two coats of high grade clear lacquer.



# TRANSCO ULTRA VAC 5A NEON MANIFOLD SYSTEM



The Transco Ultra Vac 5A neon pumping system is an all Pyrex glass manifold where the operator can pump from either the right and/or left side. All Pyrex glass is entirely oven annealed to ensure a stress free glass system with good durability. The modular design is simple to assemble and operate. Uses high vacuum greaseless stopcocks and o-ring connectors for easy installation. Choice of aas flask or tank connectors. Supplied with 0-40 torr positive pressure gauge. Trap arm has a built-in main stopcock which allows the manifold to be kept under vacuum even while sealing on neon units prior to processing. Supplied with two Alta Robbins valves for gas metering.

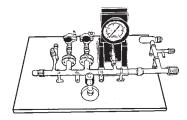
# **Ordering Information**

TRA-UVACSATR Ultra Vac 5A base system shown consists of an all Pyrex glass body, torr gauge & ability to fill off of one side. Please specify right or left at time of order.

TRA-CKGF is a necessary connector kit for connecting glass gas flasks to the system.

TRA-96460 Special filling unit is a gas filling connector which enables you to pump up to two tubes simultaneously without the trouble of welding the tubulation. Simply tighten the cap around the tubulation glass.

Catalog Number	Description
TRA-UVAC5ATR	Manifold Ultra Vac 5A Base System w/Torr Gauge
TRA-CKGF	Connector Kit for Glass Gas Flasks
TRA-96460	Special Filling Unit



Ultra Vac 5A **Manifold System** 

# **Options**

Substitute the TRA-Y-CONN "Y" glass connector in place of the TRA-96460 special filling unit. Pump up to two tubes simultaneously with the need to weld the tubulation.

Substitute two TRA-96457 gas transfer tank systems in place of the TRA-96402/96411 gas flask connector kit. This system enables you to use 25 liter EGL gas tanks or 100 liter Transco gas tanks with your system. Please specify which tank size is intended to be used at time of order.

Add an extra trap arm TRA-96424 onto your system to make processing possible on both sides of your manifold. An additional special filling unit or "Y" glass connector will be necessary as well.

Catalog Number	Description
TRA-Y-CONN	"Y" Glass Connector
TRA-96457	Gas Transfer Tank System
TRA-96424	Extra Trap Arm



**Gas Transfer Tank System** 





# Recommended Equipment

TRA-96444 diffusion pump is the most effective method of achieving high-speed pumping below one micron.

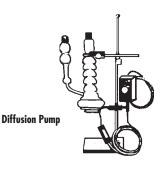
Alcatel ALC-UM2015 is an extremely high performance vacuum pump rated at 300 liters per minute. Made for high production neon shops. An ALC-UM2010 pump rated at 200 liters per minute is also available.

TRA-82440 15KVA Bombarder and the TRA-82525 superchoke has a good voltage capacity for most production work and an electronic rotary dial variac/choke for more accurate bombardment. TRA-82445 22KVA bombarder and TRA-82530 rotary dial variac/choke is available as well for shops bombarding longer lengths of tubing or with a bigger O.D. diameter. All variacs sold separately.

Catalog Number	Description
TRA-98040	Diffusion Pump Assembly
ALC-UM2015	Alcatel 300 LPM Pump
TRA-82440	15 KVA Bombarder
TRA-82525	Superchoke DC Controlled Reactance Choke
TRA-84530	Variac only for Superchoke
TRA-84559	0-1000 mA Panel Mount Meter
TRA-84542	Digital Infrared Temperature Gauge
TRA-96484	Vacuum Gauge, 1-1000 Microns

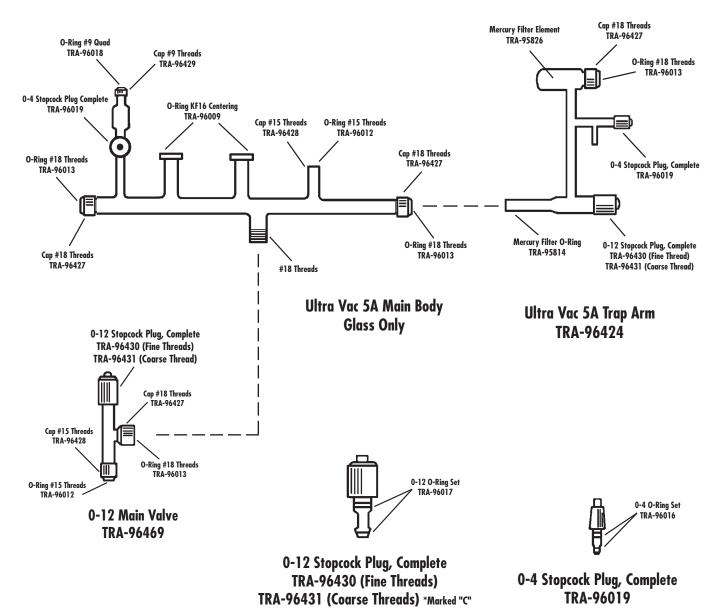


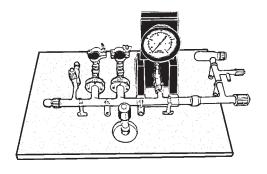
Vacuum Pump



# TRANSCO ULTRA VAC 5A MANIFOLD • PARTS DIAGRAM

# **Transco**





# Special Filling Unit

O-Ring #7 Threads TRA-96011 Cap #7 Threads TRA-96407

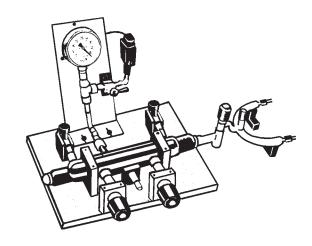
# **EGL MAXI•VAC MXV-50 NEON MANIFOLD SYSTEMS**

EGL's Maxi•Vac MXV-50 neon pumping system is made with short lengths of heavy wall 50mm diameter borosilicate tubing and welded into a compact configuration which has the fewest possible number of connections, then annealed to remove strain. The result is a strong assembly that provides high flow rates, maximum vacuum integrity, minimal gas waste and easy interior access for cleaning. The two 25mm diameter main stopcocks are large providing high pumping rates. Uses high vacuum greaseless stopcocks eliminating the contamination problems associated with lead glass stopcocks found on home made systems.

Description	Cat. No. 120V • 60Hz (2)	Cat. No. 220V ● 50Hz (2)
System I includes: Borosilicate glass manifold complete with sturdy base, 0-40mm hg/torr fill gauge, highly accurate vacuum gauge complete with gauge adapter/stopcock, newly designed oil diffusion pump (for maximum pumping performance) complete with heater and all necessary mounting hardware.		
Complete system for gas flasks Complete system for gas tanks (1)	EGL-716000 EGL-716010	EGL-716005 EGL-716015
System II includes: Same as System I, including Series A70 or equivalent vacuum pump with stainless steel flex hose and adapter. Complete system for gas flasks w/Series A70 vacuum pump Complete system for gas tanks (1) w/Series A70 vacuum pump	EGL-716025 EGL-716027	EGL-716026 EGL-716028
System III includes: Same as System II, including choice of KVA bombarder & variable output transformer choke & milliamp gauge.  Complete system for gas flasks w/Series A70 vacuum pump and 7.5KVA bombarder and choke.  Complete system for gas tanks (1) w/Series A70 vacuum pump	EGL-716050	EGL-716051
and 7.5KVA bombarder and choke.  Complete system for gas flasks w/Series A70 vacuum pump and 12.5KVA bombarder and choke.	EGL-716075	(3)
Complete system for gas tanks (**) w/Series A70 vacuum pump and 12.5KVA bombarder and choke.  Complete system for gas flasks w/Series A70 vacuum pump and 15KVA bombarder and choke.	EGL-716077 EGL-716060	EGL-716061
Complete system for gas tanks $^{(I)}$ w/Series A70 vacuum pump and 15KVA bombarder and choke.	EGL-716062	EGL-716063
Complete system for gas flasks w/Series A70 vacuum pump and 22KVA bombarder and choke.	EGL-716078	(3)
Complete system for gas tanks $^{(I)}$ w/Series A70 vacuum pump and 22KVA bombarder and choke.	EGL-716080	(3)
System IV (for gas tanks only) includes: Same as System III, plus second Series A70 or equivalent vacuum pump with stainless steel flexible hose and adapter, two gas tanks systems, EGL digital temperature gauge, set of replacement "0" rings, additional 50cc bottle of clear diffusion pump oil, and 100 pairs of 8CC PREMIUM PLUS electrodes.		
Complete system for gas tanks w/2 Series A70 vacuum pumps and 7.5KVA bombarder and choke.	EGL-716102	EGL-716103
Complete system for gas tanks w/2 Series A70 vacuum pumps and 12.5KVA bombarder and choke.	EGL-716142	EGL-716143
Complete system for gas tanks w/2 Series A70 vacuum pumps and 15KVA bombarder and choke.	EGL-716162	EGL-716163
Complete system for gas tanks w/2 Series A70 vacuum pumps and 22KVA bombarder and choke.	EGL-716164	(3)

**NOTE:** (1) Gas transfer systems included with system IV only. (2) 120V refers to all electrical components except bombarders and chokes (both are 220V primary). (3) Not available for 220V/50Hz.





Standard Maxi-Vac MXV-50 manifold On mounting base with torr gauge, "Y" fitting, complete with stopcock, air admittance valve and two Robbins valves.

Series A70 Vacuum Pump Specifications		
Free air Displacement, CFM (L/min.)	7.0 (195)	
Oil Capacity	1 Quart	
Motor Rating (hp/rpm)	1/2 - 1800	
Approximate Weight	55 Lbs.	

2-stage rotary vane pump which reaches an ultimate vacuum of 1x10<sup>-4</sup>mbr and have ISO-KF-25 flanges on inlets and outlets, including anti-suckback valves and is equipped with Pneurop flanges, hose nipple, centering ring, o-ring and clamp.

# **NEON PUMPING EQUIPMENT**

A diffusion pump is the most effective method of achieving high-speed pumping below one micron. Transco's TRA-98040 diffusion pump consists of a Pyrex glass body complete with heater, mantle, mounting hardware and a 50cc bottle of clear diffusion pump oil. Uses o-ring threaded connectors to allow lead glass to Pyrex glass connection.

TRA-96484 Televac B2A vacuum gauge has a reading scale of 1 to 1000 microns. Additionally, the scale includes a red line indicator which represents 10 (0.01 microns). This gauge offers anti-flashback capabilities by its unique grounding feature. It also comes fitted with a filter/sensor combination designed to trap out solid particles and condensable gases which may enter the sensor tube and contaminate the element. The Televac vacuum gauge can be installed on all Ultra-Vac manifold systems and can be installed on most other manifold systems (optional adaptor required).

TRA-96455 Transco MSVS capsule vacuum gauge (torr) is a mechanical gauge designed to measure from 40 to 0 torr. It is of rugged construction suitable for direct or panel mounting and is independent of barometric pressure. Within the gauge is an evacuated and hermetically sealed aneroid capsule. Variation of pressure causes deformation of the capsule and this movement is transferred to the pointer by a mechanical linkage with a jeweled movement. The pointer indicates the pressure on a linearly divided scale unaffected by any external atmospheric pressure. Because the gauge gives a direct measurement of the pressure, it is also unaffected by the composition of the gas used (i.e., argon, neon, helium, etc.). These features make it much more accurate than a conventional oil manometer. Mercury tube repairs are not recommended on systems using this gauge. Mounted on a stand for ease of installation on a Transco Ultra-Vac manifold or can be installed on any existing manifold.

Both the EGL-EZGAUGE and the HYD-BPG are gas pressure oil manometers. Gauges give readings of rare gas pressures during the filling stage of neon processing by the movement of oil in the tube. HYD-BPG is supplied with a figuring scale and the required amount of red butyl phthalate oil. Borosilicate glasswork is mounted on a wood stand. EGL-EZGAUGE uses a greaseless stopcock and is improved with borosilicate glasswork that is securely mounted to a rugged stand for easy attachment to the manifold. Connection is made with a glass compression fitting that accommodates 12-15mm tubing. Gauge is suppled with a calibrated scale and required amount of red butyl phthalate oil.

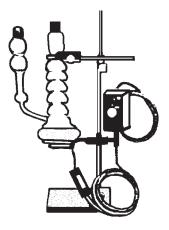
Catalog Number	Description	Mfg.
TRA-98040	Diffusion Pump System	Transco
TRA-96484	Vacuum Gauge, 1-1000 Microns	Transco
TRA-96455 EGL-EZGAUGE HYD-BPG	0-40 Torr Gauge Oil Manometer Oil Manometer	Transco EGL Voltarc







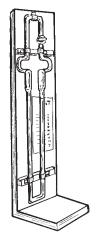




**Diffusion Pump** TRA-98040



Vacuum Gauge TRA-96484



Oil Manometer



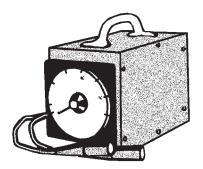
Torr Gauge TRA-96455 **Shown Mounted** 

**Iransco** 

# **NEON METERS**

TRA-75MA when connected in series with the transformer's secondary voltage and the neon tubing load, can indicate if the proper size transformer is being used. A transformer should operate at 80% of its rated secondary current for best efficiency and longest life. The TRA-75MAENCL is the same meter mounted in a portable case with test leads. The TRA-84559 can be used to monitor the higher currents used during bombarding or with cold cathode electrodes.

Catalog Number	Description
TRA-75MAENCL	0-75mA Complete Portable Meter
TRA-75MA	0-75mA Panel Mount Meter Only
TRA-84559	0-1000mA Panel Mount Meter Only



TRA-75MAENCL

# **NEON TESTERS & COLOR CHECKERS**

EGL-STT is a slim-profile gas tube and lamp tester which fits comfortably in the palm of your hand. It has a telescopic wand which allows access to hard-to-reach locations. Includes four "AA" batteries.

VIS-NTT generates a high frequency which causes good gaseous tubing and lamps to glow. It is among the smallest testers available and offers a quick way to check lamps and neon units in the field. Requires one 9 volt battery.

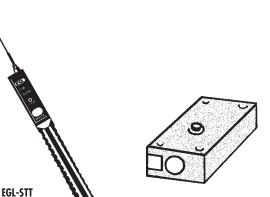
MAS-ELT electronic lamp tester quickly identifies faulty gas discharge lamps including fluorescent, HID and neon types. Its telescoping wand allows access to hard-to-reach locations. Requires one 9 volt battery.

ELE-BD-10AS sparkcoil tester will excite neon and argon gases allowing identification of unmarked gas flasks or the detection of small cracks or leaks in the neon pumping plant or in blown neon units. Sparkcoil is fitted with a push switch for momentary operation since continuous operation should not exceed 1 minute. 120V • 50/60 Hz. The ELE-1250-QT tip, when used with the sparkcoil tester will show the color of the phosphor of un-pumped sign tubing thus helping to match tubing colors.

EGL-UVG-4 is a hand held portable color tester used to determine the color of un-pumped sign tubing. Requires four "AA" batteries.

VOL-VCC1 color checker is used to determine the color of un-pumped sign tubing. Can be used in the shop or in the field. Requires four "AA" batteries.

Catalog Number	Description	Mfgr.
EGL-STT	Gas Tube & Lamp Tester, w/Wand	EGL
VIS-NTT	Gas Tube & Lamp Tester	Visual Electronics
MAS-ELT	Gas Tube & Lamp Tester, w/Wand	Masonlite
ELE-BD-10AS	Sparkcoil Tester w/Switch	Electro-Technic
ELE-1250-QT	Quartz Tip for Sparkcoil Tester	Electro-Technic
EGL-UVG-4	Neon Tube Color Tester	EGL
VOL-VCC1	Neon Tube Color Checker	Voltarc
VOL-VCC1-LMP	Replacement Lamp for VOL-VCC1 & EGL-UVG-4	Voltarc



MASONLITE VII (EGIL) EF



ELE-BD-10AS





**VIS-NTT** 

INTERSTATE ELECTRIC CO., INC.



# **MAGNET • BREAKER BAR**

A breaker bar is put into the inner sealed open end sleeve of a glass gas flask. When contacted with a magnet, it breaks the glass seal allowing gas to flow.

Catalog Number	Description
TRA-96454	Breaker Bar
MAG-HS8078	Horse Shoe Magnet





**Horse Shoe Magnet** 

**Breaker Bar** 

# **MERCURY** • Hg

The finest mercury for use in neon tube fabrication. Triple distilled to remove all impurities. Supplied in poly-coated glass bottles to protect against leakage in case of glass fracture. Sold in 1 pound bottles.

Catalog Number	Description
INT-MERCURY	Triple Distilled Mercury, 1 lb. Bottle



# **MERCURY SAFETY ACCESSORIES**

Mercury spill kit is economical and contains everything needed to handle small mercury clean-ups in a portable compact size. Kit includes one Hg Absorb™ jar, two Hg Absorb™ sponges and one 500g container of Hg Absorb™ powder. Cleans up approximately 1 lb. of spilled mercury.

Catalog Number	Description
INT-MSK	Mercury Spill Kit

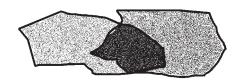


**Mercury Spill Kit** 

# MICA

Used for insulating purposes around electrodes during bombarding.

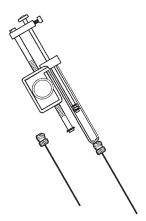
Catalog Number	Description
MIC-2.5X4	Mica, Approximately 2.5" x 4"



# **EGL MERCURY INJECTOR • SYRINGE**

EGL-732000 mercury injector is a repeating type dispenser which provides for the precise delivery of 1/50 of the entire volume of the syringe with one click or push of the button. This allows the dispensing of exact amounts of mercury from unit to unit. It is a safe and consistent means of dispensing mercury into a mercury trap. The amount dispensed from a 500 micro liter dispenser/syringe would be 10 micro liters (100mg) which is a ball approximately 2mm in diameter, the correct amount for most units.

Catalog Number	Description
EGL-732000	Mercury Injector



# WESTRIM

# **CABLE SUPPORTS**

Used to run GTO-15 cable in neon installations and provide a wire standoff distance in accordance with the National Electric Code (NEC).

Catalog Number	Description	Length	Put Up	Weight/100 (Lbs.)
WES-CSMS	White Porcelain, Machine Screw Mounted	2 - 1/2"	100	17



# **TEST CLIPS**

Insulators sold separately.

Catalog Number	Description	Clip Length	Jaw Opening	Put Up
SEL-SC27-BX SEL-SC29B-BX SEL-SC29R-BX	Test Clip Insulator for #27 Black Insulator for #27 Red	2-7/16"	5/8"	10 10 10
SEL-SC45-BX SEL-SC47B-BX SEL-SC47R-BX	Pee Wee Test Clip Insulator for #45 Black Insulator for #45 Red	1 - 1/2"	5/16"	10 10 10
SEL-SC48B-BX SEL-SC49B-BX SEL-SC49R-BX	Alligator Test Clip Insulator for #48 Black Insulator for #48 Red	2"	1/2"	10 10 10
SEL-SC85-BX SEL-SC87B-BX SEL-SC87R-BX	Crocodile Test Clip Insulator for #85 Black Insulator for #85 Red	2 - 1/8"	5/16"	10 10 10



SEL-SC27 Shown with Insulator



SEL-SC48B Shown with Insulator



Selecta Clip

SEL-SC45 Shown with Insulator



SEL-SC85 Shown with Insulator



# **STOPCOCKS**

These high vacuum stopcocks are suitable for the requirements of neon sign pumping systems. Made of lead glass.

Greaseless stopcocks made of sodaglass or Pyrex and accessories available upon request.

EGL Catalog Number	Hyde Catalog Number	Dimension
EGL-2MM	HYD-2MMSLG	2mm Bore
EGL-4MM	HYD-4MMSLG	4mm Bore
EGL-6MM	HYD-6MMSLG	6mm Bore
EGL-8MM	HYD-8MMSLG	8mm Bore
EGL-10MM	HYD-10MMSLG	10mm Bore





# STOPCOCK & O-RING GREASE

Several areases are available to fit the differing requirements. preferences and climates of our many alassblowing customers.

Catalog Number	Description	Put Up
LAB-S8950 8690-B22	Dow Corning Thomas Lubriseal	5.3 oz. Tube 75g Tube
TRA-APEZION	Apezion Grease for O-Rings	5g Thimble





# **TEMPERATURE GAUGES & INDICATORS**



Reaching proper glass temperature is essential for consistently bright, clean and high quality signs. EGL-734200 digital temperature gauge was designed specifically for the neon bombarding process, providing accurate Fahrenheit or Celsius readings in a range of 32°F-650°F (0-325°C). Features a large, clear 3/4" LCD, enabling the operator to fully concentrate on bombarding of units. A high quality durable probe made especially for neon tubing (8-20mm diameter) with an aerospace-grade low-mass foil thermocouple (replaceable) provides accurate temperature readings significantly faster than with conventional large mass thermocouples while customdesigned noise immunity circuitry ensures consistently reliable readings while bombarding. Unit is housed in a durable plastic case and comes equipped with one 9 volt battery for approximately 180 hours of operation.

TRA-84542 digital infrared temperature gauge is similar to the EGL-734200 except it reads temperature through an infrared process, therefore no probe needs to be connected to the tube during the bombarding process.

Tempilac temperature indicating liquid is applied by brush to the sign tubing before bombarding and dries instantly to an opaque mark. When 488° F or 500° F is achieved during bombarding, Tempilac liquefies sharply indicating that the proper bombarding temperature has been met. Tempilac can be diluted with TEM-REDTHIN thinner without changing the indicating temperature. The thinner the coating the guicker the reaction time.

Catalog Number	Description	Mfgr.	
EGL-734200 (1)	Digital Temperature Gauge w/4' Probe	EGL	
TRA-84542	Digital Infrared Temperature Gauge	Transco	
EGL-734210	Replacement 4' Probe	EGL	
TEM-488	Tempilac Liquid 488° F, 2 oz.	Tempil	
TEM-500	Tempilac Liquid 500° F, 2 oz.	Tempil	
TEM-THINNER	Tempilac Thinner, 2 oz.	Tempil	
NOTE: (1) Also available with a 5' probe.			





EGL-734200

**Tempilac Products** 

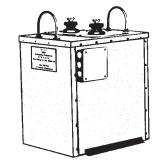
Transco

# **BOMBARDING TRANSFORMERS & CHOKES**

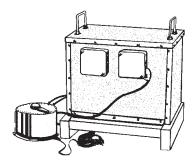
Used in the neon processing stage for bombarding tubes. Available in a 15KVA version which is suitable for most applications. A 22KVA version which will handle longer lengths and large diameter tubing is also available. Superchokes are controlled by an electric rotary dial variac which provides a degree of control over the glass and temperature never before attainable by slide-bar chokes. Items listed are 60Hz. Also available in 50Hz versions.

Catalog Number	Description	Rating	Pri. V.	Sec. V.	Line Amp.
TRA-82440	Bombarder	15KVA	220-230	24,000	90
TRA-82525	Superchoke Reactance Choke <sup>(1)</sup>	-	0-130/220-230		5
TRA-82445	Bombarder	22KVA	220-230	24,000	120
TRA-82530	Superchoke Reactance Choke <sup>(1)</sup>	-	0-130/220-230	-	5
TRA-84530	TRA-84530 Electric Rotary Variac for Superchoke 120 - 10				

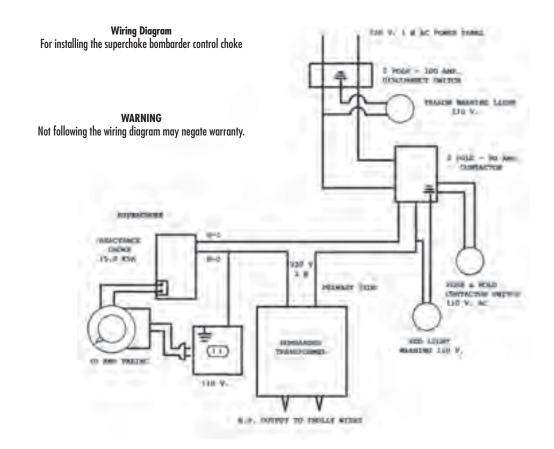
**NOTE:** (1) Electric rotary variac sold separately.



**Bombarder** 



Superchoke With electric rotary variac



# **HIGH VACUUM PUMPS**

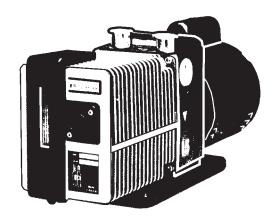
Alcatel high vacuum pumps combine innovative design with absolute reliability. Machining and casting quality combined with precision tolerances and an optimized lubrication system explains the extremely high performance of Alcatel pumps for applications which require pumping stability or whenever low ultimate vacuum is desired. Other advantages are; an efficient, reliable anti-suckback system in the case of a power failure or pump shutdown, leak-tight oil-casing and shaft. Pumps also feature the quietest, high performance ventilation system to ensure efficient cooling of the pump with a minimum of vibration. These pumps can be assembled and disassembled quickly, with no special tooling required for maintenance and serviceability. Simply follow the steps of the technical manual supplied with each pump. To facilitate maintenance actions or routine inspection, the vertical oil sight and the plugs for filling and draining are conveniently visible, located and accessible on the front of the oil casing. Plugs are made of plastic to prevent burned fingers and filling plug is surrounded by a receptacle designed to act as a funnel preventing fluid spillage. Many accessories are available for Alcatel pumps.

For over 50 years HyVac has been associated with quality products and dependable service among the vacuum industry. The HyVac 7 is a belt driven, 2 stage pump designed for economy and durability. Large pump oil reservoirs coupled with relatively slow pump rotor speeds ensures long and trouble free operation. Pumps are mounted on a rectangular steel base plate and furnished with a v-belt and belt guard which completely encloses the belt and pulleys. Supplied with an initial supply of oil, with one extra quart. Other sizes, voltages and accessories are also available.

Catalog Number	Description	Voltage	Mfg.
ALC-UM2010	Vacuum Pump, 200 Liters Per/Min.	115/230V 50/60Hz	Alcatel
ALC-UM2015	Vacuum Pump, 300 Liters Per/Min.	115/230V 50/60Hz	Alcatel
HYV-91506001	Vacuum Pump, "Hyvac 7", 1/2 Hp	115V 60Hz	Hyvac







# ALC-UM2010

Technical Characteristics	Unit	50 Hz	60 Hz
Free-air displacement Pneurop pumping speed Ultimate pressure: no air injection (partial) no air injection (total) with air injection (total) Inlet and exhaust flanges Max, permissible water vapor pressure Water vapor absorption capacity Weight Kg (lbs) Motor Oil capacity Recommended oil (standard condition) Noise level (as per pneurop)	m³/h (cfm) m³/h (cfm) mbar mbar mbar NW mbar g/h 24 (54) kW (H.P) l	9.7 8.5 ≤ 10 <sup>4</sup> ≤ 2 x 10 <sup>3</sup> 10 <sup>2</sup> 25 20 130 25.2 (55) 0.375 0.95 Akattel 100	11.6 (6.8) 10.2 (6.0) ≤ 10.4 ≤ 2 x 10.3 10.2 25 15 100 0.5 (1/2) 0.95 Alcatel 100 53

# ALC-UM2015

Technical Characteristics	Unit	50 Hz	60 Hz
Free-air displacement Pneurop pumping speed Ultimate pressure: no air injection (partial) no air injection (total) with air injection (total) Inlet and exhaust flanges Max. permissible water vapor pressure Water vapor absorption capacity Weight Motor Oil capacity Recommended oil (standard condition) Noise level (as per pneurop)	m³/h (cfm) m³/h (cfm) mbor mbor mbor NW mbor g/h Kg (lbs) kW (H.P) I dBA	15 12.5 ≤ 10 <sup>4</sup> ≤ 1.5 x 10 <sup>3</sup> 10 <sup>2</sup> 25 12 110 25.5 (63.5) 0.5 0.95 Alcotel 100 52	18 (10.6) 15 (8.8) ≤ 10.4 ≤ 1.5 x 10.3 10.2 25 10 100 30.3 (67) 0.6 (3/4) 0.95 Alcotel 100 55

### **HYVAC 7**

Specifications	
Number of Stages Ultimate Vacuum, Microns of Hg Free Air Capacity 1/min ft³/min Oil requirement for one filling	2 0.1 79 2.79 1-1/2 Quarts

# **VACUUM PUMP OIL**

High-grade organic vacuum pump oil suitable for all vacuum

Flushing oil contains detergents which once introduced into vacuum pumps, are near impossible to remove completely. We recommend running fresh vacuum pump oil through your pump for cleaning.

Catalog Number	Description
INT-V-OIL-Q	High Grade Vacuum Pump Oil, 1 Quart
INT-V-OIL-G	High Grade Vacuum Pump Oil, 1 Gallon
TRA-95992L	#19 Vacuum Pump Oil, 1 Liter



Red butyl phthalate oil is used as the indicating fluid in oil manometers. Clear oil is used in diffusion pumps.

Catalog Number	Description
HYD-BUTOIL	Red Butyl Phthalate Oil, 3 oz.
TRA-DC-705	Clear Oil for Transco Diffusion Pump, 50cc
EGL-735010	Clear Oil for EGL Maxivac Diffusion Pump, 50ml













# **GLASSBLOWER SWIVELS & ACCESSORIES**

Right angle double swivels are constructed of brass. KIT-KCS-3 connector set consists of 1 small red gum rubber connector and 2 red insulators.

Catalog Number	Description	Mfg.
KIT-KDS90 EGL-3/16SWI	Right Angle Double Swivel Right Angle Double Swivel	Kitco EGL
KIT-KCS-3	Swivel Connector Set, 3 Pcs.	Kitco



# **NEON TUBING HAND BLOCK**

Used by tube benders for holding hot neon tubing flat while making bends. Leaves no markings on neon tubing. Blocks are made of calcium silicate and inert fibers. Hand block will withstand more than 1400° F.

Catalog Number	Description
WES-NTHB	Hand Block, 1" x 3" x 7.5"



**Hand Block** Resting on neon tube



MDC 🌢

# **MATTHEWS NUANCE MIXING SYSTEMS**

Matthews 16-place deluxe mixing system takes up only seven sq. ft. because it uses only 16 base colors to easily match the entire MAP NUANCE™ color system or just about any other popular design system colors including PMS, standard vinyl and plastic. Using only 16 base colors reduces inventory. Bringing exact color matching in-house allows you to mix the precise amount as needed. Left-overs and unnecessary gallon orders are eliminated. Deluxe mixing station comes complete with electronic timer and stainless steel work shelf. Accessories include a sensitive Sartorius scale, a paint shaker, and unique agitator lids for easy mixing, measuring and pouring.

The NUANCE™ color system is the most sophisticated color selection system available. This system helps you simplify and control color and gloss levels. Each of the 858 colors are even marked with a light reflective value. The base colors, formula books which provide the mixing proportions by weight, color selector fans, a designer's album and an artist's file kit to present the color choices make up this system.

VOC base colors should be used in almost all locations as colors will meet the air quality standard of 2.8 pounds VOC per gallon. The non-VOC base colors are available for those areas without environmental VOC restrictions. Sold by the gallon.

This is a practical and reasonably priced system to install in the shop allowing one to mix and match custom colors thereby offering a larger choice.

# **MIXING SYSTEMS & ACCESSORIES**

Catalog Number	Description
MAT-60213	16 Place Mixing System
MAT-604013	32 Place Mixing System
MAT-639104	Mixing Lid
MAT-PS7001XSF	Mettler Toledo Scale
MAT-NCS	Nuance Color Selector
MAT-DA	Nuance Designer File Case
MAT-NCB	Nuance Color Book
MAT-MAPFB	Map Intermix Formula Book
MAT-DAR	Designer File Replacement Card



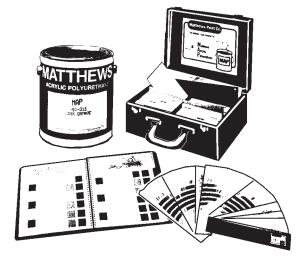
16-Place Deluxe Mixing Station

# **BASE COLORS**

		Number		
VOC Satin Gloss	VOC Full Gloss	Non-VOC Satin Gloss	Non- VOC Full Gloss	Description
SV-202G SV-911G SV-912G SV-913G SV-914G SV-917G SV-920G SV-921G SV-921G SV-922G SV-923G SV-925G SV-931G SV-931G SV-931G SV-947G SV-947G SV-947G SV-947G SV-951G SV-952G	VOC-202G VOC-911G VOC-912G VOC-913G VOC-914G VOC-915G VOC-921G VOC-921G VOC-922G VOC-923G VOC-925G VOC-931G VOC-931G VOC-931G VOC-940G VOC-940G VOC-947G VOC-947G VOC-947G VOC-951G	MAP-N202G MAP-N911G MAP-N912G MAP-N913G MAP-N915G MAP-N917G MAP-N920G MAP-N921G MAP-N922G MAP-N923G MAP-N923G MAP-N931G MAP-N931G MAP-N931G MAP-N931G MAP-N931G MAP-N931G MAP-N951G MAP-N940G MAP-N940G MAP-N940G MAP-N940G MAP-N940G MAP-N940G MAP-N940G MAP-N940G MAP-N940G MAP-N940G MAP-N940G MAP-N940G MAP-N940G MAP-N940G	MAP-SOA-202G MAP-SOA-911G MAP-SOA-912G MAP-SOA-913G MAP-SOA-914G MAP-SOA-917G MAP-SOA-920G MAP-SOA-921G MAP-SOA-922G MAP-SOA-923G MAP-SOA-923G MAP-SOA-931G MAP-SOA-931G MAP-SOA-940G MAP-SOA-940G MAP-SOA-941G MAP-SOA-947G MAP-SOA-947G MAP-SOA-947G MAP-SOA-952G	White Base Violet Base Maroon Base Magenta Base Dark Red Base Red Oxide Base Yellow Oxide Base Blue Base Green Base Burnt Umber Base Black Base New Blue Base Light Red Base Transparent Red Oxide Transparent Yellow Oxide Red Yellow Base Green Yellow Base Scarlet Base Medium Silver Metallic Sparkle Silver Metallic
SV-953G SV-954G	VOC-953G VOC-954G	MAP-N953G MAP-N954G	MAP-SOA-953G MAP-SOA-954G	Super Sparkle Silver Metallic Fine Silver Metallic
		1	MAP-SOA-950G	Gloss Modifier
SV-228G				Satin Clear Top-Coat

# **CATALYST**

Catalog Number	Description
SV-283-320G	Catalyst for VOC Satin Paints, Gallon
SV-283-320Q	Catalyst for VOC Satin Paints, Quart
VOC-283-800G	Catalyst for Gloss Paints, Gallon
VOC-283-800Q	Catalyst for Gloss Paints, Quart



**Nuance Color System** 

**MATTHEWS VOC PAINTS** 

VOC paint is a high solid 2 component acrylic polyurethane. When blended in accordance with instructions, it has less than 2.8 pounds VOC per gallon. This unique formulation contains all needed U.V. inhibitors and anti-oxidants yet meets the air quality standard of 2.8 pounds maximum allowable VOC per gallon. Colors available in gallon containers.

Mix 3 parts color or clear with 1 part VOC-283-800 catalyst and add VOC-285-180 exempt reducer as necessary to control viscosity and pot life. No more than 1 quart of exempt reducer may be added per gallon in locations where the maximum allowable VOC is 2.8 pounds per gallon. In locations where the maximum allowable VOC is 3.5 pounds per gallon any practical amount of exempt reducer may be used. Pot life can vary from 15 minutes to 3 hours depending on temperature and amount of reduction. Adding reducer and lowering temperature increase pot life. The mixture will be close to ideal spray consistency.

Normal spray paint application equipment can be used, however any aluminum components that contact the paint should be replaced with parts made of steel or stainless steel since the exempt reducer reacts with aluminum and can cause corrosion. Do not force dry. VOC paints are reactive with atmospheric moisture so it is important to keep the cans tightly closed between use. Try to use these paints within 6 months of initial opening.

MAP-74-734 metal pre-treatment/activator is for use on clean, de-greased bare steel and aluminum only. It provides excellent adhesion and additional rust protection if the protective coating is damaged. The two components are mixed 1:1 to make an amount that can be used in 8 hours. Spray a full wet coat but not a heavy one. Finish coat can be applied in 20 to 30 minutes. Be sure to wait 24 hours before masking. Finish coat must be applied before exposing the metal pre-treatment to weather. The BRACO system is a tarnish protection for brass, bronze and copper. MAP-74-737 BRACO pre-treatment is applied over MAP-74-734/735 followed by VOC-282-260 BRACO clear.

VOC colors have a high gloss finish. Wait 24 hours before judging the gloss level. Add VOC-287-750 exempt flattening paste to the catalyzed color to lower the gloss level. Flattening paste is not recommended for the VOC-281 metallic colors since these colors are manufactured with a low gloss.

VOC-285-900 and VOC 285-101 reducers are not normally used in locations with a 2.8 VOC standard, however, may be used in small quantities (less than 1/2 pint per gallon) to retard drying and solve problems such as "orange peel" and short pot life.

MAP-274-908/909 is a white epoxy primer system which is useful for finishing the inside of sign cabinets. Mix 3 parts primer to 1 part hardener and add approximately 25% VOC-285-180 exempt reducer to achieve spray consistency and to prolong drying.

Small quantities of VOC-281-342 brushed aluminum can be added to give a metallic appearance to other colors.

MAP-74-780/781 high build etching filler system is a primer/surface metal pre-treatment providing superior paint adhesion and corrosion resistance with filling properties. It can be sanded and top-coated after 15 to 30 minutes at 70° F. Mix 1 part activator to 1 part filler. Closed pot life when mixed is up to 14 days.

# **Ordering Information**

Items with "G" suffix indicates gallon, "Q" indicates quart, "P" indicates pint. Substitute "\*" suffix with a "G" for gallon or "Q" for guart.



Catalog Number	Description		
VOC-281-228G	Satin Clear		
VOC-281-312G	Medium Bronze		
VOC-281-313G	Dark Bronze		
VOC-281-314G	Old Copper		
VOC-281-335G	Anodic Black		
VOC-281-342G	Brushed Aluminum		
VOC-282-202G	Natural White		
VOC-282-204G	Gloss Black		
VOC-282-208G	Clear Gloss		
VOC-282-212G	Scarlet Red		
VOC-282-214G	Mexicali Red		
VOC-282-215G	Burgundy Maroon		
VOC-282-216G	Nipon Orange		
VOC-282-217G	Citrus Yellow		
VOC-282-218G	Sundance Yellow		
VOC-282-219G	Capri Blue		
VOC-282-222G	Emerald Green		
VOC-282-224G	Rich Brown		
VOC-282-233G	Airline Blue		
VOC-282-245G	Magenta		
VOC-282-246G	Violet toner		
VOC-282-254G VOC-282-256G	School Bus Yellow		
	Rampart Orange		
VOC-282-259G VOC-282-260G	Federal Green		
VOC-286-253G	Braco Clear		
VOC-286-258G	Copper Tucson Gold		
VOC-286-400G	Brilliant Gold		
VOC-286-401G	Aztec Gold		
VOC-286-402G	Aztec Copper		
VOC-274-685G	Primer for Aluminum/Steel		
VOC-274-686Q	Hardener for VOC-274-685		
VOC-283-800* VOC-285-101G	Catalyst		
VOC-285-1016 VOC-285-180*	Slow Reducer		
VOC-285-900G*	Exempt Reducer		
VOC-287-113G	Reducer Suede Additive		
VOC-287-437P	High Solids Accelerator		
VOC-287-484P	High Solids Turbo Enhancer		
VOC-287-750G	Exempt Flattening Paste		
VOC-287-950G	High Speed Flattening Paste		
MAP-74-734G	Metal Pre-treatment		
MAP-74-735G	Activator for MAP-74-734		
MAP-74-737Q	Braco Pre-treatment		
MAP-74-760G	Primer for PT Filler		
MAP-74-766G	PT Activator for MAP-74-760		
MAP-74-777G	Exempt Adhesive Tie Bond		
MAP-74-780G	High Build Etching Filler		
MAP-74-781G	Activator for MAP-74-780		
MAP-74-793G	Spraybond Primer		
MAP-274-228G	White Primer		
MAP-274-229Q	Hardner for MAP-274-228		
MAP-274-908G	White Epoxy Primer		
MAD 274 0000	11-4 for MAD 274 000		

Hardener for MAP-274-908

MAP-274-909Q

# **MATTHEWS MAP PAINTS**

MAP paint is a 2 part acrylic polyurethane paint system for use in locations without VOC environmental restrictions. Coverage is approximately 400 square feet per gallon at a 2.0 mil dry film thickness.

Mix 1 part MAP-43-270 catalyst with 3 parts paint. Pot life is approximately 8 hours at 70°F. Up to 15% MAP-45-203 reducer may be added to reach desired spray consistency. Use MAP-45-211 slow brush/spray reducer with the anodic colors. It can also be used if dry over-spray is a problem.

MAP colors (except metallics) have a high gloss finish. To flatten the gloss, add MAP-47-888 flattening paste.

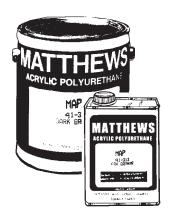
MAP-274-908/909 is a white epoxy primer system which is useful for the white inside finish of sign cabinets. Mix 3 parts primer to 1 part hardener and add approximately 25% MAP-45-900 reducer to achieve spray consistency.

MAP-74-780/781 high build etching filler system is a primer/surfacer metal pre-treatment system providing superior paint adhesion and corrosion resistance with filling properties. It can be sanded and top-coated after 15 to 30 minutes at 70°F. Mix 1:1 activator and filler. Closed pot life after mixing is up to 14 days.

The BRACO system is tarnish protection for brass, bronze and copper. First wipe surface with MAP-74-737 BRACO pre-treatment for cleaning/de-greasing, apply MAP-74-793 spray bond followed by MAP-42-260 BRACO clear.

# **Ordering Information**

Items with "G" suffix indicates gallon, "Q" indicates quart. Substitute "\*" suffix with container size desired.



Catalog Description Numbei MAP-41-312G Medium Bronze MAP-41-313G Dark Bronze MAP-41-314G Old Copper MAP-41-335G Anodic Black MAP-41-342G **Brushed Aluminum** MAP-42-202G Natural White MAP-42-204G Gloss Black MAP-42-208G Gloss Clear MAP-42-215G Burgundy MAP-42-228G Satin Clear MAP-42-260G Braco Clear MAP-42-900G Matte Clear MAP-43-270\* Universal Catalyst MAP-43-621Q **Brushing Catalyst** MAP-43-999\* Slow Catalyst MAP-45-203G Spray Reducer MAP-45-211\* Brush/Spray Reducer MAP-46-253G Copper MAP-46-258G Tucson Gold MAP-46-400G **Brilliant Gold** MAP-46-401G Aztec Gold

# **SPRAYLAT SERIES 400 LACRYL PLASTIC SIGN PAINT**

Spraylat Lacryl 400 series paint is for acrylic, polycarbonate, ABS, styrene and DR, in brilliant permanent colors with smooth translucency for illuminated signs.

Paints are lead-free unless otherwise noted. Lead-free paints are mandatory in California.

Paints are supplied as concentrates and require dilution for spraying. Use 1 part paint to 1 to 2 parts thinner. Proper thinning will give proper color intensity in 4 to 5 passes of the spray gun. 205T thinner is used with all the above mentioned plastics in normal temperature and humidity. 215T is used with all plastics in hot and/or humid conditions. Lower cost thinners 200T (medium) and 201T (fast for cold conditions) are available for use with acrylics only.

Clear gloss and clear matte are mixed in to reduce color intensity. Clear gloss w/UV and clear matte w/UV are used over exterior plastics to delay yellowing. Matte clears should not be used on the first surface.

Lacryl series 400 is not a VOC compliant coating.

# **Ordering Information**

Substitute "\*" suffix with container size. "Q" indicates quart, "G" indicates gallon.



C . I		
Catalog Number	Description	
MOHIDEI	Description	
SPR-403W*	White	
SPR-404W*	White (Blue-White)	
SPR-409I*	lvory	
SPR-412Y*	Buttercup <sup>(1)</sup>	
SPR-413Y*	Daffodil (1)	
SPR-415Y*	Lemon Yellow (4-Color) (1)	
SPR-4210R*	Pumpkin <sup>(1)</sup>	
SPR-432R*	Permanent Red	
SPR-437R*	Unique Red (1)	
SPR-447G (2)	Unique Red	
SPR-438R*	Dark Red (1)	
SPR-448G (2)	Dark Red	
SPR-449G (2)	Flame Red	
SPR-443R*	Deep Red	
SPR-440M*	Magenta	
SPR-452BR*	Pale Brown	
SPR-457BR*	Deep Brown	
SPR-460B*	Midnight Blue	
SPR-461B*	Ocean Blue	
SPR-462B*	Caribbean Blue (4-Color)	
SPR-463BG (2)	Bright Blue	
SPR-470G*	Fir Green	
SPR-471G*	Shamrock Green	
SPR-480BK*	Black (4-Color)	
SPR-481BK*	Black Matte	
SPR-490CL*	Clear Gloss	
SPR-491CL*	Clear Matte	
SPR-498SG*	Silver Gray (Blockout)	
NOTE: (1) Contr	ins lead.	
(2) Available in gallons only.		
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# **SPRAYLAT SERIES 20 LACRYL METAL PAINT**

Spraylat Lacryl Series 20 paint is an automotive quality, one-component, acrylic lacquer available in twelve stock colors. It applies easily and dries in twenty minutes. The finish is durable and fade resistant. When used in conjunction with Lacryl Series 20/30 Wash Primer, Series 20 will provide the highest quality resin and pigment. Series 20 meets Ford Motors and General Motors exterior lacquer specifications. It is recommended that series 20 colors be reduced up to 20% with 200-T, 201-T Toluene or Xylene; however, reduction will depend on color. Other colors also available.

Catalog Number	Description
SPR-20-01G SPR-20-313G SPR-20-313EG SPR-20-80G	Gloss White 313 Duranodic Bronze <sup>(1)</sup> 313E Duranodic Bronze <sup>(1)</sup> Gloss Black
NOTE: (1) Contains lead.	

# **SPRAYLAT SUNDRIES**

"SPR-2030" Series 20/30 Wash Primer is designed to be used with the Series 20 intermix colors. It outperforms most commercial primers in providing excellent adhesion and water resistance. Surface should be clean of oil, grease and oxides.

New Blue SignStrip is a liquid maskant for plastics.

# **Ordering Information**

Substitute "\*\*" suffix with container size. "G" indicates gallon, "F" indicates 5 gallon pail,
"D" indicates 55 gallon drum.

Catalog Number	Description
SPR-205TG SPR-200TG SPR-201TG SPR-215TG	Thinner for All Plastics Thinner for Acrylics Fast Thinner for Acrylics Slow Thinner for Acrylics
SPR-206TG	Cleaner/Remover for All Plastics
SPR-2030AG SPR-2030PG	Activator/Reducer Part "A" Primer Part "B"
SPR-NBSS**	New Blue Sign Strip



# **AKZO NOBEL GRIP-FLEX PLASTIC SIGN PAINTS**

Grip-Flex colors are pure acrylic, translucent, fade resistant and meet ecology requirements. For use on acrylic, polycarbonate, DR, styrene, ABS, Filon and flexible vinyl. Grip-Flex colors may be intermixed, used as tints or extended with clear to increase transparency without fading. Intended for spray application.

1AFR-02106, 1AFR-02106T and 1AFR-02157 are double concentrated whites which must be reduced 1 part paint to 2 parts thinner. All spray colors will normally require 25% to 50% reduction with the correct spray thinner. Viscosity should be checked. Thinner should be added slowly.

10AFR-02200 or 10AFR-02201 may be added to decrease the pigment density and color intensity. 02200 will increase the aloss level and 02201 will decrease it.

Mixing should be done with component temperatures above 50°F.

10AFR-02285 is used as an overcoat to provide extra abrasion resistance where necessary.

10AFR-02201 matte clear should be thoroughly agitated to disperse the heavy solids before use. Whitens after 1 to 2 years when used outdoors.

T2003 thinner reduces spray Grip-Flex in warm climates. Use with all above noted plastics.

T2004 fast thinner is to reduce spray Grip-Flex in cold or temperate climates and can be used with all above mentioned plastics. T2001 fast thinner cannot be used with polycarbonates and is not approved for use in ecologically sensitive locations.

T1003 thinner/retarder reduces and slows the drying of screening Grip-Flex. For use with all above mentioned plastics.

T1004 thinner/retarder reduces and drastically slows the drying of screening Grip-Flex. Useful for hot climates and large surface areas. For use with all above noted plastics.

T1007 additive improves leveling, stops bubbling and minimizes mottling of screening Grip-Flex. Use sparingly. For use with all of the above mentioned plastics.

T4000 removes Grip-Flex paint from polycarbonate.

10AHK-31050 may be mixed 1:1 with spray Grip-Flex to produce a spray viscosity, finish for application to metals. Mix 1:1 with screen Grip-Flex and T-1003 thinner added to adjust to the desired screening viscosity.

Catalog Number	Color
1AFR-02106*	Cool White
1AFR-02106T*	Blue White
1AFR-02110*	High Intensely White
1AFR-02157*	Soft White
1AFR-02180*	lvory
2AFR-02310*	Earth Yellow
2AFR-02325*	Golden Yellow
2AFR-02326*	Lemon Yellow
2AFR-02346*	Spring Yellow
3AFR-02500*	Magenta
3AFR-02523*	Maroon (1)
3AFR-02525*	Radiant Red
3AFR-02535*	Unique Red
3AFR-02583*	Earth Red (1)
3AFR-02584*	Cherry Red
3AFR-02585*	Flame Red
3AFR-02595*	Bright Scarlet
4AFR-02900*	Black
5AFR-02311*	Poppy Orange
5AFR-02315*	Citrus Orange
5AFR-02357* 6AFR-02613*	Sunset Orange Dark Brown
6AFR-02642*	Earth Brown
7AFR-02700*	Erin Green
7AFR-02720*	Hunter Green
8AFR-02403*	Champion Blue
8AFR-02431*	Royal Purple (1)
8AFR-02470*	Regal Blue
8AFR-02480*	Monarch Blue
9AFR-02838*	Aluminum (#2010)
10AFR-02200*	Clear
10AFR-02201*	Matte Clear
10AFR-02266*	Solar Clear
10AFR-02285*	Tough Coat Clear
12AFR-02383*	Gold Metallic
12AFR-02632*	Medium Bronze (#312)
12AFR-02633*	Dark Bronze (#313)
12AFR-02641*	Dark Bronze (#313E)
NOTE: (1) Special	order

**NOTE:** (1) Special order.









### Catalog Number Description T2003\*\* Spray Thinner T2004\*\* Fast Spray Thinner Fast Spray Thinner (1) T2001\*\* T1003\*\*\* Screen Thinner/Retarder T1004\*\*\* Super Retarder T1007\*\*\* Trouble Free Additive T4000\*\* Remover for Polycarbonate 10AHK-31050\*\* Clear Metal Additive **NOTE**: (1) Not for polycarbonate.

### **Ordering Information**

Substitute all asterisk suffixes with container size desired:

"L" indicates liter, "G" indicates gallon, "F" indicates 5 gallon pail and "D" indicates 55 gallon drum.

Items with "\*\*" suffix indicates items that are not available in liter size.

Items with "\*\*\*" suffix indicates items that are only available in 1 gallon and 5 gallon sizes.

# **AKZO NOBEL META-FLEX ACRYLIC METAL SPRAY PAINTS**

Meta-Flex acrylic enamels are fast drying, durable and fade resistant finish coats for steel and aluminum. Paints are to be used over the appropriate primer as described below. It is important that the metal surface to be coated is rust and oil free as well as solvent cleaned. Top-coats dry to the touch in 30 minutes and achieve maximum hardness in 24 hours. Meta-Flex should provide a satisfactory exterior finish for 3 to 5 years on a properly prepared surface.

To thin use T2003 reducer when temperature is above 70°F and T2001 when temperature is below 70°F.

4ALK-31049 flat black is a fast drying, 30% gloss, durable finish for painting sign cabinets and poles.

1ALK-31046 is a good general purpose white primer for steel and aluminum. It may also be used as a white top-coat inside sign cabinets.

Meta-Flex may be forced dried or baked to improve hardness and durability.

-
AKZO NOBEL

Catalog Number	Description
12ALK-31047G 12ALK-31051G 12ALK-31052G 12ALK-31053G 9ALK-31048G 4ALK-31049G 10AHK-31050G 1ALK-31046G	Gold Metallic Medium Bronze Metallic (Duro. 312) Dark Bronze Metallic (Duro. 313) Dark Bronze Metallic (Duro. 313E) Aluminum Metallic (Duro. 2010) Flat Black (30% Gloss) Clear Metal Additive White Primer/Top-Coat
T2003G T2001G	Spray Thinner Fast Spray Thinner

# **Ordering Information**

Suffix indicates container size, "G" indicates gallon, "L" indicates liter. Other sizes may be available.



# **AKZO NOBEL VOC PAINTS**

A full variety of VOC compliant paints also available.



# **AKZO NOBEL GRIP-GARD ACRYLIC POLYURETHANE PAINTS**

Grip-Gard is a 2 part, fast drying, high gloss coating that provides superior coverage plus excellent weather resistance. It is suitable for use on steel, galvanized steel, aluminum, fiberglass, hardboard and plywood. Coverage is 675-750 sq. ft. per gallon at 1 mil thickness. Application is by spray coating. Use lacquer thinner for a cleanup solvent.

Custom matched Grip-Gard colors can be mixed at the factory using the color matching system as described below. Paints can be matched to over 5000 colors in the Grip-Gard color map book or to hundreds of Pantone colors used as reference by designers, artists and architects.

Mixing ratios of Grip-Gard paints are 100 parts enamel to 50 parts 10AHU-31243 hardener to 30 parts reducer by volume. A graduated mixing stick makes mixing simple. Use 10AHY-31372 standard reducer when temperature is above  $70^{\circ}$ F and 10AHY-31199 non-stop reducer when temperature is below  $70^{\circ}$ F. Below  $50^{\circ}$ F add 10-30% 10AHY-31242 accelerator.

Grip-Gard matting paste is used for gloss modification. 10AHC-32313 brush/roll-on additive is used in place of reducer.

Grip-Gard 2AFY-31284 wash primer is a 2 part, self etching, passivating primer with a 14 day pot life after mixing 1:1 with 10AFK-31285 primer hardener. It is suitable for steel, galvanized steel, aluminum and most other substrates. Coverage is 360-390 sq. ft. per gallon at 1 mil thickness. Application is by spray coating, two coats (about 1.5 mil dry thickness) are recommended.

# **Ordering Information**

Suffix indicates container size, "G" indicates gallon, "F" indicates 5 gallon pail and "D" indicates 55 gallon drum. Substitute "\*" suffix with container size desired.

Catalog	B
Number	Description
1AHU-43000G	White
3AHU-43359G	Brilliant red
5AHU-43253L	Dark Orange
2AHU-43254L	Orange Yellow
2AHU-43297L 9AHU-43330CL	Light Yellow Metallic Coarse
9AHU43330CL	Metallic Coarse Metallic Very Coarse
9AHU-43330MG	Metallic Medium Coarse
9AHU43330MSL	Metallic Medium Coarse Sparkle
3AHU-43528L	Red Maroon Transparent
6AHU-43530L	Red Brown Transparent
3AHU-43532L	Red Oxide Transparent
3AHU-43538G	Bright Maroon Transparent
2AHU-43557L	Bright Yellow Transparent
2AHU-43558G	Light Yellow Oxide
3AHU-43559L	Yellow Red Oxide
3AHU-43563G	Orange Red
5AHU-43568L	Red Orange
2AHU-43572G	Light Chrome Yellow
2AHU-43573G	Chrome Yellow
8AHU-43575G	Blue Transparent
7AHU-43576G	Green Transparent
5AHU-43579L	Yellow Orange Transparent
8AHU-43630L	Blue Berlin
7AHU-43732G	Dark Green transparent
4AHU-43744G	Mixing Black
4AHU-43242G	Deep Black
8AHU-43904G	Dark Blue Transparent
2AHU-43922L	Yellow Transparent
3AHU-43956G	Violet-Rouge Transparent
8AHU-43971L	Violet Transparent
2AHU-43977L	Dark Yellow Oxide Transparent
WYA-GGCB	GRIP-GARD Color Map Book

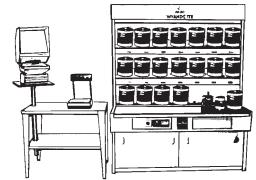
Catalog Number	Description
12ALU-43312G 12ALU-43313G 12ALU-43313EG 4ALU-43311G 4AHU-43242G 1AHU-43000G 1AHU-43180G 5AHU-43315G 2AHU-43325G 2AHU-43325G 3AHU-43535G 3AHU-43585G 6AHU-43642G 7AHU-43700G 8AHU-43403G 10AHU-43001G 10AHU-31430G	Medium Bronze (Duro. 312) Dark Bronze (Duro. 313) Dark Bronze (Duro. 313E) Low Gloss Anodic Black High Gloss Deep Black White Ivory Citrus Orange Golden Yellow Lemon Yellow Unique Red Flame Red Earth Brown Erin Green Champion Blue Gloss Clear
10AHU-31243G 10AHY-31372G 10AHY-31199G 10AHY-32177G 10AHY-31242Q 10AHY-31206G 10AFU-31311G 2AFY-31284* 10AFK-31285* 10AHC-32313L	Hardener for GRIP-GARD Paints Standard Reducer Non-Stop Reducer Very Slow Reducer Accelerator, Quart Wax & Grease Remover Matte Paste GRIP-GARD Wash Primer Hardener for GRIP-GARD Primer Brush or Roll-On Additive, Liter
WYA-MIX-SP WYA-MIX-BR	Mixing Stick for Spray Mixing Stick for Brush/Roll-On

# **GRIP-GARD COLOR MATCHING SYSTEM**



This system produces color matches to thousands of colors on your premises in any quantity needed. The Grip-Gard color map book contains thousands of color chips which are keyed with location coordinates to the mixing formula which is stored on microfiche. The microfiche viewer finds the formula and gives a magnified view of it. The mixing base colors which are kept stirred on the mixing machine/work platform are then mixed by weight, measured by a sensitive digital scale producing the desired quantity of an extremely accurate color match. Color is ready to mix with hardener and reducer as described in the section above. Grip-Gard color matching system complete, without paints, consists of a mixing machine/work platform, stirring/pouring lids for the cans of the mixing base colors, a color map book, microfiche viewer, microfiches containing the mixing formulas, sensitive digital scale and a stand for the scale and viewer.

Listed on the left are the mixing base colors for the color matching system. Hardener, reducers and other accessories are listed in the section above.



### **Ordering Information**

Suffix indicates container size, "G" indicates gallon, "L" indicates liter.

# 1-SHOT LETTERING ENAMELS

Superior quality lettering enamels with high gloss, exceptional opacity, durability, smooth flow and excellent resistance to sagging. For interior or exterior use on metal, glass, wood, masonite and enamel receptive vinyl materials.

# **Ordering Information**

Substitute "\*" suffix with container size desired: "G" indicates gallon, "Q" indicates quart, "P" indicates pint.



Catalog Number	Description
ONE-100L*	Vermillion
ONE-101L*	White
ONE-102L*	Fire Red
ONE-104L*	Bright Red
ONE-108L*	Maroon
ONE-109L*	Metallic Gold
ONE-114L*	Medium Brown
ONE-115L*	Dark Brown
ONE-116L*	lvory
ONE-117L*	Tan <sub>.</sub>
ONE-120L*	Coral
ONE-124L*	Orange
ONE-130L*	Primrose Yellow
ONE-132L*	Lemon Yellow
ONE-134L*	Chrome Yellow
ONE-142L*	Emerald Green
ONE-144L*	Medium Green
ONE-148L*	Dark Green

Catalog Number	Description
ONE-149L* ONE-150L* ONE-151L* ONE-152L* ONE-154L* ONE-155L* ONE-156L* ONE-156L* ONE-156L* ONE-160L* ONE-160L* ONE-163L*	Aqua Blue Green Robin Egg Blue Light Blue Process Blue Peacock Blue Reflex Blue Brilliant Blue Dark Blue Violet Purple Magenta
ONE-165L* ONE-168L* ONE-191L* ONE-193L* ONE-195L* ONE-199L*	Rubine Red Salmon Pink Imitation Gold Metallic Silver Medium Gray Black

# 1-SHOT GRAPHIC COAT BULLETIN PAINTS

Premium enamels for graphic arts professionals with excellent exterior durability, hiding power and chalk resistance with a full gloss finish. Formulated for easy application to large and rough surfaces such as billboards and masonry walls.

# **Ordering Information**

Substitute "\*" suffix with container size desired: "G" indicates gallon, "Q" indicates quart, "P" indicates pint.

Catalog Number	Description
ONE-100B* ONE-101B* ONE-102B* ONE-104B* ONE-106B* ONE-108B* ONE-114B* ONE-115B* ONE-116B* ONE-124B* ONE-130B*	Vermillion White Fire Red Bright Red Carmine Maroon Medium Brown Dark Brown Ivory Orange Primrose Yellow Lemon Yellow

Catalog Number	Description
ONE-134B*	Chrome Yellow
ONE-142B*	Emerlad Green
ONE-144B*	Medium Green
ONE-148B*	Dark Green
ONE-150B*	Blue Green
ONE-152B*	Light Blue
ONE-153B*	Process Blue
ONE-156B*	Brilliant Blue
ONE-158B*	Dark Blue
ONE-163B*	Magenta
ONE-197B*	Block-Out White
ONE-199B*	Black

# 1-SHOT FLUORESCENT PAINTS

Semi-transparent oil based paints brush easily, have good adhesion, are fast drying and have sparkling color clarity. For interior or exterior application by brush, roller or spray. Available in quart size containers.

Catalog Number	Description
ONE-200FQ	Fluorescent Chartreuse
ONE-201FQ	Fluorescent Yellow Orange
ONE-202FQ	Fluorescent Orange
ONE-203FQ	Fluorescent Red Orange
ONE-204FQ	Fluorescent Red

Catalog Number	Description
ONE-206FQ	Fluorescent Pink
ONE-208FQ	Fluorescent Blue
ONE-209FQ	Fluorescent Green
ONE-220FQ	UV Top Coat

# 1-SHOT PAINT SUNDRIES

Brush conditioner and cleaner is for use before storing brushes which have been used with oil based paint.

Vinyl primer is for vinyl and most synthetic surfaces providing excellent adhesion for oil based paints.

Catalog Number	Description
ONE-4004Q	Brush Conditioner and Cleaner, Quart
ONE-5004Q	Vinyl Primer, Quart



# **CHROMATIC & RONAN OUTDOOR BULLETIN COLORS & PRODUCTS**

Both Chromatic and Ronan outdoor bulletin colors provide the finest in a high gloss, quick drying, quality enamel. Dries to a tough, weather resistant, porcelain-like finish which is free from brush marks, laps and imperfections. For use on outdoor advertising bulletin boards, metal highway signs, all types of wood and masonite board, metal structures, etc. Mineral spirits is the recommended solvent.

RON-BFDBO fast-dry blockout white gives excellent one-coat coverage to obscure old unwanted lettering. May be tinted with universal tinting colors.

RON-SFC sign finishing clear gives any surface a hard extra durable finish. May be sprayed or brushed on.

RON-QD101 quick-dry background enamel is a high gloss, durable enamel specially formulated for background work. Its fast drying lends itself to spray application for production work. May also be brushed or rolled on.

RON-PRAL Prime-All is a white interior/exterior water based acrylic primer with superior stain blocking and corrosion inhibiting properties. It has excellent adhesion to wood, aluminum, vinyl, galvanized, concrete, plaster, glass, sheetrock and Signfoam. Top-coats can usually be applied in 1 hour.

All other Chromatic products also available.

### **Ordering Information**

Items with "G" suffix indicates gallon, "Q" indicates quart.
Substitute "\*" suffix with container size desired.



Catalog Chromatic		ber onan	Color/Description
CHR-21*	RO	N-21*	Black
CHR-21F*		N-21F*	Flat Black
CHR-100*		N-100*	Vermillion
CHR-101*		N-101*	White
CHR-101F*		N-101F*	Flat White
CHR-102*		N-102*	Fire Red
CHR-103*		N-103*	Aluminum
CHR-104*		N-104*	Bright Red
CHR-105*		N-105*	Imitation Silver
CHR-106*		N-106*	Carmine
CHR-107*		N-107*	Imitation Gold
CHR-108*		N-108*	Maroon
CHR-114*		N-114*	Medium Brown
CHR-116*		N-116*	
CHR-124*		N-124*	lvory
CHR-130*		N-130*	Medium Orange
CHR-132* CHR-134*		N-132* N-134*	Primrose Yellow
CHR-140*		N-134 N-140*	Lemon Yellow
CHR-140*		N-140 N-142*	Chrome Yellow
CHR-144*	RON-142		Light Green
CHR-148*			Emerald Green
CHR-150*	RON-148* RON-150*		Medium Green
CHR-152*	RON-150*		Dark Green
CHR-154*		N-154*	Blue-Green
CHR-156*		N-156*	Light Blue
CHR-158*		N-158*	Process Blue
CHR-162*		N-162*	Brilliant Blue
CHR-166*		N-166*	Dark Blue
CHR-180*		N-180*	Purple
			Magenta
		Light Gray	
RON-FLATQ		Flattening	Paste, Quart
RON-PRAM	FTG		' '
RON-QDHH		White Vinyl Primer, Gallon White Hi-Hide, Gallon	
RON-BSTWI	-		k-Tite Primer, Gallon
RON-BFDBO			Blockout White
RON-SFC*	rusi-uiy b		
RON-QD101	OlG Sign Finis		*
<b>RON-PRAL*</b>	PRAI*		White Background Enamel, Gal.
Prime-All		Prime-All	Primer

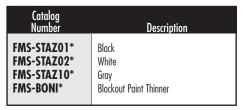
# **FMS STAZON NEON BLOCKOUT PAINTS**

Stazon blockout paint is generally used on neon sign tubing where portions of the tubing are to be "blocked out" and thus not show as being illuminated. Features which have made Stazon the world's leading neon blockout paint for more than 40 years include the following: quick drying, covers in one coat, will not freeze, extended shelf life, no pin holes, water-proof. Additionally, it dries to a sharp edge, resists blistering and cracking, can be applied with brush or dip, heat resistant, non-conductive, re-dissolvable. Stazon blockout is non flammable (flash point 170°F) and does not contain any ozone depleting materials. Available in black, gray or white. Also available in water-based version.

Star
Black Stazon
Gray Blockout Paint
FIES ME

# **Ordering Information**

Substitute "\*" suffix with container size desired: "G" indicates gallon. "Q" indicates guart.



# TEX-COTE PREMIUM TEXTURED COATINGS



Tex-Cote® textured coatings provide long life protection and decoration approximating a "stucco" finish to most exterior or interior surfaces. There are separate types for pressure spray application and for roll-on application. Water based Tex-Cote® has high adhesion and flexibility and is used over wood surfaces and in module type construction. Estimated coverage is 45 sq. ft. per gallon for 2 coats. Drying times are 48 hours to touch, 24 hours between coats, and 2-3 weeks for final cure. Stir thoroughly before using. Oil based Tex-Cote® is suitable for almost any substrate in almost any climate and is available upon special order.

Coarse texture, which approximates stucco is normally used in the sign industry. Extra coarse and fine textures are also available. Tex-Cote® is stocked in 5 gallon pails and is available in 30 gallon drums. Mineral spirits clean up wet oil based material and water cleans up wet water based material. Use MEK for dry oil or water based material.

Catalog Number	Description
TEX-600CP2F	Spray, Polar White, Water Base, Coarse
TEX-600XCP2F	Spray, Polar White, Water Base, Extra Coarse
TEX-600FP2F	Spray, Polar White, Water Base, Fine
TEX-R600P2F	Roll-on, Polar White, Water Base, Coarse
TEX-R600N2F	Roll-on, Navajo White, Water Base, Coarse



# PROFESSIONAL GRADE TEXTURED COATINGS

An economical, high quality, polar white textured coating that is flexible, water-based and suitable for interior or exterior use on concrete, masonry or primed metal surfaces. Coating can be applied by brush, roller or a hand-held hopper spray gun. Estimated coverage for FINE texture is 65 sq. ft. per gallon, MEDIUM is 45 sq. ft. per gallon and COARSE is 40 sq. ft. per gallon (±5). Coating comes ready to use in 5 gallon pails. Can be tinted with standard colorants.

Catalog Number	Texture
PRO-FINE-F	Fine
PRO-MEDIUM-F	Medium
PRO-COARSE-F	Coarse









# JAY COOKE'S ALL-PURPOSE SIGN PRIMER

Jay Cooke's all-purpose water based sign primer provides the best possible undercoat for a beautiful finish on all wood suitable for sign panel construction, any density of foam/Signfoam, MDO plywood, MDF, PVC or other porous surfaces and metal as well as sandblasted surfaces. It is odorless, sands beautifully, cleans with water and dries in 30 minutes. Offers superb adhesion to either latex or enamel top-coats.

Catalog Number	Description
HAR-JCPQ	All-Purpose Sign Primer, Quart
HAR-JCPG	All-Purpose Sign Primer, Gallon



# **MISCELLANEOUS PAINT ACCESSORIES**

INT-MASK is NIOSH certified under 42CFR84 regulation to have a filter efficiency level of 95% or greater gaginst particulate gerosols free of oil up to 10x PEL. The Dura-Mesh shell protects the filter so it stays cleaner longer. Shell also resists collapsing even in heat and humidity so the respirator holds its shape longer. The result is fewer respirators used and lower costs. Molded nose bridge provides the wearer an easy comfortable fit. No metal noseband to adjust and the seal is maintained without pressure points.

Catalog Number	Description	Put Up
INT-MASK	Disposable Dust & Mist Mask	20
NAS-STRAIN	Disposable Paint Strainer	250



Disposable Dust & Mist Mask





# **ALUMINUM LETTER EDGING COILS**

Pre-finished high quality aluminum coil. Other gauges, colors and sizes are also available. Custom colors available upon request.

Catalog Number	Color	Gauge	Width	Put Up
ALL-040-01 ALL-040-01A ALL-040-02 ALL-040-02A ALL-040-21 ALL-040-603 ALL-040-603A ALL-040-BGA ALL-040-HBA ALL-040-MB	Raven Black Raven Black Polar White Polar White Bronze Bronze Hunter Red Hunter Red Bright Gold Anodized Heron Blue Matte Black	.040 .040 .040 .040 .040 .040 .040 .040	5.3" 5.3" 5.3" 5.3" 5.3" 5.3" 5.3" 5.3"	500' 270' 500' 270' 500' 270' 270' 270' 270' 500'
ALL-8040-01	Matte Black Raven Black	.040	5.3" 8"	270' 500'
ALL-8040-02 ALL-8040-02A ALL-8040-21	Polar White Polar White Bronze	.040 .040 .040	8" 8" 8"	500' 270' 500'



# **PAINT ROLLERS & ACCESSORIES**

W00-R206 are woven fabric rollers for mirror-smooth finishes with enamels, gloss or semi-gloss paints, epoxies and varnishes.

WOO-R265 are high-capacity yellow foam rollers for oil-based paints.

WOO-R730 are economical yellow foam rollers for application of enamels and varnish.

Shur-Line rollers are narrow touch-up rollers for small projects using latex or oil-based paints.

Catalog Number	Description	Mfg.
W00-R206-7	7" Dooz Fabric Blend Roller Cover	Wooster
W00-R206-9	9" Dooz Fabric Blend Roller Cover	Wooster
W00-R265-9	9" Pro Tiz Foam Roller Cover	Wooster
W00-R730-9	9" Tiz Foam Roller Cover, 2-Pack	Wooster
SHU-HR3	3" Roller w/Red Handle	Shur-Line
SHU-03000	3" Roller w/Red Handle & Tray	Shur-Line
SHU-HRR3	3" Replacement Roller Cover	Shur-Line

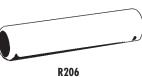


# SHUR-LINE









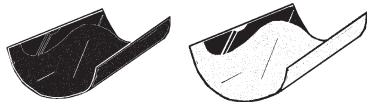
# **CARBON PAPER**

Blue carbon paper is used to transfer patterns to work. Premium grade incorporates an extra heavy ink on to a thicker kraft backing.





Catalog Number	Description
K-50-07	Blue Carbon Paper
WES-CP-07	Blue Premium Grade Carbon Paper



# **MASKING PAPER**

Application tape is economical and works well for most masking purposes. Refer to Application Tape in the Graphics section.

# **PATTERN PAPER**

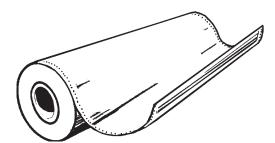
White meatwrap commonly referred to as "butcher paper" is a high quality 50# base paper for patterns.

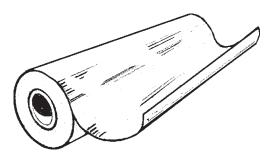
BAR-104 pattern paper has a 1" grid with 1/4" plot points on 70# kraft paper.

3050 series white pattern paper is a perforated 20# paper for use in computer driven plotters.

3000 series white pattern paper is a non perforated 20# paper for use in computer driven friction plotters.

Catalog Number	Description	Put Up
18/50	18" White Meatwrap	1100' Roll
24/50	24" White Meatwrap	1100' Roll
36/50	36" White Meatwrap	1100' Roll
48/50	48" White Meatwrap	1100' Roll
60/50	60" White Meatwrap	1100' Roll
BAR-104	48" Kraft Paper w/Grid Pattern	330' Roll
3050-1550-02	15" White Perforated Paper	500' Roll
3050-1930-02	19" White Perforated Paper	300' Roll
3050-3030-02	30" White Perforated Paper	300' Roll
3000-2430-02	24" White Non-Perforated Paper	300' Roll
3000-3030-02	30" White Non-Perforated Paper	300' Roll
3000-3630-02	36" White Non-Perforated Paper	300' Roll
3000-3930-02	39" White Non-Perforated Paper	300' Roll
3000-4830-02	48" White Non-Perforated Paper	300' Roll





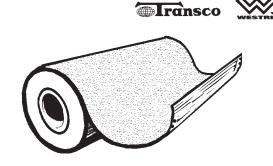
# **ASBESTOS SUBSTITUTES FOR NEON PATTERNS**

Wes-Nobestos is a high-temperature silicone coated fiberglass material. It marks well with both carbon paper, pen ink and is reusable with little odor. Works well with friction feed plotters for use with all computer neon layout programs.

Transbestos III is a high-temperature silicone coated fiberglass material. Also durable and reusable.

Both brands contain no asbestos. Sold by the 38" wide x 25 yard roll.

Catalog Number	Description
WES-NOBESTOS	Glowstar Nonsbestos Material
TRANSBESTOS3	Transbestos III





# **MARKING PENCILS**

Stabilo grease pencils write well on glass and plastic. The graphite pencil will not melt and is used by glassblowers to mark bends in neon tubing. Also has many other uses in the shop.

BER-745 carmine red pencil makes an easy to read mark on sheet metal.

Listo grease marking pencils are for general purpose marking. Consists of a mechanical holder with pocket clip. Marking lead refills come 6 leads per package. Lead refills sold in package quantities.

Catalog Number	Description	Put Up
SWA-8008	Graphite Stabilo Pencil	12
SWA-8040	Red Grease Stabilo Pencil	12
SWA-8041	Blue Grease Stabilo Pencil	12
SWA-8046	Black Grease Stabilo Pencil	12
SWA-8052	White Grease Stabilo Pencil	12
BER-745	Carmine Red Eagle Pencil	12
LIS-1620-03	Red Listo Lead Holder	12
LIS-162-01	Black Listo Lead Refills	1 Package of 6 Leads
LIS-162-03	Red Listo Lead Refills	1 Package of 6 Leads







Listo Lead Holder

Listo Lead Refills



**Carmine Red Pencil** 



Stabilo Pencil

# **POUNCE WHEELS**

Made of light weight aluminum.

Catalog Number	Dimensions	Teeth Per Inch
GRI-10	1/4" Diameter	15
GRI-12	7/16" Diameter	15





# **FMS ELECTRO POUNCE**

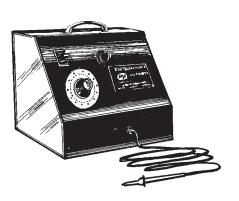
In the late 1950's FMS began development work on an electric pounce machine designed to eliminate the drudgery of hand pouncing sign patterns. The Electro Pounce was first introduced to sign makers in 1961. Since that time it has become one of the most widely used labor saving tools in the industry.

Save time and money by simply drawing with this electric pencil rather than using pounce wheels. Crisp, clean holes of various sizes can be easily pounced in one or many sheets of paper by simply adjusting the voltage dial. Back sanding is no longer necessary because the Electro Pounce forms holes by actually eliminating unwanted material rather than just pushing it out of the way. Patterns last longer because holes made with the Electro Pounce are more resistant to tearing than conventionally pounced holes.

The Electro Pounce comes complete with a standard 10 foot pounce cord and a dozen replacement needles.

Catalog Number	Description
FMS-EPSR	Senior Electro Pounce
FMS-EPRN	Pounce Needles, Package of 12
FMS-EPCORD	Replacement Cord





# **Interstate** Electric Co.

### **BIRD CONTROL**

Bird control in general will reduce the cost and frequency of exterior maintenance to buildings and structures. Spaces and surfaces below remain cleaner longer, therefore remain attractive and inviting.

# BIRD-B-GONE BIRD REPELLING SYSTEMS





Interstate Electric is the exclusive distributor of Bird-B-Gone spike systems and repellers. Bird-B-Gone spike systems are made of stainless steel and/or polycarbonate with UV inhibitors making spikes permanent and virtually unbreakable. Spikes are effective, safe and will not cut the installer.

BBG-1 is made for general purpose and heavy bird pressure areas, offering 7" wide coverage. Available in clear molded 2' lengths with continuous spikes which also repel smaller birds. Mounting holes provided along base. Non-conductive and will not interfere with electrical transmissions, radio frequencies or electronic security systems. Mounting holes provided along base.

BBG-2 is made specifically for ledges and rooftops where bird pressure is light to medium. Particularly effective on narrow surfaces including pipes, conduit and nonelectrical wires. Supplied un-assembled with 4' tan colored strips, 3 clear spike units per running foot. Non-conductive and will not interfere with electrical transmissions, radio frequencies or electronic security systems.

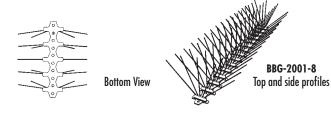
Both systems also available in many blending colors. Custom colors also available. Sold by the foot.

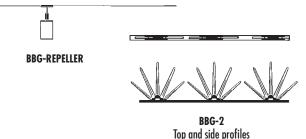
BBG-2001-8 is a versatile spike system that can be easily installed where any bird can roost. It consists of 316 continuous stainless steel spikes placed into a UV resistant clear polycarbonate base. Provides 8" wide coverage in 2 foot lengths. Repels all types of birds. 10 year guarantee.

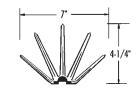
The Repeller by Bird-B-Gone is a light weight propeller device that rotates at 30 rpm. Consists of two 6' fiberglass rods rotating in a 12' diameter circle. Easily installed on signs, billboards, roofs, buildings or any place where birds are a nuisance. Repellers are durable with dependable operation. In most installations it is virtually invisible to passers-by. Housed in a 4" x 6" weather resistant metal housing with attached mounting bracket. Mounting hardware included. 110V • 60Hz

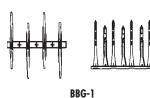
All Bird-B-Gone systems are environmentally safe and will not hurt birds. Many other systems also available.

Catalog Number	Description	Put Up	Color
BBG-1 BBG-2 BBG-2001-8 (1)	Polycarbonate Spike System Polycarbonate Narrow Spike System Stainless Steel Spike System	2' Strip 4' Strip 2' Strip	Clear Clear/Tan Clear/Stainless Steel
BBG-REPELLER	Mechanical Propeller Device	1	White
<b>NOTE:</b> (1) Also available in 3" and 5" wide spike range.			













# **BIRD REPELLENTS**

Nixalite stainless steel needle strips are an effective and permanent system of bird control. Properly installed, prevents the roosting and nesting of pestiferous birds. Birds avoid alighting on Nixalite for the same reason that people avoid stepping on tacks. Nixalite is not lethal, but extremely effective. It can be successfully installed on many shapes and surface materials. Available in 4' strips, 3-3/4" wide by 4' high. 120 stainless steel needle-sharp points per foot welded to a 1/4" flexible base strip in a 180 degree radius. Sold by the foot.

Tanglefoot is a soft sticky clear compound. It repels birds without harm by simply discouraging birds from roosting. Available in a convenient 10 oz. caulk tube.

Catalog Number	Description	Put Up	Mfgr.
NIXALITE	Stainless Steel Spike System	4' Strip	Nixalite
TAN-97010	Repellent	10 oz. Tube	Tanglefoot





# **3M ADHESIVE TAPES**



MMM-234 is a high quality, general purpose masking tape.

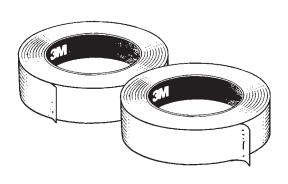
MMM-400 double face tissue tape has the proper tack for holding stacks of plastic together while cutting identical characters or shapes.

MMM-600, 610 is a high quality cellophane tape.

MMM-898 premium grade filament tape has a very high shear and tear strength. Among its many uses, it is used to hold plastic sheets together while butt-cementing edges.

MMM-3939-2 duct tape is a silver-aray plastic coated cotton tape. Used to prevent light leaks from less than perfect joints in sign cabinets.

Catalog Number	Description	Dimensions	Put Up
MMM-234-1/2	Masking Tape	1/2" x 60 Yd	18/72
MMM-234-3/4	Masking Tape	3/4" x 60 Yd	12/48
MMM-234-1	Masking Tape	1" x 60 Yd	9/36
MMM-234-1.5	Masking Tape	1-1/2" x 60 Yd	6/24
MMM-234-2	Masking Tape	2" x 60 Yd	6/24
MMM-400-1/2	Double Face Tissue Tape	1/2" x 36 Yd	12/72
MMM-400-3/4	Double Face Tissue Tape	3/4" x 36 Yd	12/48
MMM-610-1	Cellophane Tape	1" x 2592"	12/36
MMM-600-2	Cellophane Tape	2" x 2592"	12/24
MMM-898-3/4	Filament Tape	3/4" x 60 Yd	12/48
MMM-898-1	Filament Tape	1" x 60 Yd	12/36
MMM-3939-2	Duct Tape	2" x 60 Yd	12/24



# **3M ADHESIVE FOAM & TRANSFER TAPES**

MMM-4032, 4016, 4008 are white double sided foam tapes. General purpose for mounting and holding applications.

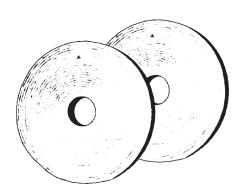
MMM-4930 is a very high bond .025" thick white foam tape. It is a general purpose tape for minimum visibility bonding of flat surfaces. Not recommended for polycarbonate plastics.

MMM-4945 is a very high bond .045" medium thick white foam tape. Resists the weakening effects of moisture, elevated temperatures, chemicals and vapors making it effective when bonding to many painted surfaces and flexible plastics. Not recommended for polycarbonate plastics.

MMM-4950 is a very high bond .045" medium thick white foam tape. The greater thickness (over MMM-4930) gives a more constant and therefore stronger bond. Recommended for many signage assembly usages. Not recommended for polycarbonate plastics.

MMMF9473 is a very high bond .010" very thin clear adhesive transfer tape. Useful for lamination of decorative metals and trim attachments.

Catalog Number	Description	Dimensions	Put Up
MMM-4032-1/2	Double Face Foam Tape, 1/32" Thick Double Face Foam Tape, 1/32" Thick Double Face Foam Tape, 1/16" Thick Double Face Foam Tape, 1/16" Thick Double Face Foam Tape, 1/8" Thick Double Face Foam Tape, 1/8" Thick	1/2" x 72 Yd	18
MMM-4032-3/4		3/4" x 72 Yd	12
MMM-4016-1/2		1/2" x 36 Yd	18
MMM-4016-3/4		3/4" x 36 Yd	12
MMM-4008-1/2		1/2" x 36 Yd	18
MMM-4008-3/4		3/4" x 36 Yd	12
MMM-4930-1/2	VHB Double Face Foam Tape, .025" Thick	1/2" x 72 Yd	18
MMM-4930-3/4	VHB Double Face Foam Tape, .025" Thick	1/2" x 72 Yd	12
MMM-4930-1	VHB Double Face Foam Tape, .025" Thick	1" x 72 Yd	9
MMM-4945-3/4	VHB Double Face Foam Tape, .045" Thick	3/4" x 36 Yd	12
MMM-4950-1/2	VHB Double Face Foam Tape, .045" Thick	1/2" x 36 Yd	18
MMM-4950-3/4	VHB Double Face Foam Tape, .045" Thick	3/4" x 36 Yd	12
MMM-4950-1	VHB Double Face Foam Tape, .045" Thick	1" x 36 Yd	9
MMMF9473-1/2	VHB Adhesive Transfer Tape, .010" Thick	1/2" x 60 Yd	18
MMMF9473-3/4	VHB Adhesive Transfer Tape, .010" Thick	3/4" x 60 Yd	12
MMMF9473-1	VHB Adhesive Transfer Tape, .010" Thick	1" x 60 Yd	9



# **Interstate** Electric Co.

# **TUBE SUPPORTS**

Catalog Number	Description	Height (	A=Assembled UA=Un-Assemble	Put d Up	Mfgr.
FMS-10T3-A (1) FMS-10T3-A-W (1) FMS-52A-A (1) FMS-52B-UAB (1) TRA-TS202A (1) TRA-TS202BW (1) TRA-TS202CB (1) TRA-TS202WB (1) VOL-TG-A VOL-TG-UA	Brass/Glass Brass/Glass w/Tie Wire Aluminum/Glass Brass/Glass, Un-plated Base Aluminum/Glass Brass/Glass w/Tie Wire Brass/Glass, Clip Base Brass/Glass, Wrapped Base Brass/Glass Brass/Glass	1-3/4" 1-3/4" 1-3/4" 1-3/4" 1-3/4" 1-3/4" 1-3/4" 1-3/4"	A A UA A A A UA	500/2000 500/2000 500/2000 500/2000 250/2000 500/2000 500/2000 500/2000 500/2000	FMS FMS FMS Transco Transco Transco Voltarc Voltarc
FMS-835-A(1) TRA-TS301BW(1) TRA-TS303B(1)	Brass/Glass Brass/Glass w/Tie Wire Brass/Glass	3-1/2" 3-1/2" 5-1/2"	A A UA	100/500 100/1000 100/1000	FMS Transco Transco
CLE-10MM CLE-20MM CLE-30MM CLE-40MM CLE-50MM CLE-60MM CLE-70MM	Clear Acrylic, 1-Piece (2)	3/8" 3/4" 1-3/16" 1-9/16" 2" 2-3/8" 2-3/4"	- - - - -	100/1000 100/1000 100/1000 100/1000 100/1000 100/1000	Clear Vue Clear Vue Clear Vue Clear Vue Clear Vue Clear Vue
DIV-101-QS ELE-TS-00 (1) TRA-TSPC11 TRA-TSPC31 TRA-TSPC41 TRA-TSPC51	Clear Polycarbonate, Clear Base Clear Polycarbonate, Clear Base Clear Polycarbonate, 1-Piece Clear Polycarbonate, 1-Piece Clear Polycarbonate, 1-Piece Clear Polycarbonate, 1-Piece	1-3/4" to 2-1/2" 1-3/8" to 2" 1/2" 1-1/4" 1-5/8" 2"	UA UA - - -	500/2000 100/1000 100/500 100/500 100/500 100/500	Diversified Electrobits Transco Transco Transco Transco
EGL-GI-10-00 (3) EGL-GI-12-00 (3) EGL-GI-13-00 (3)	10mm Grab-It Spring Loaded, Clear Polycarbonate <sup>(2)</sup> 12mm Grab-It Spring Loaded, Clear Polycarbonate <sup>(2)</sup> 13mm Grab-It Spring Loaded,	1-3/4" 1-3/4" 1-3/4"	-	100/1000 100/1000 100/1000	EGL EGL EGL
EGL-GI-15-00 (3) TRA-TS202MVB	Clear Polycarbonate (2) 15mm Grab-It Spring Loaded, Clear Polycarbonate (2) Black Nylon Spring Loaded w/Black Metal Base	1-3/4"	-	100/1000 250/2000	EGL Transco
TRA-TS202MVN	White Nylon Spring Loaded w/Metal Base	1-3/4"	-	250/2000	Transco
FMS-EXT	Aluminum Extension Post Only w/Screws	2-1/2" to 5-1/2"	-	100/1000	FMS



CLEAR-VUE Transco





**VOL-TG-A** 

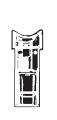
TRA-TS202A





w/Tie Wire

DIV-101-QS/ELE-TS





**CLEAR-VUE** 

FMS-835-A

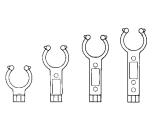




NOTE: (1) UL listed. (2) Also available in black. (3) UL Recognized.



TRA-TS202MVN





TRA-TSPC11-51 TRA-TS303B



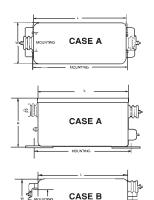
# SANYO/LECIP SENTRY GFP NEON SIGN TRANSFORMERS • OUTDOOR NON-WEATHERPROOF @ 2161

**LECIP** 

Complies with UL 2161 and '96 National Electric Code. Sentry Series transformers have no asphalt fill, instead a thermosetting compound (polyester resin fill) which will not heat, soften nor flow at elevated temperatures. Features bypass switch for easy troubleshooting, LED diagnosis indicator and is flashable, dimmable and has high resistance to noise or surge on the primary line. Encased in a one-piece, seamless deep drawn can and pre-engineered to perform well under less than ideal conditions such as poorly ventilated areas, long runs of GTO-15 and metal conduit. 30mA versions may also be available without bypass switch.

120V ● 60Hz ● Mid Point Ground ● Individually Boxed

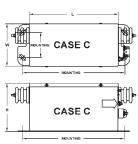
Catalog Number	Voltage	Current mA	Volt Amp	Input Amps.	Dime	ensions (Inch W	nes) H	Mounting	Case Type	Weight (lbs.)
Normal Power		IIIA	VIIIh	Allips.		"		mooning	Турс	(103.7
4B15N3-CB 4B12N3-CB 4B09N3-CB 4B75N3-CB 4B06N3-C(1) 4B05N3-C(1)	15,000 12,000 9,000 7,500 6,000 5,000	30 30 30 30 30 30	450 360 270 225 180 150	3.8 3.0 2.3 1.9 1.5 1.3	9-1/16 9-1/16 8-1/4 8-1/4 8-1/4	4-3/16 4-3/16 3-5/8 3-5/8 3-5/8 3-5/8	5-3/16 5-3/16 3-7/8 3-7/8 3-1/4 3-1/4	9-11/16 x 2 9-11/16 x 2 8-3/4 x 2 8-3/4 x 2 8-3/4 x 2 8-3/4 x 2	A A B B B B B	22 22 13 13 11
4B15N6-CB 4B12N6-CB 4B09N6-CB 4B75N6-CB 4B06N6-CB 4B05N6-CB	15,000 12,000 9,000 7,500 6,000 5,000	60 60 60 60 60	900 720 540 450 360 300	7.5 6.0 4.5 3.75 3.0 2.5	10-3/8 10-3/8 10-3/8 10-3/8 9-3/16 9-3/16	5-1/16 5-1/16 5-1/16 5-1/16 4-5/16 4-5/16	5-13/16 5-13/16 5 5 5-1/4 5-1/4	11-7/8 x 3 11-7/8 x 3 11-7/8 x 3 11-7/8 x 3 10-11/16 x 3 10-11/16 x 3	( ( ( (	36 36 32 32 23 23
High Power Fac 4B15H3-CB 4B12H3-CB 4B09H3-CB 4B75H3-CB 4B06H3-C(1) 4B05H3-C(1)	15,000 12,000 9,000 7,500 6,000 5,000	30 30 30 30 30 30	252 204 156 120 95 80	2.1 1.7 1.3 1.0 0.8 0.7	9-1/16 9-1/16 8-1/4 8-1/4 8-1/4	4-3/16 4-3/16 3-5/8 3-5/8 3-5/8 3-5/8	5-3/4 5-3/4 3-7/8 3-7/8 3-1/4 3-1/4	9-11/16 x 2 9-11/16 x 2 8-3/4 x 2 8-3/4 x 2 8-3/4 x 2 8-3/4 x 2	A A B B B	24 23 13 13 11
4B15H6-CB 4B12H6-CB 4B09H6-CB 4B75H6-CB 4B05H6-CB NOTE: (2) UL216	15,000 12,000 9,000 7,500 6,000 5,000	60 60 60 60 60	420 335 240 190 160 140	3.5 2.8 2.0 1.6 1.35 1.15	10-3/8 10-3/8 10-3/8 10-3/8 9-3/16 9-3/16	5-1/16 5-1/16 5-1/16 5-1/16 4-5/16 4-5/16	5-13/16 5-13/16 5 5 5-1/4 5-1/4	11-7/8 x 3 11-7/8 x 3 11-7/8 x 3 11-7/8 x 3 10-11/16 x 3 10-11/16 x 3	( ( ( (	36 36 32 32 32 23 23







Catalog	1	Current	Volt	Input	Dii	mensions (In	ches)		Case	Weight
Number	Voltage	mA	Amp	Amps.	L	W	Н	Mounting	Туре	(lbs.)
Normal Powe	r Factor									
7B15N3-CB 7B12N3-CB	15,000 12,000	30 30	450 360	1.6 1.3	9-1/16 9-1/16	4-3/16 4-3/16	5-3/16 5-3/16	9-11/16 x 2 9-11/16 x 2	A A	22 22
7B09N3-CB 7B75N3-CB 7B06N3-C	9,000 7,500 6,000	30 30 30	270 225 180	1.0 .80 .60	8-1/4 8-1/4 8-1/4	3-5/8 3-5/8 3-5/8	3-7/8 3-7/8 3-1/4	8-3/4 x 2 8-3/4 x 2 8-3/4 x 2	B B B	13 13 11
7B05N3-C <sup>(1)</sup>	5,000	30	150	.50	8-1/4	3-5/8	3-1/4	8-3/4 x 2	В	11
7B15N6-CB 7B12N6-CB 7B09N6-CB	15,000 12,000 9,000	60 60 60	900 720 540	3.25 2.6 1.95	10-3/8 10-3/8 10-3/8	5-1/16 5-1/16 5-1/16	5-13/16 5-13/16 5		( (	36 36 32
7B75N6-CB 7B06N6-CB 7B05N6-CB	7,500 6,000 5,000	60 60 60	450 360 300	1.6 1.3 1.1	10-3/8 9-3/16 9-3/16	5-1/16 4-5/16 4-5/16	5 5-1/4 5-1/4	11-7/8 x 3 10-11/16 x 3 10-11/16 x 3	C	32 23 23
NOTE: (1) UL2					,	. 5/ 10	3 1/ 1	10 , 10 % 0		20



Commerce: 323.803.2000 / 800.225.5432 (CALL IEC) / Fax 323.803.2019

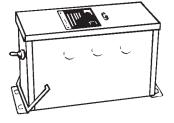
# SANYO/LECIP SENTRY GFP NEON SIGN TRANSFORMERS • ENCLOSED • NON-WEATHERPROOF (9) 2161

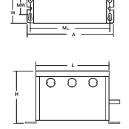
**LECIP** 

Complies with UL 2161 and '96 National Electric Code. Self-contained with disconnect switch. Sentry Series potting compound provides direct cooling of transformer generated heat into the surrounding "free-air" environment. Transformer can be mounted either horizontally or vertically to fit mounting requirements unlike tar-filled units which can only be mounted horizontally or the warranty may be voided. Features bypass switch for easy troubleshooting, LED diagnosis indicator and is flashable, dimmable and has a high resistance to noise or surge on the primary line. Top and end panels are removable for easy wiring access. Knockouts are provided for both standard conduit and the on-off switch. Easy to use self-storing carry handle provided. May also be available without bypass switch.

120V ● 60Hz ● Mid Point Ground ● Individually Boxed

Catalog Number	Voltage	Current mA	Volt Amp	Input Amps.	Dim L	ensions (Inc W	hes) H	Mounting	Weight (lbs.)
Normal Power	Factor								
4B15N3-EB 4B12N3-EB 4B10N3-EB 4B09N3-EB 4B75N3-EB 4B06N3-E(1) 4B05N3-E(1)	15,000 12,000 10,500 9,000 7,500 6,000 5,000	30 30 30 30 30 30 30	450 360 315 270 225 180 150	3.8 3.0 2.65 2.3 1.9 1.5	10-7/8 10-7/8 10-7/8 10-7/8 10-7/8 10-7/8	4-11/32 4-11/32 4-11/32 3-5/8 3-5/8 3-5/8 3-5/8	7-1/16 7-1/16 7-1/16 6-5/16 6-5/16 6-5/16	11-3/4 x 2 11-3/4 x 2 11-3/4 x 2 11-3/4 x 2 11-3/4 x 2 11-3/4 x 2 11-3/4 x 2	26 26 26 18 18 16
High Power Fa 4B15H3-EB 4B12H3-EB 4B10H3-EB 4B09H3-EB 4B75H3-EB 4B06H3-E(1) 4B05H3-E(1)	15,000 12,000 10,500 9,000 7,500 6,000 5,000	30 30 30 30 30 30 30 30	252 204 174 156 120 95 80	2.1 1.7 1.45 1.3 1.0 .8	10-7/8 10-7/8 10-7/8 10-7/8 10-7/8 10-7/8 10-7/8	4-11/32 4-11/32 4-11/32 3-5/8 3-5/8 3-5/8 3-5/8	7-1/16 7-1/16 7-1/16 6-5/16 6-5/16 6-5/16	11-3/4 x 2 11-3/4 x 2 11-3/4 x 2 11-3/4 x 2 11-3/4 x 2 11-3/4 x 2 11-3/4 x 2	26 26 26 18 18 16





ULZ 161 listed without Secondary Ground Fault Protection.

277V ● 60Hz ● Mid Point Ground ● Individually Boxed

Catalog		Current	Volt	Input	Dim	ensions (Inc	hes)		Weight
Number	Voltage	mA_	Amp	Amps.	L	W	Н	Mounting	(lbs.)
Normal Power	Factor								
7B15N3-EB	15,000	30	450	1.6	10-7/8	4-11/32	7-1/16	11-3/4 x 2	26
7B12N3-EB	12,000	30	360	1.3	10-7/8	4-11/32	7-1/16	11-3/4 x 2	26
7B10N3-EB	10,500	30	315	1.15	10-7/8	4-11/32	7-1/16	11-3/4 x 2	26
7B09N3-EB	9,000	30	270	1.0	10-7/8	3-5/8	6-5/16	11-3/4 x 2	18
7B75N3-EB	7,500	30	225	0.8	10-7/8	3-5/8	6-5/16	11-3/4 x 2	18
7B06N3-E(1)	6,000	30	180	0.6	10-7/8	3-5/8	6-5/16	11-3/4 x 2	16
7B05N3-E(1)	5,000	30	150	0.5	10-7/8	3-5/8	6-5/16	11-3/4 x 2	16

**NOTE:** (1) UL2161 listed without Secondary Ground Fault Protection.

**LECIP** 



### SANYO/LECIP HOUSING • OUTDOOR NON-WEATHERPROOF 2161 COMPLIANT

UL 2161 compliant. For internal mounting.

120V ● 60Hz ● Mid Point Ground ● Individually Boxed

	Catalog		Current	Volt	Input		Dimen	sions (Inches)			Weight
	Number	Voltage	mA	Amp	Amps.	L	W	Н	Mounting	Housing	(lbs.)
١	4B09N3-H	9,000	30	270	2.3	8-5/8	3-5/8	3-7/16	9-1/4 x 2	1-3/4	13
1	4B75N3-H	7,500	30	225	1.9	8-5/8	3-5/8	3-7/16	9-1 <sup>′</sup> /4 x 2	1-3/4	13
1	4B06N3-H	6,000	30	180	1.5	8-5/8	3-5/8	3-7/16	9-1/4 x 2	1-3/4	12
	4B05N3-H	5,000	30	150	1.3	8-5/8	3-5/8	3-7/16	9-1/4 x 2	1-3/4	12

# 277V ● 60Hz ● Mid Point Ground ● Individually Boxed

Catalog		Current	Volt	Input		Dimen	sions (Inches)			Weight
Number	Voltage	mA	Amp	Amps.	L	W	Н	Mounting	Housing	(lbs.)
7B09N3-H	9,000	30	270	1.0	8-5/8	3-5/8	3-7/16	9-1/4 x 2	1-3/4	13
7B75N3-H	7,500	30	225	0.8	8-5/8	3-5/8	3-7/16	9-1/4 x 2	1-3/4	13
7B06N3-H	6,000	30	180	0.6	8-5/8	3-5/8	3-7/16	9-1 <sup>′</sup> /4 x 2	1-3/4	12
7B05N3-H	5,000	30	150	0.5	8-5/8	3-5/8	3-7/16	9-1 <sup>′</sup> /4 x 2	1-3/4	12

# SANYO/LECIP MINI-HOUSING • OUTDOOR NON-WEATHERPROOF . 92 2161

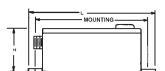
UL 2161 compliant. For internal mounting.

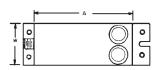
120V ● 60Hz ● Mid Point Ground ● Individually Boxed

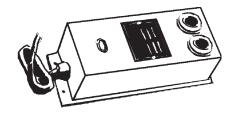
١	Catalog		Current	Volt	Input										
ı	Number	Voltage	<u>mA</u>	Amp	Amps.	L	W	Н	Mounting	Housing	(lbs.)				
	4B05N3-M	5,000	30	150	1.3	5-13/16	3-1/16	3-1/8	6-5/16 x 2	1-1/2	7				
١	4B04N3-M	4,000	30	120	1.0	5-13/16	3-1/16	3-1/8	6-5/16 x 2	1-1/2	7				
	4B03N3-M	3,000	30	95	0.8	5-13/16	3-1/16	3-1/8	6-5/16 x 2	1-1/2	7				

# 277V • 60Hz • Mid Point Ground • Individually Boxed

Catalog		Current	Volt	Input									
Number	Voltage	mA	Amp	Amps.	L	W	Н	Mounting	Housing	Weight (lbs.)			
7B05N3-M	5,000	30	150	.54	5-13/16	3-1/16	3-1/8	6-5/16 x 2	1-1/2	7			
7B04N3-M	4,000	30	120	.43	5-13/16	3-1/16	3-1/8	6-5/16 x 2	1-1/2	7			
7B03N3-M	3,000	30	95	.34	5-13/16	3-1/16	3-1/8	6-5/16 x 2	1-1/2	7			







# SANYO/LECIP EXPORT MODEL NEON SIGN TRANSFORMERS • OUTDOOR NON-WEATHERPROOF

**LECIP** 

LECIP transformers have no asphalt fill, instead a thermosetting compound (polyester resin fill) which will not heat, soften nor flow at elevated temperatures. Encased in a one-piece, seamless deep drawn can and pre-engineered to perform well under less than ideal conditions such as poorly ventilated areas, long runs of GTO-15 and metal conduit. Mid point ground and balanced secondary. Export models are not UL listed. Other variations also available.

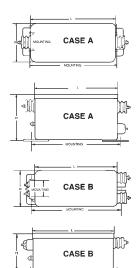
100V ● 60Hz ● Mid Point Ground ● Individually Boxed

Catalog		Current	Volt	Input		Case	Weight			
Number	Voltage	mA	Amp	Amps.	L	W	Н	Mounting	Туре	(lbs.)
Normal Po	wer Factor									
EX100B15	<b>N</b> 15,000	30	450	3.8	9-1/16	4-3/16	5-3/16	9-11/16 x 2	Α	22
EX100B12	<b>N</b> 12,000	30	360	3.0	9-1/16	4-3/16	5-3/16	9-11/16 x 2	A	22
EX100B09	<b>N</b> 9,000	30	270	2.3	8-1/4	3-5/8	3-7/8	8-3/4 x 2	В	13
EX100B75	<b>N</b> 7,500	30	225	1.9	8-1/4	3-5/8	3-7/8	8-3/4 x 2	В	13
EX100B06	<b>N</b> 6,000	30	180	1.5	8-1/4	3-5/8	3-1/4	8-3/4 x 2	В	11
EX100B05	<b>N</b> 5,000	30	150	1.3	8-1/4	3-5/8	3-1/4	8-3/4 x 2	В	11



220V • 50Hz • Mid Point Ground • Individually Boxed

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Catalog		Current	Volt	Input		Dimen	sions (Inches)		Case	Weight
Number	Voltage	mA	Amp	Amps.	l	W	Н	Mounting	Туре	(lbs.)
Normal Powe	r Factor									
EX220A15N	15,000	30	450	2.0	9-1/16	4-3/16	5-3/16	9-11/16 x 2	A	24
EX220A12N	12,000	30	360	1.6	9-1/16	4-3/16	5-3/16	9-11/16 x 2	A	22
EX220A09N	9,000	30	270	1.2	8-1/4	3-5/8	3-7/8	8-3/4 x 2	В	13
EX220A75N	7,500	30	225	1.0	8-1/4	3-5/8	3-7/8	8-3/4 x 2	В	13
EX220A06N	6,000	30	180	0.8	8-1/4	3-5/8	3-1/4	8-3/4 x 2	В	12
EX220A05N	5,000	30	150	0.7	8-1/4	3-5/8	3-1/4	8-3/4 x 2	В	11
EX220A04N	4,000	30	120	0.55	8-1/4	3-5/8	3-1/4	8-3/4 x 2	В	11
EX220A03N	3,000	30	90	0.4	8-1/4	3-5/8	3-1/4	8-3/4 x 2	В	11



220V ● 60Hz ● Mid Point Ground ● Individually Boxed

Catalog		Current	Volt	Input		Dimens	ions (Inches)		Case	Weight
Number	Voltage	mA	Amp	Amps.	l	W	H	Mounting	Туре	(lbs.)
Normal Powe	r Factor									
EX220B15N	15,000	30	450	2.0	9-1/16	4-3/16	5-3/16	9-11/16 x 2	A	22
EX220B12N	12,000	30	360	1.6	9-1/16	4-3/16	5-3/16	9-11/16 x 2	A	22
EX220B09N	9,000	30	270	1.2	8-1/4	3-5/8	3-7/8	8-3/4 x 2	В	13
EX220B75N	7,500	30	225	1.0	8-1/4	3-5/8	3-7/8	8-3/4 x 2	В	13
EX220B06N	6,000	30	180	0.8	8-1/4	3-5/8	3-1/4	8-3/4 x 2	В	12
EX220B05N	5,000	30	150	0.7	8-1/4	3-5/8	3-1/4	8-3/4 x 2	В	11
EX220B04N	4,000	30	120	0.55	8-1/4	3-5/8	3-1/4	8-3/4 x 2	В	11
EX220B03N	3,000	30	90	0.4	8-1/4	3-5/8	3-1/4	8-3/4 x 2	В	11



# **SANYO/LECIP LUMINOUS TUBE FOOTAGE CHART**

**LECIP** 

TRAN	ISFORMER RA	TINGS								APPRO	XIMAT Based	E FEET on Avera	OF TU ge Grad	BING C e of Tubi	PERAT	ED								
Open-Circuit Secondary	Short-Circuit Secondary	Approximate Watts		Clear or Fluorescent Red Neon							(	lear or	Fluores	cent Me	ercury F	illed Tu	bes, All	Colors.						
Voltage	Current	Consumption		TUBE SIZE, MILLIMETERS								TU	BE SIZ	E, MILI	.IMETE	RS								
(Volts)	(mA)		25	22	20	18	15	14	13	12	11	10	9	25	22	20	18	15	14	13	12	11	10	9
15,000	30	243	102	85	78	72	60	54	50	46	43	40	38	120	100	90	80	72	65	60	55	51	48	45
12,000	30	194	79	67	61	55	46	42	38	35	33	31	28	95	79	70	62	55	50	46	42	39	37	34
10,500	30	170	73	62	55	48	39	36	34	31	28	25	22	88	73	63	54	48	43	40	37	33	30	27
9,000	30	146	67	57	48	40	33	30	28	26	24	23	21	80	67	55	45	40	36	33	31	29	28	25
7,500	30	122	51	41	34	28	27	25	23	22	20	19	18	61	48	39	35	33	30	28	26	24	23	21
6,000	30	97	40	34	28	24	22	21	19	18	16	15	14	48	40	32	29	27	25	23	21	19	18	17
5,000	30	81	33	28	23	20	18	17	15	14	13	13	12	40	33	27	24	22	20	18	17	16	15	14
4,000	30	65	27	23 19 17 15 13 13 12 11 10						9	32	27	22	20	18	16	15	14	13	12	11			
3,000	30	49	17	14	14 12 11 11 10 9 8 8 8 8						7	22	18	16	14	13	12	11	10	9	9	8		
Recommo	ended Gas Press	ure, mm/Hg	6	7	8	8	9	10	10	11	12	13	15	6	7	8	8	9	10	10	11	12	13	15

NOTE: Each pair of electrodes equals 1 foot in length.

Add 10% to the recommended gas pressure measured in mm/Hg when the length of the tube is less than 10 feet.

Above footage chart is a guide only.

# TRANSCO POLYLOK GFP NEON SIGN TRANSFORMERS • OUTDOOR NON-WEATHERPROOF

**4** 2161

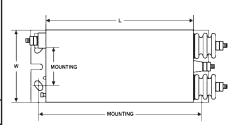
Transco

Complies with UL 2161 and '96 National Electric Code. Equipped with trouble shooting by-pass switch and color chromatic "Tri-LED" sensor lamp indicator. PolyLok<sup>TM</sup> transformers have no asphalt fill, instead a thermosetting compound (epoxy resin fill) which will not heat, soften nor flow at elevated temperatures. Encased in a one-piece, seamless deep drawn can and pre-engineered to perform well under less than ideal conditions such as poorly ventilated areas, long runs of GTO-15 and metal conduit. Mid point ground and balanced secondary. High power factor versions also available.

120V • 60Hz • Individually Boxed

Catalog Number	Voltage	Current mA	Watts	Input Amps.	L	Dimension W	s (Inches) H	Mounting	Weight (lbs.)
Normal Power Fa	ictor								
NT1512N3G NT1212N3G NT912N3G NT7512N3G NT612N3G <sup>(1)</sup> NT512N3G <sup>(1)</sup> T412 (1),(2) T312 (1),(2)	15,000 12,000 9,000 7,500 6,000 5,000 4,000 3,000	30 30 30 30 30 30 30 30 30	243 194 146 122 97 81 65 49	3.71 2.80 2.16 1.70 1.34 1.20 1.10	10-7/8 10-7/8 9-7/8 9-7/8 8-5/16 8-5/16 7-3/4 7-3/4	4-3/8 4-3/8 3-5/8 3-5/8 3-15/16 3-15/16 3-1/4	5-1/2 5-1/2 3-7/8 3-7/8 3-1/2 3-1/2 2-3/4 2-3/4	11-3/4 x 2-1/2 11-3/4 x 2-1/2 10-3/4 x 2 10-3/4 x 2 7-5/16 x 2 7-5/16 x 2 8-3/4 x 2 8-3/4 x 2	26 24 16 15 11 10 9
\$1512G <sup>(2)</sup> \$1212G <sup>(2)</sup> \$912G <sup>(2)</sup> \$7512G <sup>(2)</sup> \$612G <sup>(2)</sup> \$512G <sup>(2)</sup> \$412G <sup>(2)</sup>	15,000 12,000 9,000 7,500 6,000 5,000 4,000	60 60 60 60 60 60	486 389 292 243 194 162 130	8.25 6.60 4.95 4.13 3.30 2.75 2.20	11-3/4 10-3/4 10-3/4 10 10 9	4-3/4 4-1/4 4-1/8 4-1/8 4-1/8 3-1/2 3-1/2	6-1/2 5-3/4 5-3/4 5-1/4 4-3/4 3-5/8 3-5/8	12-3/4 x 2-1/2 11-3/4 x 2-1/2 11-3/4 x 2-1/2 11 x 2-1/2 11 x 2-1/2 10 x 2 10 x 2	41 33 28 23 21 18 16

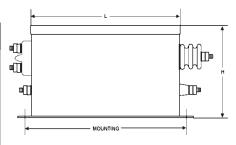




277V ● 60Hz ● Individually Boxed

Catalog Number	Voltage	Current mA	Watts	Input Amps.	L	Dimensior W	s (Inches) H	Mounting	Weight (lbs.)
Normal Power Fo	ıctor								
NT1527N3G NT1227N3G NT927N3G NT7527N3G NT627N3G (1) NT527N3G (1) T427 (1),(2) T327 (1),(2)	15,000 12,000 9,000 7,500 6,000 5,000 4,000 3,000	30 30 30 30 30 30 30 30 30	243 194 146 122 97 81 65 49	1.59 1.14 0.86 0.79 0.57 0.49 0.47 0.36	10-7/8 10-7/8 9-7/8 9-7/8 8-5/16 8-5/16 7-3/4	4-3/8 4-3/8 3-5/8 3-5/8 3-15/16 3-15/16 3-1/4 3-1/4	5-1/2 5-1/2 3-7/8 3-7/8 3-1/2 3-1/2 2-3/4 2-3/4	11-3/4 x 2-1/2 11-3/4 x 2-1/2 10-3/4 x 2 10-3/4 x 2 7-5/16 x 2 7-5/16 x 2 8-3/4 x 2 8-3/4 x 2	26 24 16 15 11 10 9
\$1527G <sup>(2)</sup> \$1227G <sup>(2)</sup> \$927G <sup>(2)</sup> \$7527G <sup>(2)</sup> \$627G <sup>(2)</sup> \$527G <sup>(2)</sup> \$427G <sup>(2)</sup>	15,000 12,000 9,000 7,500 6,000 5,000 4,000	60 60 60 60 60 60	486 389 292 243 194 162 130	3.58 2.86 2.15 1.78 1.43 1.19 0.96	11-3/4 10-3/4 10-3/4 10 10 9	4-3/4 4-1/4 4-1/8 4-1/8 4-1/8 3-1/2 3-1/2	6-1/2 5-3/4 5-3/4 5-1/4 4-3/4 3-5/8 3-5/8	12-3/4 x 2-1/2 11-3/4 x 2-1/2 11-3/4 x 2-1/2 11 x 2-1/2 11 x 2-1/2 10 x 2 10 x 2	41 33 28 23 21 18 16

NOTE: (1) UL2161 listed without Secondary Ground Fault Protection. (2) Asphalt Filled





# TRANSCO POLYTRANS GFP NEON SIGN TRANSFORMERS • ENCLOSED • NON-WEATHERPROOF

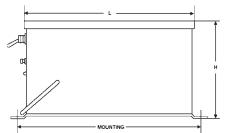
**4 2161** 

Complies with UL 2161 and '96 National Electric Code. Equipped with color chromatic "Tri-LED" sensor lamp indicator. Polyester resin fill potting compound provides direct cooling of transformer generated heat into the surrounding "free-air" environment. Transformer can be mounted either horizontally or vertically to fit mounting requirements unlike tar-filled units which can only be mounted horizontally or the warranty may be voided. Top and end panels are removable for easy wiring access. On-off switch is provided for each unit. Knockouts are provided for both standard conduit and the on-off switch. Easy to use self-storing carry handle provided. Mid point ground and balanced secondary.

120V ● 60Hz ● Individually Boxed

Catalog Number	Voltage	Current mA	Watts	Input Amps.	L	Dimension W	s (Inches) H	Mounting	Weight (lbs.)
Normal Power Fa	ctor								
PNT1512N3G	15,000	30	243	3.71	10-3/4	4-1/4	7	11-3/4 x 2	24
PNT1212N3G	12,000	30	194	2.80	10-3/4	4-1/4	7	11-3/4 x 2	23
PNT912N3G	9,000	30	146	2.16	10-3/4	3-5/8	6-1/4	11-3/4 x 2	15
PNT712N3G	7,500	30	122	1.70	10-3/4	3-5/8	6-1/4	11-3/4 x 2	14
PNT612N3G (1)	6,000	30	97	1.34	10-3/4	3-5/8	6-1/4	11-3/4 x 2	14
PNT512N3G (1)	5,000	30	81	1.20	10-3/4	3-5/8	6-1/4	11-3/4 x 2	14

**NOTE:** (1) UL2161 listed without Secondary Ground Fault Protection.



# 277V ● 60Hz ● Individually Boxed

Catalog Number	Voltage	Current mA	Watts	Input Amps.	L	Dimension W	ıs (Inches) H	Mounting	Weight (lbs.)
Normal Power Fa	ctor								
PNT1527N3G PNT1227N3G	15,000 12,000	30 30	243 194	1.59 1.14	10-3/4 10-3/4	4-1/4 4-1/4	7 7	11-3/4 x 2 11-3/4 x 2	24 23
PNT927N3G PNT727N3G	9,000 7.500	30 30	146 122	0.86 0.79	10-3/4 10-3/4	3-5/8 3-5/8	6-1/4 6-1/4	11-3/4 x 2 11-3/4 x 2	15 14
PNT627N3G (1)	6,000	30	97	0.57	10-3/4	3-5/8	6-1/4	11-3/4 x 2	14
PNT527N3G (1)	5,000	30	81	0.49	10-3/4	3-5/8	6-1/4	11-3/4 x 2	14

NOTE: (1) UL2161 listed without Secondary Ground Fault Protection.

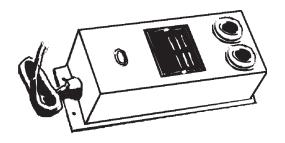
### TRANSCO MINI-HEIGHT PB HOUSING TRANSFORMERS **₹161** 2161

**Transco** 

UL2161 compliant. For internal mounting.

60Hz • Individually Boxed

Catalog 120V	Number 277V	Sec. V	mA	VA	Line <i>l</i> 120V	Amp 277V	Overall	Length	Dime Width	ensions (Inc Height	hes) Mounting	Housing	Weight (lbs.)
Normal Power T1512PB T1212PB T912PB T7512PB T612PB T512PB T412PB T312PB	T Factor T1527PB T1227PB T927PB T7527PB T627PB T527PB T527PB T427PB T327PB	15,000 12,000 9,000 7,500 6,000 5,000 4,000 3,000	30 30 30 30 30 30 30 30	450 360 270 225 180 150 120 90	4.13 3.3 2.48 2.06 1.65 1.38 1.1 0.83	1.78 1.43 1.07 0.89 0.72 0.59 0.48 0.36	11-1/2 11-1/2 10 10 10 10 10	10 10 8-3/4 8-3/4 8-3/4 8-3/4 8-3/4	4-7/8 4-7/8 3-5/8 3-5/8 3-3/8 3-3/8 3-3/8 3-3/8	3-7/8 3-7/8 3-1/4 3-1/4 3 3 3	10-13/16 x 2-1/2 10-13/16 x 2-1/2 9-7/16 x 2 9-7/16 x 2 9-7/16 x 2 9-7/16 x 2 9-7/16 x 2 9-7/16 x 2	2-1/2 2-1/2 1-3/4 1-3/4 1-3/4 1-3/4 1-3/4	21 19 13 11 10 9 9
S1512PB S1212PB S912PB S7512PB S612PB S512PB S412PB S312PB	\$1527PB \$1227PB \$927PB \$7527PB \$627PB \$527PB \$427PB \$327PB	15,000 12,000 9,000 7,500 6,000 5,000 4,000 3,000	60 60 60 60 60 60	900 720 540 450 360 300 240 180	8.25 6.6 4.95 4.13 3.3 2.75 2.2 1.65	3.58 2.86 2.15 1.78 1.43 1.19 0.96 0.72	13-1/4 12-1/4 12-1/4 11-1/4 11-1/4 10 10	11-3/4 10-3/4 10-3/4 10 10 8-3/4 8-3/4 8-3/4	6-1/8 5-3/8 5-3/8 3-3/4 3-3/4 3-11/16 3-11/16 3-3/8	4-13/16 4-3/16 4-3/16 3-1/4 3-1/4 3-1/4 3-1/4 3	12-5/8 x 2-1/2 11-9/16 x 2-1/2 11-9/16 x 2-1/2 10-11/16 x 2 10-11/16 x 2 9-7/16 x 2 9-7/16 x 2 9-3/8 x 2	2-1/2 2-1/2 2-1/2 1-3/4 1-3/4 1-3/4 1-3/4	38 30 26 16 15 13 12
High Power For T1512PBH T1212PBH T7512PBH T612PBH T512PBH T412PBH T312PBH	T1527PBH T1227PBH T927PBH T927PBH T7527PBH T627PBH T527PBH T427PBH T327PBH	15,000 12,000 9,000 7,500 6,000 5,000 4,000 3,000	30 30 30 30 30 30 30 30	243 194 146 122 97 81 65 49	2.13 1.7 1.28 1.07 0.85 0.71 0.57 0.43	0.92 0.74 0.56 0.46 0.37 0.30 0.24 0.19	12-1/2 12-1/2 11-1/2 11-1/2 11-1/2 11-1/2 11-1/2 11-1/2	11 10-1/4 10-1/4 10-1/4 10-1/4 10-1/4	4-7/8 4-7/8 3-3/4 3-3/4 3-1/2 3-1/2 3-3/8 3-3/8	3-3/4 3-3/4 3-1/4 3-1/4 3 3 2-7/8	11-7/8 x 2-1/2 11-7/8 x 2-1/2 10-7/8 x 2 10-7/8 x 2 10-7/8 x 2 10-7/8 x 2 10-7/8 x 2 10-7/8 x 2	2-1/2 2-1/2 1-3/4 1-3/4 1-3/4 1-3/4 1-3/4	21 19 13 12 11 10 10
S1512PBH S1212PBH S912PBH S7512PBH S612PBH S512PBH S412PBH S312PBH	S1527PBH S1227PBH S927PBH S7527PBH S627PBH S527PBH S427PBH S327PBH	15,000 12,000 9,000 7,500 6,000 5,000 4,000 3,000	60 60 60 60 60 60	486 389 292 243 194 162 130 97	4.25 3.4 2.56 2.13 1.7 1.42 1.14 0.85	1.84 1.47 1.10 0.92 0.74 0.61 0.49 0.37	14-1/4 13-1/4 13-1/4 12-3/4 12-3/4 11-1/2 11-1/2	12-3/4 11-3/4 11-3/4 11-1/2 11-1/2 10-1/4 10-1/4	6 5-1/2 5-1/2 3-3/4 3-3/4 3-3/4 3-3/8	4-3/4 4-1/4 4-1/4 3-1/4 3-1/4 3-1/4 3-1/4	13-1/2 x 2-1/2 12-1/2 x 2-1/2 12-1/2 x 2-1/2 12-1/4 x 2 12-1/4 x 2 10-7/8 x 2 10-7/8 x 2	2-1/2 2-1/2 2-1/2 1-3/4 1-3/4 1-3/4 1-3/4	43 31 26 17 17 14 13





### **944** 2161 **TRANSCO PR HOUSING TRANSFORMERS**

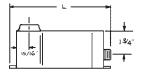
**Transco** 

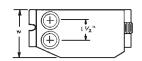
UL2161 compliant. Mini internal mount. Secondary end-point grounded to case.

60Hz ● Normal Power Factor ● Individually Boxed

Catalog 120V	Number 277V	Sec. V	mA	VA	Line 120V	Amp 277V	Length	Width	Dimensior Height	ns (Inches) Mounting	Housing	Weight (Lbs.)
T612PR	T627PR	6,000	30	180	1.65	0.72	6-3/8	3-9/16	2-3/4	6-7/8 x 1-3/4	1-1/2	8
T512PR	T527PR	5,000	30	150	1.38	0.59	6-3/8	3-9/16	2-3/4	6-7/8 x 1-3/4	1-1/2	8
T412PR	T427PR	4,000	30	120	1.1	0.48	6-3/8	3-9/16	2-3/4	6-7/8 x 1-3/4	1-1/2	7
T312PR	T327PR	3,000	30	90	0.83	0.36	6-3/8	3-9/16	2-3/4	6-7/8 x 1-3/4	1-1/2	7







# TRANSCO PT HOUSING TRANSFORMERS 3 2161

Transco

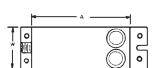
UL2161 compliant. Mini internal mount. Secondary end-point grounded to case.

120V ● 60Hz ● Normal Power Factor ● Individually Boxed

Catalog Number	Seco Volts	ndary mA	Primary VA	Input Amp	Length	Width	Dimensior Height	ns (Inches) Mounting	Housing	Weight (Lbs.)
T512PT	5,000	25	150	1.3	5-3/4	2-7/8	2-7/8	6-1/4 x 2	1-1/2	6.50
T412PT	4,000	30	150	1.3	5-3/4	2-7/8	2-7/8	6-1/4 x 2	1-1/2	6.25
T312PT	3,000	30	90	.9	5-3/4	2-7/8	2-7/8	6-1/4 x 2	1-1/2	6.25

**PT Series** 





Transco

# TRANSCO REVISED LUMINOUS TUBE FOOTAGE CHART

				15,000	12,000	10,500	000'6	7,500	6,000	5,000	4,000	3,000	2,000		To facilitate the dissipation of heat from a neon transformer by conduction, the mounting surface should be in good contact with another solid surface. Double-nutting will result in reduced service life.
	<u> </u>		6	39 45 39	34433	27 27	2552	27 27 18	19 71 71	9 1 1 1 1 1 1 1 1	== 6	887	54	15	n of heat n, the mo
	SCEN		10	55 4 4 8 8 4 1	42 37 31	88	2883	23 23 19	24 13 13 13 13 13 13 13 13 13 13 13 13 13	15 15 13	222	9 6 7	20	13	ssipation nduction contact utting wi
	JORE	<b>(</b> 0	11	51 51 44	45 88 84 84 84	333	28333	24 24 20	25 19 19 19	81 91 4	555	တတထ	9 5	12	e the dis ar by cor in good ouble-nu
	PR FL	TER	12	64 55 48	45 45 36 36	37 37	33.33	2882	2228	15 15 15	442	55%	5	=	facilitat insforme ould be rface. D
*	AR C	LLIME	13	2263	53 46 39	94	88888	3888	2222	£8899 1988	स्स	==°	စဖ	9	
ATED	E, CLE	⊠ N	14	75 65 56 56	57 50 50 43	43 43	3885	2883	2332	1883	91 4	555	ထမ	9	the ssure tube is
PER	FILLED TUBE, CLEAR OR FLUORESCENT COLORS, FOR ALL APPLICATIONS	TUBE SIZE, IN MILLIMETERS	15	8223	63 55 55 47	48 48	8448	8888	23,27,31	2222	885	555	6	6	Deduct approximately one (1) foot from the above figures for each pair of electrodes.  Add 10% to the recommended gas pressure measured in MMH when the length of tube is less than ten (10) feet.
NG O	LED	JBE	18	88	62	54 54	45 45 52	33.35	888	27 24 24	88	44		8	pair of e pair of e nended en the l
TUBI		<b>,-</b>	20	88	22	83	2222	3939	32333	27	22	91		7 1/2	mately on each recomming Willia who will be with a whole with the whole will be with the whole with the whole will be with the will be with the will be will be with the will be will be with the will be
TOF	MERCURY ALL		22	901	79	73	77 67 67	258 8 8 8	840 940 940	888	27	88		_	approxi igures fi % to the ed in MI an ten (1
FEE	Ø		25	120	955	88	888	70 61	52 48 48	9404	322	88		9	Deduct above f Add 10° measur less tha
NORMAL AVERAGE NUMBER OF FEET OF TUBING OPERATED			6	33 33 33	33 58 58 58 58 58	22	24 21 18	888t	5 4 4 1 2	<b>5555</b>	90	9 2 2	46	15	
IUMB			10	40 40 34 34	8333	22	13338	13 19 16 16 16	करुरह	4555	558	889	54	13	ose the for you use the
GEN	RED NEON, CLEAR OR FLUORESCENT (ALSO RECOMMENDED FOR NEON FLUORESCENT GOLD)	တ	11	43 43 77	83338	28 28	2448	1883	899	<del>1000000000000000000000000000000000000</del>	11 6	8 8 7	5	12	We suggest, whenever possible, you choose the neon transformed for the control of the control o
/ERA	ORES	TER	12	53 46 40 40	98888	88	5888	4225	28 8 5 5 5	9 <u>4</u> 4£	222	8 8 7	6	11	ossible, d recom will allo
AL A	FLU	<u> </u>	13	43058 43058	3888	34	3883	23 19 19	22 19 16 16	8252	133	668	5	10	never p gned an be. This nallest r
DRM/	IN OF	TUBE SIZE, IN MILLIMETERS	14	63 54 74	45 36 36 36	36 36	8888	2552 2552	23 18 18	19 17 17	555	10 10 8	7	10	est, whe ner desi th of tul d and sr
Ž	CLEA DED FO	SIZE,	15	60 60 52	52 46 39	39	88888	27 27 23	22 22 19	18 18 16	555	11 11	5	6	Ve sugg ransforn ific leng st price
	EON,	JBE	18	72	55	48 48	84 40 40	28 28 28	28 24 24	223	17	11		8	
	ED N	F	20	78	61	55 55	55 48 48	34 34 34	32 28 28 28	26 23 23	19	12		7 1/2	te data ent. An rom you
	ALSC		22	85 85	67 67	62 62	65 57 57	47 41 41	34 34	32 28 28	23	14		7	accura instrume stained f
			25	102	79	73 73	77 67 67	59 51	46 40 40	33338	27	17		9	ne. More load by an be ob
ATIONS	Approximate Watte	Consumption		972 486 243 157	778 389 194 130	170	583 292 146 97	486 243 122 81	389 194 97 65	324 162 81 54	130 65 43	97 49 32	32 22	I/Hg	The above chart is a guideline. More accurate data can only be obtained it you load by instrument. An new Williammeter (0-78Ms) can be obtained from your nearest Transco distributor.
PECIFIC	city nperes	High Power	Factor	927 464 232 149	742 371 185 124	175	556 278 139 93	464 232 116 77	371 185 93 62	309 155 77 52	124 62 41	93 46 31	31	essure MM	
TRANSFORMER SIZE SPECIFICATIONS	Capacity Volt — Amperes	Normal Power	Factor	1800 900 290	1440 720 360 240	315	1080 540 270 180	900 450 225 150	720 360 180 120	600 300 150 100	240 120 80	86 89 89	90 40	Recommended gas pressure MM/Hg	*Henised based on (1) average grade of tubing, (2) correct gas pressure; (3) High Voltage Cable (GTO 15) less than 25 feet per Installation, and (4) primary voltage supply at 120 volts ± 5%.
ANSFOR	Short Circuit Secondary		(ma)	120 30 20 20	120 30 20 20	98	120 30 20	150 30 20 20	120 23 23 20 20 20	120 30 20 20	80 20 20	238	233	Recomm	Pevised based on (1) averag correct gas pressure, (3) Higl less than 25 feet per installat age supply at 120 volts ± 5%
TR	Open Circuit		(enes)	15,000	12,000	10,500	9,000	7,500	6,000	5,000	4,000	3,000	2,000		*Revised base correct gas pr less than 25 fe age supply at



# ACTOWN GUARDIAN NEON SIGN TRANSFORMERS • OUTDOOR NON-WEATHERPROOF



2161



UL2161 & NEC 600 compliant. Two-part epoxy fill with granular silica for cooler operation. Equipped with trouble shooting bypass "Answer" button. Can be used with flashers, animators and dimmers. Features secondary ground fault protection in midpoint returned & conventional series wiring applications. Can be converted to high power factor (HPF) when used with the appropriate Power Factor Correction Module (PFC) found elswhere in this section.

120V • 60Hz • Normal Power Factor • Individually Boxed

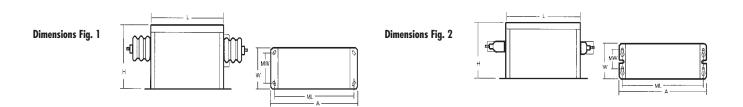
Catalog Number	Seco Volts	ndary mA	Primary VA	Input Amps	Overall (A)	Lenath	Dimens Width	sions (Inches) Height	MI	MW	Fia	Weight (lbs)
15030-0G 12030-0G 10530-0G 9030-0G 7530-0G 6030-0 (1) 5030-0 (2) 4030-0 (2)	15,000 12,000 10,500 9,000 7,500 6,000 5,000 4,000 3,000	30 30 30 30 30 30 30 30 30 30 30	450 360 315 270 225 180 150 120	3.9 3.2 2.9 2.4 2.0 1.6 1.3 1.1	12-1/4 12-1/4 12-1/4 12-1/4 9 9 9	10 10 10 7-1/4 7-1/4 7-1/4 7-1/4 7-1/4	4-1/4 4-1/4 4-1/4 3-11/16 3-11/16 3-7/8 3-7/8 3-7/8 3-7/8	5-3/4 5-3/4 5-3/4 5-3/32 5-3/32 3-3/8 3-3/8 3-3/8 3-3/8	11-1/8 11-1/8 11-1/8 7-15/16 7-15/16 7-15/16 7-15/16 7-15/16	3 3 2-5/8 2-5/8 2-5/8 2-5/8 2-5/8 2-5/8	1 1 1 2 2 2 2 2 2	27 26 25 14.5 13.5 10 10 9
15060-OG 12060-OG 9060-OG 7560-OG 6060-OG 5060-OG 4060-OG 3060-OG	15,000 12,000 9,000 7,500 6,000 5,000 4,000 3,000	60 60 60 60 60 60 60	900 720 540 450 360 300 240 180	6.8 5.5 4.7 3.9 3.2 2.6 2.1 1.6	13 13 13 12-1/4 12-1/4 9 9	10-3/4 10-3/4 10-3/4 10 10 7-1/4 7-1/4 7-1/4	5-1/2 5-1/2 5-1/2 5-1/2 4-1/4 4-1/4 3-11/16 3-11/16	6-5/8 6-5/8 6-5/8 5-3/4 5-3/4 5-3/32 5-3/32 5-3/32	11-7/8 11-7/8 11-7/8 11-1/8 11-1/8 7-15/16 7-15/16 7-15/16	3 3 3 3 2-5/8 2-5/8 2-5/8	1 1 1 1 1 2 2 2	42 41 31 24 23 21 12

**NOTE:** (1) UL2161 listed without Secondary Ground Fault Protection.

277V • 60Hz • Normal Power Factor • Individually Boxed

Catalog	Secor	ndary	Primary	Input			Dimens	ions (Inches)				Weight
Number	Volts	mA	VA	Amps	Overall (A)	Length	Width	Height	ML	MW	Fig	(lbs)
15030-0G-277	15,000	30	450	1.7	12-1/4	10	4-1/4	5-3/4	11-1/8	3	1	27
12030-0G-277	12,000	30	360	1.2	12-1/4	10	4-1/4	5-3/4	11-1/8	3	1	26
10530-0G-277	10,500	30	315	1.2	12-1/4	10	4-1/4	5-3/4	11-1/8	3	1	25
9030-OG-277	9,000	30	270	.9	9	7-1/4	3-11/16	5-3/32	7-15/16	2-5/8	2	14.5
7530-0G-277	7,500	30	225	.7	9	7-1/4	3-11/16	5-3/32	7-15/16	2-5/8	2	13.5
6030-0-277 (1)	6,000	30	180	.7	9	7-1/4	3-7/8	3-3/8	7-15/16	2-5/8	2	10
5030-0-277 <sup>(1)</sup>	5,000	30	150	.5	9	7-1/4	3-7/8	3-3/8	7-15/16	2-5/8	2	10
4030-0-277 (1)	4,000	30	120	.4	9	7-1/4	3-7/8	3-3/8	7-15/16	2-5/8	2	9
3030-0-277 (1)	3,000	30	90	.3	9	7-1/4	3-7/8	3-3/8	7-15/16	2-5/8	2	9
15060-0G-277	15,000	60	900	2.9	13	10-3/4	5-1/2	6-5/8	11-7/8	3	1	42
12060-OG-277	12,000	60	720	2.4	13	10-3/4	5-1/2	6-5/8	11-7/8	3	1	41
9060-OG-277	9,000	60	540	1.7	13	10-3/4	5-1/2	6-5/8	11-7/8	3	1	31
7560-0G-277	7,500	60	450	1.5	12-1/4	10	4-1/4	5-3/4	11-1/8	3	1	24
6060-0G-277	6,000	60	360	1.2	12-1/4	10	4-1/4	5-3/4	11-1/8	3	1	23
5060-0G-277	5,000	60	300	1.0	9	7-1/4	3-11/16	5-3/32	7-15/16	2-5/8	2	21
4060-OG-277	4,000	60	240	.9	9	7-1/4	3-11/16	5-3/32	7-15/16	2-5/8	2	12
3060-0G-277	3,000	60	180	.6	9	7-1/4	3-11/16	5-3/32	7-15/16	2-5/8	2	11

**NOTE:** (1) UL2161 listed without Secondary Ground Fault Protection.



# ACTOWN GUARDIAN VERSAMOUNT NEON SIGN TRANSFORMERS • ENCLOSED • NON-WEATHERPROOF © 2161 actions



UL2161 & NEC 600 compliant. Two-part epoxy fill with granular silica for cooler operation. Equipped with trouble shooting bypass "Answer" button. Can be used with flashers, animators and dimmers. Features secondary ground fault protection in midpoint returned & conventional series wiring applications. Can also be mounted in any direction and features keyhole mounting holes for simple installation. Complete with mounted on-off rocker switch in sturdy case with handle. Can be converted to high power factor (HPF) when used with the appropriate Power Factor Correction Module (PFC) found elswhere in this section.

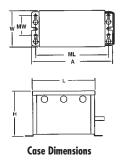
120V • 60Hz • Normal Power Factor • Individually Boxed

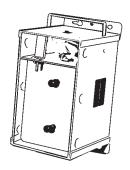
Catalog	Secon	ndary	Primary	Input	Dimensions (Inches) Overall (A) Length Width Height MI						Weight
Number	Volts	mA	VA	Amps	Overall (A)	Length	Width	Height	ML	MW	(lbs)
15030-VMG	15,000	30	450	3.9	12	10	5-3/4	7-1/4	11	3	29
12030-VMG	12,000	30	360	3.2	12	10	5-3/4	7-1/4	11	3	27
10530-VMG	10,500	30	315	2.9	12	10	5-3/4	7-1/4	11	3	25
9030-VMG	9,000	30	270	2.4	10-1/4	8	4-1/8	7-1/4	8-15/16	2-1/4	15
7530-VMG	7,500	30	225	2.0	10-1/4	8	4-1/8	7-1/4	8-15/16	2-1/4	14
6030-VM (1)	6,000	30	180	1.6	10-1/4	8	4-1/8	6-1/8	8-15/16	2-1/4	12
5030-VM (1)	5,000	30	150	1.3	10-1/4	8	4-1/8	6-1/8	8-15/16	2-1/4	12
4030-VM <sup>(1)</sup>	4,000	30	120	1.1	10-1/4	8	4-1/8	6-1/8	8-15/16	2-1/4	11
3030-VM <sup>(1)</sup>	3,000	30	90	0.8	10-1/4	8	4-1/8	6-1/8	8-15/16	2-1/4	11
15060-VMG	15,000	60	900	6.8	12	10	5-3/4	9-3/8	11	3	44
12060-VMG	12,000	60	720	5.5	12	10	5-3/4	8-3/4	11	3	38
9060-VMG	9,000	60	540	4.7	12	10	5-3/4	8-3/4	11	3	32
7560-VMG	7,500	60	450	3.9	12	10	5-3/4	7-1/4	11	3	29
6060-VMG	6,000	60	360	3.2	12	10	5-3/4	7-1/4	11	3	27
5060-VMG	5,000	60	300	2.6	10-1/4	8	4	7-1/4	8-15/16	2-1/4	16
4060-VMG	4,000	60	240	2.1	10-1/4	8	4	7-1/4	8-15/16	2-1/4	15
3060-VMG	3,000	60	180	1.6	10-1/4	8	4	7-1/4	8-15/16	2-1/4	14
NOTE: (1) UL2161 listed without Secondary Ground Fault Protection.											

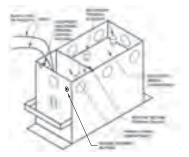
277V • 60Hz • Normal Power Factor •Individually Boxed

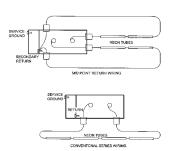
Catalog	Secon	dary	Primary	Input				ions (Inches)			Weight
Number	Volts	mA	VA	Amps	Overall (A)	Length	Width	Height	ML	MW	(lbs)
15030-VMG-277	15,000	30	450	1.7	12	10	5-3/4	7-1/4	11	3	29
12030-VMG-277	12,000	30	360	1.2	12	10	5-3/4	7-1/4	11	3	27
10530-VMG-277	10,500	30	315	1.2	12	10	5-3/4	7-1/4	11	3	25
9030-VMG-277	9,000	30	270	.9	10-1/4	8	4-1/8	7-1/4	8-15/16	2-1/4	15
7530-VMG-277	7,500	30	225	.7	10-1/4	8	4-1/8	7-1/4	8-15/16	2-1/4	14
6030-VM-277 <sup>(1)</sup>	6,000	30	180	.7	10-1/4	8	4-1/8	6-1/8	8-15/16	2-1/4	12
5030-VM-277 <sup>(1)</sup>	5,000	30	150	.5	10-1/4	8	4-1/8	6-1/8	8-15/16	2-1/4	12
4030-VM-277 <sup>(1)</sup>	4,000	30	120	.4	10-1/4	8	4-1/8	6-1/8	8-15/16	2-1/4	11
3030-VM-277 <sup>(1)</sup>	3,000	30	90	.3	10-1/4	8	4-1/8	6-1/8	8-15/16	2-1/4	11
15060-VMG-277	15,000	60	900	2.9	12	10	5-3/4	9-3/8	11	3	44
12060-VMG-277	12,000	60	720	2.4	12	10	5-3/4	8-3/4	11	3	38
9060-VMG-277	9,000	60	540	1.7	12	10	5-3/4	8-3/4	11	3	32
7560-VMG-277	7,500	60	450	1.5	12	10	5-3/4	7-1/4	11	3	29
6060-VMG-277	6,000	60	360	1.2	12	10	5-3/4	7-1/4	11	3	27
5060-VMG-277	5,000	60	300	1.0	10-1/4	8	4	7-1/4	8-15/16	2-1/4	16
4060-VMG-277	4,000	60	240	.9	10-1/4	8	4	7-1/4	8-15/16	2-1/4	15
3060-VMG-277	3,000	60	180	.6	10-1/4	8	4	7-1/4	8-15/16	2-1/4	14
l											

**NOTE:** (1) UL2161 listed without Secondary Ground Fault Protection.











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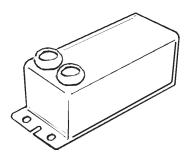
UL2161 compliant. For internal mounting. Features a two-part epoxy fill incorporating granular silica for cooler operation. A fully enclosed "PKFE" version is also available in 30mA. Add suffix "FE" to catalog number. Can be converted to high power factor (HPF) when used with the appropriate Power Factor Correction Module (PFC) found elswhere in this section.

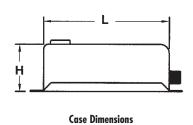
120V ● 60Hz ● Normal Power Factor ● Individually Boxed

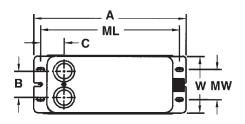
Catalog	Secon	dary	Primary	Input			Din	nensions (Inc	hes)				Weight
Number	Volts	mA	VA ´	Amps	Overall (A)	Length	Width	Height	ML	MW	В	C	(lbs)
9030-PK 7530-PK 6030-PK 5030-PK 4030-PK 3030-PK	9,000 7,500 6,000 5,000 4,000 3,000	30 30 30 30 30 30 30	270 225 180 150 120 90	2.4 2.0 1.6 1.3 1.1 0.8	10-1/8 10-1/8 10-1/8 10-1/8 10-1/8 10-1/8	8-3/8 8-3/8 8-3/8 8-3/8 8-3/8 8-3/8	3-15/16 3-15/16 3-15/16 3-15/16 3-15/16 3-15/16	3-1/8 3-1/8 3-1/8 3-1/8 3-1/8 3-1/8	9-1/4 9-1/4 9-1/4 9-1/4 9-1/4	2 2 2 2 2 2 2	1-3/4 1-3/4 1-3/4 1-3/4 1-3/4	1-9/16 1-9/16 1-9/16 1-9/16 1-9/16	13 12 11 10 10
9060-PK 7560-PK 6060-PK 5060-PK 4060-PK 3060-PK	9,000 7,500 6,000 5,000 4,000 3,000	60 60 60 60 60	540 450 360 300 240 180	4.7 3.9 3.2 2.6 2.1 1.6	14 14 14 10-1/8 10-1/8 10-1/8	12-1/4 12-1/4 12-1/4 8-3/8 8-3/8 8-3/8	3-15/16 3-15/16 3-15/16 3-15/16 3-15/16 3-15/16	3-1/2 3-1/2 3-1/2 3-1/2 3-1/2 3-1/2	13-1/8 13-1/8 13-1/8 9-1/4 9-1/4 9-1/4	2 2 2 2 2 2 2	1-3/4 1-3/4 1-3/4 1-3/4 1-3/4 1-3/4	1-3/4 1-3/4 1-3/4 1-9/16 1-9/16	24 22 20 14 13

277V ● 60Hz ● Normal Power Factor ● Individually Boxed

Catalog	Second	dary	Primary	Input			Dim	nensions (Inc	hes)				Weight
Number	Volts	mA	VA	Amps	Overall (A)	Length	Width	Height	ML	MW	В	C	(lbs)
9030-PK-277 7530-PK-277 6030-PK-277 5030-PK-277 4030-PK-277 3030-PK-277	9,000 7,500 6,000 5,000 4,000 3,000	30 30 30 30 30 30	270 225 180 150 120 90	0.9 0.7 0.7 0.5 0.4 0.3	10-1/8 10-1/8 10-1/8 10-1/8 10-1/8 10-1/8	8-3/8 8-3/8 8-3/8 8-3/8 8-3/8 8-3/8	3-15/16 3-15/16 3-15/16 3-15/16 3-15/16 3-15/16	3-1/8 3-1/8 3-1/8 3-1/8 3-1/8 3-1/8	9-1/4 9-1/4 9-1/4 9-1/4 9-1/4	2 2 2 2 2 2 2	1-3/4 1-3/4 1-3/4 1-3/4 1-3/4 1-3/4	1-9/16 1-9/16 1-9/16 1-9/16 1-9/16	13 12 11 10 10
9060-PK-277 7560-PK-277 6060-PK-277 5060-PK-277 4060-PK-277 3060-PK-277	9,000 7,500 6,000 5,000 4,000 3,000	60 60 60 60 60	540 450 360 300 240 180	1.7 1.5 1.2 1.0 0.9 0.6	14 14 14 10-1/8 10-1/8 10-1/8	12-1/4 12-1/4 12-1/4 8-3/8 8-3/8 8-3/8	3-15/16 3-15/16 3-15/16 3-15/16 3-15/16 3-15/16	3-1/2 3-1/2 3-1/2 3-1/2 3-1/2 3-1/2	13-1/8 13-1/8 13-1/8 9-1/4 9-1/4 9-1/4	2 2 2 2 2 2 2	1-3/4 1-3/4 1-3/4 1-3/4 1-3/4 1-3/4	1-3/4 1-3/4 1-3/4 1-5/8 1-5/8	24 22 20 14 13







# ACTOWN MINI-PK HOUSING TRANSFORMERS 2161



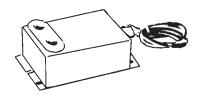
UL2161 compliant. For internal mounting. Same features as PK type but with added low profile design. 36" leads and galvanized conduit connector nipple, which ensures excellent AC ground without a third wire. Can be converted to high power factor (HPF) when used with the appropriate Power Factor Correction Module (PFC) found elswhere in this section.

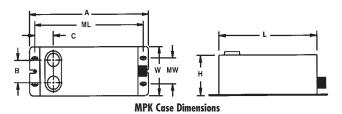
120V ● 60Hz ● Normal Power Factor ● Individually Boxed

Catalog	Secon	dary	Primary	Input			Dir	nensions (Inc	hes)				Weight (lbs)
Number	Volts	mA	VA ´	Amps	Overall (A)	Length	Width	Heigth	ML	MW	В	C	(lbs)
5030-MPK 4030-MPK 3030-MPK	5,000 4,000 3,000	30 30 30	160 130 100	1.3 1.1 0.8	7 7 7	5-13/16 5-13/16 5-13/16	3 3 3	2-15/16 2-15/16 2-15/16	6-5/16 6-5/16 6-5/16	2 2 2	1-1/2 1-1/2 1-1/2	1-1/4 1-1/4 1-1/4	7 7 7

# 277V • 60Hz • Normal Power Factor • Individually Boxed

Catalog		ndary	Primary	Input			Din	nensions (Inc	hes)				Weight (lbs)
Number	Volts	mA	VA	Amps	Overall (A)	Length	Width	Heigth	ML	MW	В	C	(lbs)
5030-MPK-277 4030-MPK-277 3030-MPK-277	5,000 4,000 3,000	30 30 30	160 130 100	.5 .4 .3	7 7 7	5-13/16 5-13/16 5-13/16	3 3 3	2-15/16 2-15/16 2-15/16	6-5/16 6-5/16 6-5/16	2 2 2	1-1/2 1-1/2 1-1/2	1-1/4 1-1/4 1-1/4	7 7 7





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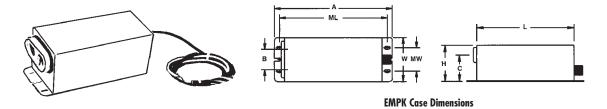
UL2161 compliant. For internal mounting. Same features as Mini-PK transformers. Can be converted to high power factor (HPF) when used with the appropriate Power Factor Correction Module (PFC) found elswhere in this section.

120V ● 60Hz ● Normal Power Factor ● Individually Boxed

Catalog Number	Secon Volts	dary mA	Primary V.A.	Input Amps	Overall (A)	Length	Width	Dimensions Height	ML	MW	В	C	Weight (lbs)
5030-EMPK	5,000	30	160	1.3	8	6-3/4	3	2-15/16	7-5/16	2	1-1/2	2	8
4030-EMPK	4,000	30	130	1.1	8	6-3/4	3	2-15/16	7-5/16	2	1-1/2	2	7
3030-EMPK	3,000	30	100	0.8	8	6-3/4	3	2-15/16	7-5/16	2	1-1/2	2	7

# 277V • 60Hz • Normal Power Factor • Individually Boxed

Catalog Number	Secor Volts	ndary mA	Primary VA	Input Amps	Overall (A)	Length	Din Width	nensions (Inc Height	hes) ML	MW	В	C	Weight (lbs)
5030-EMPK277	5,000	30	160	.5	8	6-3/4	3	2-15/16	7-5/16	2	1-1/2	2	8
4030-EMPK277	4,000	30	130	.4	8	6-3/4	3	2-15/16	7-5/16	2	1-1/2	2	7
3030-EMPK277	3,000	30	100	.3	8	6-3/4	3	2-15/16	7-5/16	2	1-1/2	2	7



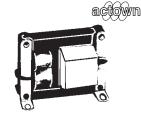


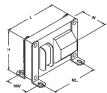
### **ACTOWN INDOOR TRANSFORMERS • OPEN CORE & COIL** 2161

Other sizes may also be available.

120V ● 60Hz ● Normal Power Factor ● Individually Boxed

Catalog Number	Secor Volts	idary mA	Primary VA	Input Amps	Length	Width	Dimensions Height	(Inches) ML	MW	Weight (lbs)
6520-C	6,500	20	130	1.1	4-3/4	2-3/4	3-11/16	4-1/4	1-15/16	5
5020-C	5,000	20	100	1.0	4-3/4	2-5/8	3-11/16	4-1/4	1-3/4	4
5010-C	5,000	10	50	0.5	4-3/4	2-3/8	3-5/8	4-1/4	1-3/4	3
4030-C	4,000	30	120	1.1	4-3/4	2-3/4	3-11/16	4-1/4	1-15/16	4
4020-C	4,000	20	80	0.7	4-3/4	2-5/8	3-11/16	4-1/4	1-3/4	4
3508-C	3,500	8	30	0.3	3-7/8	Ź	á	3-5/8	1-5/8	2
3025-C	3,000	25	75	0.7	4-3/4	2-5/8	3-11/16	4-1/4	1-3/4	4
2030-С	2,000	30	60	0.5	4-11/16	2-3/8	3-3/16	á	1-11/16	3





**Case Dimensions** 

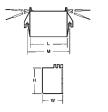
# **ACTOWN INDOOR MINI-LITE DISPLAY TRANSFORMERS**

A very small, light weight magnetic neon transformer. Ideal for displays, in-store headers or any low voltage indoor application.

120V ● 60Hz ● Normal Power Factor ● Individually Boxed

Catalog Number	Seco Volts	ndary mA	Primary VA	Input Amps	Primary Conn.	Lenath	Dimension Width	s (Inches) Height	М	Weight (oz)
3008-L 3008-C	3,000 3,000	8 8	24 24	0.2 0.2	12" Leads 6' Line Cord w/Switch	3	1-7/10 1-7/10	2-1/4 2-1/4	3-2/5 3-2/5	20 20



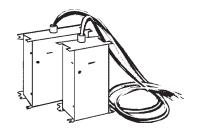


**Case Dimensions** 

# **ACTOWN POWER FACTOR CORRECTION MODULES**

Actown PFC Modules are available in fifteen models which convert all Actown transformers into High Power Factor (HPF) units. PFC Modules are separate units from the transformer and allow for simple wiring and installation in all orientations.

PFC Modules will also reduce current for non-Actown brand transformers.

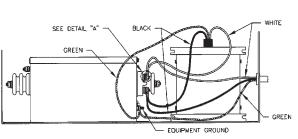


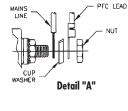
277V ● 60Hz ● Individually Boxed

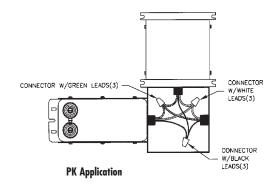
120V • 60Hz	z • Individuall	y Boxed		
Seco	ndary	Catalog	Corrected	Input
Volts	mA	Number	Amps	Amps
3,000	30	PFC-306	0.45	0.80
4,000	30	PFC-101	0.54	0.80
5,000	30	PFC-102	0.68	0.80

Volts	mA	Number	Amps	Amps	Style
3,000 4,000 5,000 6,000 7,500 9,000 12,000 15,000	30 30 30 30 30 30 30 30 30	PFC-306 PFC-101 PFC-102 PFC-102 PFC-104 PFC-104 PFC-106 PFC-107	0.45 0.54 0.68 0.74 0.95 1.20 1.40	0.80 0.80 0.80 0.80 0.80 0.80 0.80	A A A A A
3,000 4,000 5,000 6,000 7,500 9,000 12,000 15,000	60 60 60 60 60 60 60 60	PFC-102 PFC-104 PFC-106 PFC-107 PFC-107 PFC-205 PFC-207 PFC-208	0.70 0.95 1.35 1.40 1.80 2.00 2.55 3.25	0.80 0.80 0.80 0.80 0.80 0.80 0.80 0.80	A A A A B B B

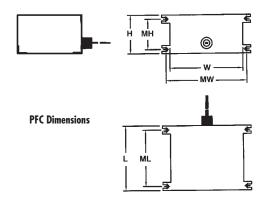
Secoi Volts	ndary mA	Catalog Number	Corrected Amps	Input Amps	Can Style
3,000 4,000 5,000 6,000 7,500 9,000 12,000 15,000	30 30 30 30 30 30 30 30 30	PFC-300 PFC-301 PFC-302 PFC-303 PFC-304 PFC-305 PFC-306	0.14 0.20 0.21 0.30 0.34 0.46 0.69 0.86	0.30 0.40 0.50 0.70 0.70 0.90 1.20 1.40	A A A A A A
3,000 4,000 5,000 6,000 7,500 9,000 12,000 15,000	60 60 60 60 60 60 60	PFC-303 PFC-304 PFC-304 PFC-305 PFC-306 PFC-101 PFC-101 PFC-102	0.25 0.35 0.45 0.48 0.60 0.77 1.12 1.32	0.60 0.90 1.00 1.20 1.50 1.70 2.40 2.90	A A A A A A







Can				Dimensions (I	nches)			Weight (lbs)
Style	Length	Width	Heigth	ML	MW	MH	NH	(lbs)
A B	6 - 15/32 6 - 15/32	3 - 3/8	2 - 15/16 2 - 15/16	5 - 27/32 5 - 27/32	4 - 5/32 6 - 23/32	2 - 9/32 2 - 9/32	7/8 7/8	2 3





# **ACTOWN ACCUSIZER PORTABLE TEST UNIT**

A portable, heavy duty unit which tests operating current, flicker, sign input voltage and all tests that are PIE $^{\text{TM}}$  compatible.

# **SPECIFICATIONS**

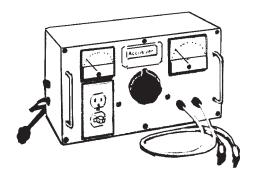
"Input Voltage/Variac Voltage" Switch Milliammeter (0-70mA)  $\pm$  1%

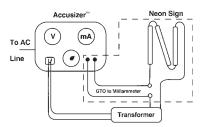
GTO with shielded alligator clips RMS Voltmeter (0-150VAC)  $\pm 1\%$ 

Heavy duty plastic case 10A Variac (variable voltage)

"Power On" Switch Large carrying handles

Catalog	Length	Dimensions	(Inches)	Weight
Number		Width	Height	(lbs)
ACT-FG5001	13	6.5	7	25





# **ACTOWN LUMINOUS TUBE FOOTAGE CHART**

Actown recommends conducting a flicker test at input voltage of 90 VAC or less and an mA test: operating current at 85% of short circuit current for neon and 80% for mercury filled tubes.

## **NOTES:**

All footage is based on average grade of tubing. Deduct approximately one (1) foot from the figures below for each pair of electrodes. Add 10% to the recommended gas pressure measured in mm of Hg when the length of tube is less than 10'.

	Transfo	rmer Spe	cifications								I	Approxir	nate Nu	mber of	Feet of	Tubing O	perated					
Secondary	Short Circuit		ot Amps O VAC)		ut Amps 77 VAC)		(al		lear or Flo nended for			ld)						, Clear or I losed Appl				Secondary Voltage
Voltage '	Current	Std.	With PFC	Std.	With PFC			Ti	ube size in	Millimete	rs					Ti	be size in	Millimete	irs			٧ "
V	(mA)	Jiu.	Module	Siu.	Module	18	15	14	13	12	-11	10	9	18	15	14	13	12	-11	10	9	
	60	6.8	3.25	2.9	1.32	72	60	54	50	45	40	36	32	80	72	64	60	55	48	44	39	
15,000	30	3.9	1.70	1.4	.86	72	60	54	50	45	40	36	32	80	72	64	60	55	48	44	39	15,000
	25	2.9	1.50		-	72	60	54	50	45	40	36	32	80	72	64	60	55	48	44	39	
12,000	60	5.5	2.55	2.4	1.12	55	45	42	39	35	32	29	26	62	55	50	46	42	38	35	31	12,000
12,000	30	3.2	1.40	1.2	0.69	55	45	42	39	35	32	29	26	62	55	50	46	42	38	35	31	12,000
	60	4.7	2.00	1.7	0.77	40	33	30	29	26	24	21	18	45	40	36	33	31	28	25	22	
9,000	30	2.4	1.20	0.9	0.46	40	33	30	29	26	24	21	18	45	40	36	33	31	28	25	22	9,000
	25	1.6	0.85		-	40	33	30	29	26	24	21	18	45	40	36	33	31	28	25	22	
	60	3.9	1.80	1.5	0.60	28	26	24	22	21	19	17	15	35	31	28	27	25	23	20	18	
7,500	30	2.0	0.95	0.7	0.34	28	26	24	22	21	19	17	15	35	31	28	27	25	23	20	18	7,500
	25	1.4	-		-	28	26	24	22	21	19	17	15	35	31	28	27	25	23	20	18	
6,500	20	1.1	-		-	25	23	21	20	18	17	15	13	30	26	25	23	21	20	18	16	6,500
6,000	60	3.2	1.40	1.2	0.48	23	20	19	18	16	15	13	12	28	24	23	21	19	18	16	14	6,000
0,000	30	1.6	0.74	0.7	0.30	23	20	19	18	16	15	13	12	28	24	23	21	19	18	16	14	0,000
	60	2.6	1.35	1.0	0.45	19	17	16	15	12	11	10	8	23	20	19	16	15	13	12	10	
5,000	30	1.3	0.68	0.5	0.21	19	17	16	15	12	11	10	8	23	20	19	16	15	13	12	10	5,000
3,000	20	1.0	-	-	-	17	15	13	13	11	9	8	7	22	18	16	15	13	12	11	9	3,000
	10	0.5	-	-	-	16	13	12	11	10	9	8	7	22	18	16	15	13	12	11	9	
	60	2.1	0.95	0.9	0.35	16	13	12	11	10	9	8	7	19	16	14	13	12	10	9	8	
4,000	30	1.1	0.54	0.4	0.20	16	13	12	11	10	9	8	7	19	16	14	13	12	10	9	8	4,000
	20	0.7	-	-	-	13	11	10	10	9	8	7	6	16	13	12	12	11	9	8	7	
3,500	8	0.3	-	-	-	11	9	9	8	7	6	6	5	16	13	12	12	11	9	8	7	3,500
	60	1.6	0.70	0.6	0.25	11	10	9	9	8	7	6	5	14	12	11	10	9	8	7	6	
2.000	30	0.8	0.45	0.3	0.14	11	10	9	9	8	7	6	5	14	12	11	10	9	8	7	6	2 000
3,000	25	0.7	-	-	-	11	9	8	8	7	6	6	5	14	12	11	10	9	8	7	6	3,000
	8	0.2	-	-	-	11	9	8	8	7	6	6	5	12	10	9	9	8	7	6	5	
2,000	30	0.5	-	-	-	7	7	6	6	5	5	4	4	9	9	8	8	7	6	5	5	2,000
	Recommende	d gas pres	sure in mm of	f Hg		8	9	10	10	11	12	13	15	8	9	10	10	11	12	13	15	

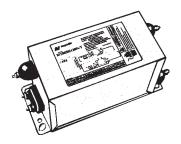
**AL 2161** 



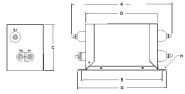
Designed to meet both UL 2161 and UL 506 standards. Complies with '96 National Electric Code without additional fault-protection circuitry. High impact-resistant primary bushing made of Ryton™. Versatile and economical. Eliminates unnecessary service calls (nuisance tripping). Designed for mid-point wired applications. Ideal for both indoor and outdoor installations.

120V • 60Hz • Individually Boxed • Circuit Type: Mid Point Isolated (MPI)

Catalog		Secondary	VA	Line	Input	Circuit	uit Case Dimensions (Inches) We								
Number	Voltage	Current (mA)	Rating	Current (Amps)	Watts	Туре	A	В	C	D	E	F	G	<u>H</u>	Weight (lbs.)
Normal Pov	wer Fact	or													
M15030I120N-T	15,000	30	450	3.75	234	MPI	13-1/32	4-5/16	5-1/2	8-11/16	9-11/16	3-3/16	10-11/16	7/16x5/8	24
M12030I120N-T	12,000	30	360	3.00	187	MPI	13-1/32	4-5/16	5-1/2	8-11/16	9-11/16	3-3/16	10-11/16	7/16x5/8	23
M9030I120N-T	9,000	30	270	2.25	140	MPI	13-1/32	4-5/16	5-1/2	8-11/16	9-11/16	3-3/16	10-11/16	7/16x5/8	20



**Case Dimensions** 





### MagneTek MAGNETEK ISOLATED DESIGN NEON SIGN TRANSFORMERS OUTDOOR NON-WEATHERPROOF 32 2161

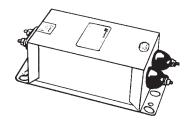
Designed to meet both UL 2161 and UL 506 standards. Complies with '96 National Electric Code without additional fault-protection circuitry. Features a low profile design for more mounting options. High impact-resistant primary bushing made of Ryton™. Ideal for both indoor and outdoor installations.

120V • 60Hz • Individually Boxed • Circuit Type: Isolated (ISO)

Catalog		Secondary	VA	Line	Input	Circuit				Case Dime	nsions (Inches	;)			Weight (lbs.)
Number	Voltage	Current (mA)	Rating	Current (Amps)	Watts	Туре	A	В	C	D	E	F	G	Н	(lbs.)
Low Profile	• Norm	al Power	Factor												
M75301120N-C	7,500	30	225	1.88	117	ISO	10-11/16	4	3-3/8	7-3/8	8-3/8	3-3/16	9-3/8	7/16x5/8	11
M60301120N-C	6,000	30	180	1.50	94	ISO	10-1/16	4	3-3/8	6-3/4	7-3/4	3-3/16	8-3/4	7/16x5/8	11
M50301120N-C	5,000	30	150	1.25	78	ISO	10-1/16	4	3-3/8	6-3/4	7-3/4	3-3/16	8-3/4	7/16x5/8	10
M40301120N-C	4,000	30	130	1.08	68	ISO	10-1/16	4	3-3/8	6-3/4	7-3/4	3-3/16	8-3/4	7/16x5/8	10
M30301120N-C	3,000	30	100	0.83	52	ISO	10-1/16	4	3-3/8	6-3/4	7-3/4	3-3/16	8-3/4	7/16x5/8	10

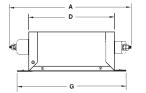
277V • 60Hz • Individually Boxed • Circuit Type: Isolated (ISO)

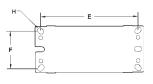
Catalog		Secondary	VA	Line	Input	Circuit				Case Dime	nsions (Inches	)			Weight (lbs.)
Number	Voltage	Current (mA)	Rating	Current (Amps)	Watts	Туре	A	В	C	D	E	F	G	Н	(lbs.)
Low Profile	• Norm	al Power	Factor												
M75301277N-C	7,500	30	225	0.81	117	ISO	10-11/16	4	3-3/8	7-3/8	8-3/8	3-3/16	9-3/8	7/16x5/8	11
M60301277N-C	6,000	30	180	0.65	94	ISO	10-1/16	4	3-3/8	6-3/4	7-3/4	3-3/16	8-3/4	7/16x5/8	11
M50301277N-C	5,000	30	150	0.54	78	ISO	10-1/16	4	3-3/8	6-3/4	7-3/4	3-3/16	8-3/4	7/16x5/8	10
M40301277N-C	4,000	30	130	0.47	68	ISO	10-1/16	4	3-3/8	6-3/4	7-3/4	3-3/16	8-3/4	7/16x5/8	10
M30301277N-C	3,000	30	100	0.36	52	ISO	10-1/16	4	3-3/8	6-3/4	7-3/4	3-3/16	8-3/4	7/16x5/8	10



**Case Dimensions** 









### **MAGNETEK PK HOUSING TRANSFORMERS** 2161

MagneTek

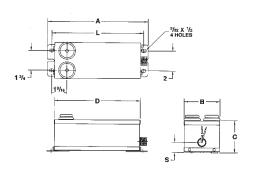
UL2161 compliant. Neon tubing "plugs" directly into transformer. Eliminates the need for GTO wire connections. Designed to fit in tight quarters. Mounts inside fixed neon signs. Ideal for individual channel letters.

120V • 60Hz • Individually Boxed • Circuit Types: Mid Point Ground (MPG), Mid Point Ground Un-Balanced (MPG-UB), End Ground (EG)

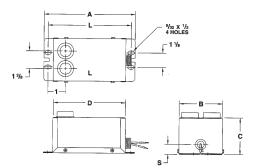
Catalog Number	Voltage	Secondary Current (mA)	VA Rating	Line Current (Amps)	Input Watts	Circuit Type	A	В	<b>C</b> ase	Dimensions (	Inches) L	S	Weight (lbs.)
Low Profile	• Norm	ial Powe	Factor										
M1530G120NPK M1230G120NPK M9030G120NPK M7530G120NPK M6030G120NPK M5030G120NPK M4030G120NPK M3030G120NPK	15,000 12,000 9,000 7,500 6,000 5,000 4,000 3,000		450 360 270 225 180 160 140	3.75 3.00 2.25 1.88 1.50 1.33 1.17 0.83	234 187 140 117 94 83 73 52	MPG MPG-UB MPG-UB MPG-UB MPG-UB EG EG	11-1/2 11-1/2 10-1/8 10-5/8 10-5/8 10-5/8 10-5/8 10-5/8	5-1/4 5-1/4 3-11/16 3-5/8 3-5/8 3-5/8 3-5/8 3-5/8	4-3/16 4-3/16 3-1/8 2-29/32 2-29/32 2-29/32 2-29/32 2-29/32	10 10 8-5/8 9-1/4 9-1/4 9-1/4 9-1/4	10-5/8 10-5/8 9-1/4 9-3/4 9-3/4 9-3/4 9-3/4	1-1/16 1-1/16 1-1/32 1 1 1	24 23 12 12 11 11 10 9
M9060G120NPK M7560G120NPK M6060G120NPK M5060G120NPK M4060G120NPK M3060G120NPK	9,000 7,500 6,000 5,000 4,000 3,000	60 60 60 60 60	540 450 360 300 260 180	4.50 3.75 3.00 2.50 2.17 1.50	281 234 187 156 135 94	MPG MPG MPG-UB MPG-UB EG	14-1/8 14-1/8 14-1/8 10-1/8 10-1/8 10-5/8	3-7/16 3-7/16 3-7/16 3-11/16 3-11/16 3-5/8	3-5/16 3-5/16 3-5/16 3-1/8 3-1/8 2-29/32	12-5/8 12-5/8 12-5/8 12-5/8 8-5/8 8-5/8 9-1/4	13-1/4 13-1/4 13-1/4 9-1/4 9-1/4 9-3/4	2-7/16 2-7/16 2-7/16 1-1/32 1-1/32	20 20 18 15 12
M530G120NPKC M430G120NPKC M330G120NPKC	5,000 4,000 3,000	30 30 30 30	160 160 140 100	1.33 1.17 0.83	83 73 52	EG EG EG	7-1/16 7-1/16 7-1/16	3-5/16 3-5/16 3-5/16	2-13/16 2-13/16 2-13/16	5-21/32 5-21/32 5-21/32	6-7/16 6-7/16 6-7/16	7/8 7/8 7/8	6 6 6

277V • 60Hz • Individually Boxed • Circuit Types: Mid Point Ground (MPG), Mid Point Ground Un-Balanced (MPG-UB), End Ground (EG)

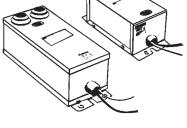
Catalog		Secondary	VA	Line	Input	Circuit								
Number	Voltage	Current (mA)	Rating	Current (Amps)	Watts	Туре	A	В	C	D	L	S	(lbs.)	
Low Profile • I	Normal I	Power F	actor											
M1530G277NPK M1230G277NPK M4030G277NPK M3030G277NPK	15,000 12,000 4,000 3,000	30 30 30 30	450 360 140 100	1.62 1.30 0.50 0.36	234 187 73 52	MPG MPG EG EG	11-1/2 11-1/2 10-5/8 10-5/8	5-1/4 5-1/4 3-5/8 3-5/8	4-3/16 4-3/16 2-29/32 2-29/32	10 10 9-1/4 9-1/4	10-5/8 10-5/8 9-3/4 9-3/4	1-1/16 1-1/16 1	24 23 10 9	
M9060G277NPK M6060G277NPK M5060G277NPK	9,000 6,000 5,000	60 60 60	540 360 300	1.95 1.30 1.08	281 187 156	MPG MPG MPG-UB	14-1/8 14-1/8 10-1/8	3-7/16 3-7/16 3-11/16	3-5/16 3-5/16 3-1/8	12-5/8 12-5/8 8-5/8	13-1/4 13-1/4 9-1/4	2-7/16 2-7/16 1-1/32	20 18 15	



**Low Profile Transformer** 



**Compact Low Profile Transformer** 



# **LUMINOUS TUBE FOOTAGE CHART**

Use this Luminous Tube Footage Chart as a guide. More accurate loading is obtained by conducting the % I Short Circuit test. The I.S.C. Test can be performed with or without the use of a Powerstat, preferably with.

NOTE: Deduct approximately 1 foot from the figures below for each pair of electrodes. For approximate Volt-Ampere ratings of High Power Factor type transformers, multiply the listed Volt-Amperes by 55%.

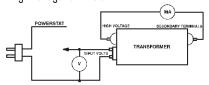
**WARNING:** Potentially hazardous high voltage can be present. Testing, handling or servicing should be done only by qualified personnel.

Procedure for % I.S.C. Neon Transformer Loading: (1) NOTE: This description is for a transformer with rated input voltage of 120. Refer to the nameplate of the transformer being tested and use input voltage shown.

### **Procedures for % I.S.C. Neon Transformer Loading**

### With Power Off:

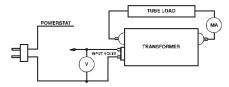
- 1. Connect the input leads and voltmeter to the transformer primary terminals.
- 2. Connect the milliamp meter to the transformer high voltage terminals.



3. (1) Plug the input cord into a 120 volt receptacle or adjust powerstat to read 120 volts on the volt-meter. Read the SHORT CIRCUIT mA on the milliamp meter and disconnect input plug.

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4. Connect the tube load in series with the transformer high voltage terminals.



- 5. (1) Plug in the input cord; adjust powerstat for 120 volts and read **LOAD mA** on milliamp meter.
- 6. Calculate for Percent of Short Circuit.

A. % I.S.C. = 
$$\frac{\text{Load mA}}{\text{Short Circuit mA}} \text{ (100)}$$

$$\text{Example:}$$

$$\text{Load mA} = 24$$

$$\text{Short Circuit mA} = 30$$

$$\text{% I.S.C.} = \frac{24}{30} \text{ (100)} = 80$$

**B.** Proper % I.S.C. Ranges 77.5 to 82.5% (Indoor or Outdoor Enclosed) 82.5 to 85% (Cold Weather - Mercury filled tubing)

For additional information call MAGNETEK at (800) MAGNETEK (624-6383)

	TR	ANSFORMER	RATINGS								AP				F TUBI Grade o			D							
Secondary	Short Circuit	Input at Secondary	Approximate			(Also F		lear or nended				ıt Gold	)				Cle Al	ar or F I Colors	luoresco . All Er	ent Me nclosed	rcury F Applic	illed Tu ations	bes (1)		
Voltage	Current	Short Circuit	Watts				TU	BE SIZ	E, MILI	LIMET	ERS							TUI	BE SIZI	E, MIL	LIMET	ERS			
(Volts)	Milliamperes	Volt-Amperes	Consumption	25	22	20	18	15	14	13	12	11	10	9	25	22	20	18	15	14	13	12	11	10	9
15,000	60	900	466	102	85	78	72	60	54	50	45	40	36	32	120	10	90	80	72	64	60	55	48	44	39
	30	450	234	102	85	78	72	60	54	50	45	40	36	32	120	10	90	80	72	64	60	55	48	44	39
	20	270	140					51	47	44	40	36	32	28					62	56	52	48	41	38	33
12,000	60	720	374	79	67	61	55	45	42	39	35	32	29	26	95	79	70	62	55	50	46	44	38	35	31
	30	360	187	79	67	61	55	45	42	39	35	32	29	26	95	79	70	62	55	50	46	44	38	35	31
	20	225	117					40	37	33	30	27	24	22					47	45	40	36	31	30	27
10,500	30	315	170	73	62	55	48	39	36	34	31	28	25	22	88	73	63	53	48	43	40	38	33	29	27
9,000	120	1080	561	77	65	55	46	38	34	33	30	27	23	20	92	77	63	52	46	41	38	35	32	27	24
	60	540	281	67	57	48	40	33	30	29	26	24	21	18	80	67	55	45	40	36	33	32	28	25	22
	30	270	140	67	57	48	40	33	30	29	26	24	21	18	80	67	55	45	40	36	33	32	28	25	22
	20	180	94					28	26	24	22	20	18	16					34	31	29	27	23	20	18
7,500	120	900	466	59	47	39	32	29	27	26	23	21	19	17	70	55	45	39	35	32	31	28	25	22	19
	60	450	234	51	41	34	28	26	24	22	21	19	17	15	61	48	39	35	31	28	27	25	23	20	18
	30	225	117	51	41	34	28	26	24	22	21	19	17	15	61	48	39	35	31	28	27	25	23	20	18
	20	150	78					22	21	20	18	16	14	13					27	25	23	21	19	17	16
6,000	120	720	374	46	39	32	27	24	22	21	19	17	15	13	55	46	37	32	27	26	25	23	20	18	16
	60	360	187	40	34	28	23	21	19	18	16	15	13	12	48	40	32	28	24	23	21	19	18	16	14
	30	180	94	40	34	28	23	21	19	18	16	15	13	12	48	40	32	28	24	23	21	19	18	16	14
	20	130	68					18	17	16	14	13	11	10					22	20	18	17	15	13	12
5,000	120	600	312	38	32	26	22	20	18	17	14	12	11	9	46	38	31	26	23	22	19	18	15	13	12
	60	300	156	33	28	23	19	17	16	15	12	11	10	8	40	33	27	23	20	19	16	16	13	12	11
	30	160	83	33	28	23	19	17	16	15	12	11	10	8	40	33	27	23	20	19	16	16	13	12	11
	20	100	52					15	13	13	11	9	8	7					18	16	15	14	11	10	9
4,000	60	240	125	27	23	19	16	13	12	11	10	9	8	7	32	27	22	19	17	16	15	14	11	10	8
	30	140	73	27	23	19	16	13	12	11	10	9	8	7	32	27	22	19	17	16	15	14	11	10	8
	20	90	47					11	10	10	9	8	7	6					14	13	13	12	9	8	7
3,000	60	180	94	17	14	12	11	10	9	9	8	7	6	5	22	18	16	14	12	11	10	9	8	7	6
	30	100	52	17	14	12	11	10	9	9	8	7	6	5	22	18	16	14	12	11	10	9	8	7	6
	20	75	39					8	8	7	6	5	4	4					10	9	8	7	6	5	5
2,000	30	75	39					7	6	6	6	5	4	4					9	9	8	7	6	5	5
	20	50	26					6	5	5	5	4	3	3					7	7	7	6	5	4	4
Recommen	ded Gas Pressure	e, mm/hg		6	7	7.5	8	9	10	10	11	12	13	15	6	7	7.5	8	9	10	10	11	12	13	15

NOTE: "Tubing underloading may be required for low temperature (below 40°F) applications. In such cases the reduced footage should not be less then 85% of the footages shown. Extreme cold weather conditions may dictate the non use of mercury filled tubing.



# VENTEX ELECTRONIC INDOOR TRANSFORMERS 4 2161

Ventex

Ventex self adjusting electronic power supplies are UL 2161 compliant. Features "Generation II" circuitry for optimum safety and performance. "Generation II" circuitry features include, open short and ground fault circuit protection, anti-migration circuitry, line and load regulation for consistent mA output, maximum overload protection and "sort start technology" (SST) which virtually eliminates nuisance tripping upon start-up. Can be flashed. Requires no special tube processing.

All units are supplied with built-in GTO grommets for attaching GTO sleeving, a 10', 3-wire power cord, grounded mounting foot and on/off switch.

All models, except VT4030-120, are available in a 240V primary version. 9,000V secondary version also available with a built-in 3 level (100%/65%/45%) dimming switch. 12,000V secondary version available with a 2 level (100%/65%) dimming toggle.

Catalog Number	Max Sec. V.	mA	Line Volts	Hz
VT4030-120	4,000	30	120	50/60
VT6030-120	6,000	30	120	50/60
VT9030-120	9,000	30	120	50/60
VT12030-120	12,000	30	120	50/60







## **VENTEX ELECTRONIC CHANNEL LETTER TRANSFORMERS**

**4** 2161

Ventex UL 2161 compliant electronic channel letter transformers mount directly inside the metal letter or wireway eliminating housing and housing transformer usage and simplifies tube bending. These lightweight transformers reduce bracing needs, draw less current and eliminate the necessity of remote wiring and/or raceways.

Ventex self-adjusting channel letter "Generation II" technology features open, short and ground fault protection, active anti-migration circuitry, maximum overload protection and broad operating temperature of -30°F to 122°F without de-rating. Requires no special tube processing.

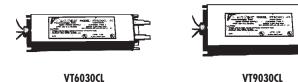
All units supplied with built-in GTO grommets for attaching GTO sleeving, 1/2" conduit fitting for hard wiring, grounded mounting foot and supplied in white casing which eliminates shadows inside letter.

Catalog Number	Max Sec. V.	mA	Line Volts	Hz
VT4030CL-120 (1)	4,000	30	120	50/60
VT6030CL-120 (2)	6,000	30	120	50/60
VT9030CL-120 (3)	9,000	30	120	50/60
VT6060CL-120	6,000	60	120	50/60
VT9060CL-120 (1)	9,000	60	120	50/60

**NOTE:** (1) Also available in 277V primary version.

(2) Also available in 240V primary version.

(3) Also available in 240V and 277V primary versions.



# VENTEX ELECTRONIC LOW PROFILE TRANSFORMERS (9) 2161

Ventex low profile electronic power supplies are UL 2161 compliant. Self adjusing from 500V to 5,500V Secondary. Patented Ventex Anti-Bubbling technology prevents neon bubbling. Anti-Migration Circuitry eliminates mercury migration. Available in several configurations. See "Notes" below.

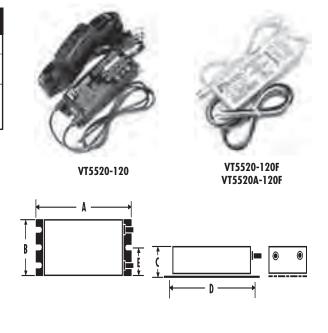
Catalog Number	Max Sec. V.	mA	Line Volts	Hz	Notes
VT5520-120	5,500	20	120	50/60	4
VT5520-120F VT5520A-120F	5,500 5,500	20 20	120 120	50/60 50/60	5 6

**NOTE:**(4) Features 10', 3-wire power cord with on/off switch. Indoor.

(5) Features 18" flying leads for hard wiring. Indoor/Outdoor.

(6) Features 18" external leads for flashing and flying leads for hard wiring. Indoor/Outdoor.

		Case Di	mensions											
Catalog Number A B C D E Wt.														
VT4030	5.5"	1.8"	1.25"	4.5"	0.9"	11oz								
VT6030	6.5"	2.05"	1.45"	6.0"	1.03"	24oz								
VT9030	6.5"	3.04"	1.51"	6.0"	1.52"	32oz								
VT12030	6.5"	3.05"	2.0"	6.0"	1.52"	32oz								
VT4030CL	5.5"	1.75"	1.25"	4.5"	0.9"	11oz								
VT6030CL	7.3"	1.96"	1.45"	6.5"	0.94"	23oz								
VT6060CL	6.65"	3.13"	1.55"	6.13"	1.55"	34oz								
VT9030CL	6.65"	3.13"	1.55"	6.13"	1.55"	34oz								
VT5520-120	4.90"	1.50"	.90"	4.50"	0.75"	14oz								
VT5520-120F	4.90"	1.50"	.90"	4.50"	0.75"	7oz								
VT5520A-120F	4.90"	1.50"	.90"	4.50"	0.75"	7oz								



# TRANSFOTEC ELECTRONIC TRANSFORMERS **4 2161**

**TFT** 

Transforted offers the most complete product line available to satisfy most lighting and signage needs through reliable solid state technology. TFT electronic transformers are self adjusting to the length of tube used (no minimum) without mercury migration. Other features include; high power factor/low input current, compact size, bright, quiet with uniform/flicker-free intensity. Items with a catalog number prefix TFT-P indicate the Platinum Series which complies with secondary ground fault protection requirements in UL2161. See rating column below for more information. Other models also available.

All transformers supplied with switch and cordset.

Catalog Number	Max Sec. V.	mA	Line Volts	Hz	Rating	Fig.	Overall Dimensions L x W x H (Inches)					
TFT-P-12-30	12,000	30	120	60	UL2161	Α	4.85 x 3.1 x 1.8					
TFT-P-10-30	10,000	30	120	60	UL2161	Α	4.81 x 3 x 1.62					
TFT-P-9-30	9,000	30	120	60	UL2161	Α	4.85 x 3.1 x 1.8					
TFT-P-5-20	5,000	20	120	50/60	UL2161	В	3-5/8 x 2-3/8 x 1					
TFT-03-5000	5,000	20	120	60	UL	В	3.62 x 2 x .87					
TFT-022-3000	3,000	20	120	60	UL	В	3.62 x 1.55 x .87					
TFT-06E-9000 (1)	9,000	30	230	50/60	-	А	4.81 x 3 x 1.62					
NOTE: (1) Not UL listed.												



Fig. B



# TRANSFOTEC ELECTRONIC DIMMING & FLASHING TRANSFORMERS (9) 2161

Along with the features described above, the following are available with optional dimming and two different flashing features as shown below. Complies with secondary ground fault protection requirements in UL2161.

Catalog Number	Max Sec. V.	mA	Line Volts	Hz	Rating	Fig.	Overall Dimensions L x W x H (Inches)				
TFT-P-10-30-3 (2) TFT-P-1230*	10,000 12,000	30 30	120 120	60 60	UL 2161 UL 2161	A A	4.81 x 3 x 1.62 4.85 x 3.1 x 1.8				
NOTE: (2) Dimming feature only.											

# **Ordering Information**

Items with "\*" suffix indicates type of dimming or flashing feature.

"1" = Flashing, 2 level brightness, high-low.

"2" = Flashing, On-Off.

"3" = Dimming.

# TRANSFOTEC ELECTRONIC SPECIALTY TRANSFORMERS

A compact light weight base for neon sculptures. It's black ABS (plastic) enclosure contains a TFT-03-5000 transformer (5,000V 20mA). Complete with switch and cordset.

Catalog Number					Line Description Volts Hz Rating							
TFT-BASE-03	5,000	20	Black Display Base	120	60	UL	С	6.4 x 4.5 x 3.49				



ia. C

# **VOLTARC VOLTRONIX ELECTRONIC TRANSFORMERS**





Voltronix electronic power supply is a bright, 35mA, high power factor, self adjusting (2,000V - 9,000V) UL2161 compliant transformer with built-in Secondary Ground Fault Protection. Features include low harmonic distortion with short circuit, open circuit and broken tube protection. Can be mounted on metal surfaces with no mutual interference between two units and is flicker free with no mercury migration. Supplied with switch and cordset. Weighs 2.1 lbs.

Catalog Number	Max Sec. V.	mA	Line Volts	Hz	Overall Dimensions L x W x H (Inches)
VOLTRONIX	9,000	35	120	60	7.125 x 2.625 x 2



# TRANSFOTEC OCTOPUS CHANNEL LETTER SYSTEM 2161 COMPELIANT

**TFT** 

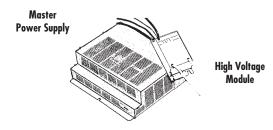
The TFT Octopus Channel Letter System is designed to eliminate existing installation constraints and therefore reduce labor to a minimum. It also increases safety by eliminating high voltage through the wall structure and is UL2161 compliant. It is composed of a Master Power Supply and High Voltage Modules. Enclosing all the electronic components required to convert the incoming line of 120V 60Hz into a limited voltage and high frequency AC current source, the Master Power Supply is used to supply the High Voltage Modules, which in turn power the neon tubes. These High Voltage Modules enclose a transformer that increases the incoming voltage to a maximum of 2000V at 30mA.

Both the Master Power Supply and the High Voltage Module may be used for indoor or outdoor, non-weatherproof applications. As required for outdoor applications, the Master Power Supply must be placed in a separate weatherproof enclosure. As for the High Voltage Module, it must be located inside an enclosed letter.

Safety features include no high voltage through wall structure, maximum voltage of 2000Vrms between any electrode and chassis ground. Also, automatic shut off during ground fault, broken tube and loading overload condition and LED indication of fault condition with diagnostic feature for troubleshooting purposes.

TFT-OCT-TCM must be used with one Master Power Supply (MPS) and a minimum of three 60mA High Voltage Modules (HVM6). Provided with a 3 position switch to control the output current. Switch positions are AUTO, 30mA and 60mA. In the 30mA and 60mA position, the temperature sensor does not work and the output current is according to the switch. In AUTO mode, the TCM will switch the current at the tubes at 60mA when the temperature sensor reaches 5°C or below. The current in the tubes will remain at 60mA until the temperature sensor reaches 10°C before switching it back to 30mA. This temperature hysterisis is built-in to avoid unstable condition near the switch point.

Catalog Number	Description	Overall Dimensions L x W x H (Inches)								
	Master Power Supply (1) High Voltage Module, 30mA High Voltage Module, 60mA	7.95 x 6.85 x 2.55 3.13 x 1.63 x 1 3.13 x 1.63 x 1								
TFT-OCT-TCM	FT-OCT-TCM Low Temp Control Module									
<b>NOTE:</b> (1) Master Power Supply is rated 104°F max.										



# 100% LOADING H.V. MODULE FOOTAGE CHART

Neon (-4	0°C & up)	Argon/Mercui	ry (+5°C & up)	*Argon/Mercu	ry (-40°C & up)
12mm	15mm	12mm	15mm	12mm	15mm
10	12	13	15	10	

**NOTE:** With a configuration of less than 10 H.V. Modules, the maximum loading of the system is determined by the number of modules being used and the maximum loading of the H.V. Module.

<sup>\*</sup> Argon / Mercury filled tubes have very low brightness at low temperature, 60mA H.V. Modules are recommended for this type of application. Each electrode pair is equivalent to one foot of tube length.

# **NEON DISPLAY CASES**

EGL-NDC is a self-contained, portable sales kit which saves time, increases sales and ensures customer satisfaction with tubing color selections. Lockable slimline briefcase is suited to any business setting and holds 20 neon tubes, eight of which can be illuminated simultaneously to demonstrate sales combinations.

illuminated simultaneously to demonstrate color combinations. All standard tubes are 12mm in diameter and feature EGL electrodes for maximum brilliance, clarity and longevity. Unit is equipped with an integral sealed lead acid 12 VDC rechargeable battery with 110/120 VAC charger. Measures 16-9/16" x 12-5/8" x 5-1/2" and weighs 12.3 lbs.

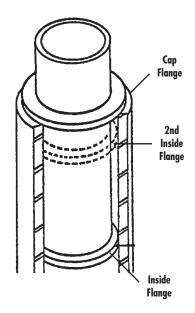
WHO-NSC portable neon display sales kit comes complete with 20 sample tubes of "U" shaped Voltarc glass. Select and light two-tubes side-by-side for comparisons. Simple "U" shape allows other tubes to be made and added to kit. High quality rugged case measures  $12"\ x\ 18"\ x\ 6"$  and features a built-in dimable power supply. 120V.

Catalog Number	Description
EGL-NDC EGL-CL-CASE	Neon Display Case w/EGL Glass Neon Display Case w/EGL CL Designer Series Glass
WHO-NSC	Neon Display Case w/Voltarc Glass



# **POLE FLANGES**

Sign pole flanges integrate a smaller pole into a larger one. Inside flange spaces the two poles and cap flange positions the inside pole height relative to the outside pole. Two inside flanges are normally used. Flanges are 3/8" to 1/2" thick depending on size. Available upon request.



# **DYNAPAC ROTATING UNITS**





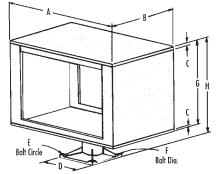
Dynapc rotating units are reliable and designed to combat the three key elements which discourage rotating sign usage; wind, weather and wear. Dynapac's patented torque relief mechanism and rigid bearing assembly absorb all the wind load on the revolving sign by slipping harmlessly and transferring bending load to the sign pole eliminating costly rotator damage. Dynapac's weather-shielded water-proof bearings, shafts and housing are protected from all forms of intense weather. Torque relief mechanism is self-adjusting which compensates for wear.

All units listed below include 2 circuit (3-ring) collector ring and brush assembly. It is recommended that a neutral circuit be added for each two 15 amp hot circuits. Available with 2 to 9 rings. 15 amps per ring capacity. Special RPM available upon request. Heat treated mounting bolts and locknuts furnished.

Catalog	Model Specifications											Dim	ensions (In	ches)			
Number	Number	Max. Weight Capacity lb.	Max. Torque Capacity ft./lb.	Max. Shear Load lb.	Max. Bearing Load ft./lb.	Bearing Shaft Diameter In.	Motor Hp.	RPM Standard	Approx. Shipping Wt.	A	В	C	D	E	F	G	Н
DYN-H-20	H-20 w/Frame	320	20	480	1000	1.375	1/12	5-1/2	31	13	4-3/4	1/8	2 Dia.			9-3/4	12
DYN-J-25 DYN-J-36 DYN-J-80 DYN-J-100 DYN-J-200	J-25 w/Frame J-36 w/Frame J-80 w/Frame J-100 w/Frame J-200 w/Frame	500 720 2000 3120 4200	70 70 70 70 70 70	1080 1470 2100 2100 2100	1000 1200 2495 3300 9000	1.375 1.771 1.790 1.968 2.750	1/4 1/4 1/4 1/4 1/4	6 6 6 6	87 99 131 144 194	17 18 22 22 22	8-1/2 8-1/2 9-1/2 9-1/2 9-1/2	3/16 1/4 3/8 3/8 1/2	4-3/4 Sq. 7 Sq. 5-3/4 Dia. 8 Sq. 10 Dia.	Ź	1/2 5/8 7/16 3/4 3/4	12 15 16-1/4 16-1/4 16-1/2	2Ó
DYN-K-36 DYN-K-80 DYN-K-100 DYN-K-200	K-36 w/Frame K-80 w/Frame K-100 w/Frame K-200 w/Frame	720 2000 3120 4200	150 150 150 150	1470 2430 3840 4500	1200 2495 3300 9000	1.771 1.790 1.968 2.750	1/4 1/4 1/4 1/4	6 6 6	105 137 150 200	18 22 22 22	8-1/2 9-1/2 9-1/2 9-1/2	1/4 3/8 3/8 3/8 1/2	7 Sq. 5-3/4 Dia. 8 Sq. 10 Dia.	7 4-3/4 8 8	5/8 7/16 3/4 3/4	15 16-1/4 16-1/4 16-1/2	2Ó
DYN-L-100 DYN-L-200 DYN-L-350 DYN-L-200C DYN-L-350C	L-100 w/Frame L-200 w/Frame L-350 w/Frame L-200C w/Frame L-350C w/Frame	3120 4200 8400 4200 8400	375 375 375 650 650	4680 7500 9000 7500 9000	3300 9000 19000 9000 19000	1.968 2.750 3.375 2.750 3.375	3/4 3/4 3/4 3/4 3/4	4 4 4 2 2	200 252 425 400 500	27 27 27 27 39 39	11 11 11 13 13	3/8 1/2 3/4 1/2 3/4	8 Sq. 10 Dia. 14 Dia. 10 Dia. 14 Dia.	8 8 11 8 11	3/4 3/4 1 3/4 1	19-1/2 16-1/2	20 20-1/2 25-1/2 20-1/2 22-1/2

Rotator designations on sizing charts take into consideration shear and bending load based on 100 mph wind loading with a 3 to 1 safety factor, weight of sign based on 20 lbs. per sq. ft. and torque based on rotator clutch allowing sign to stall in 30 to 40 mph winds. Dynapac units are listed with UL and Canadian Standards Association. Sternly tested for strength by a nationally known testing laboratory and meet requirements of any rugged use.

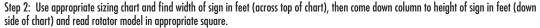
# Rotator with Frame



# **DYNAPAC ROTATOR SIZING & ORDERING INSTRUCTIONS**

Dynapac rotator sizing and ordering instructions for square and rectangular-shaped signs:





Step 3: Determine electrical load by figuring one collector ring for each 15 amps required. Also add one neutral collector ring for each two 15 amp hot rings. (3-ring collector ring and brush assembly supplied as standard.)

WIDTH OF SIGN

Step 4: Determine what accessories are needed for proper installation.

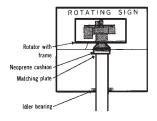


Fig. I Rotator inside sign above centerline with frame

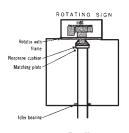


Fig. II Rotator on top of sign

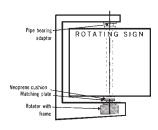


Fig. III Rotator in "C" frame from side support

ا چ																				
SIGN	1	2	3	4	5	6	7	- 8	9	10	11	12	13_	14	15	16	17	18	19	20
6	2	H-20	H-20	H-20	H-20	J-25	J-25	J-25	J-25	J-25	J-36	J-36	J-36	J-80	J-80	J-80	K-80	K-80	K-80	K-80
EIGHTH	3	H-20	H-20	H-20	H-20	J-25	J-25	J-25	J-25	J-36	J-36	J-80	J-80	K-80	K-80	K-80	K-80	K-80	K-80	L-100
	4	H-20	H-20	H-20	J-25	J-25	J-36	J-36	J-36	J-80	J-80	K-80	K-80	K-80	K-80	K-80	K-80	L-100	L-100	L-100
Ξ 	5	H-20	H-20	J-25	J-25	J-36	J-36	J-36	J-80	J-80	K-80	K-80	K-80	K-80	K-80	L-100	L-100	L-100	L-100	L-100
$\downarrow \mid$	6	H-20	J-25	J-25	J-36	J-36	J-80	J-80	J-80	K-80	K-80	K-80	K-80	K-100	L-100	L-100	L-100	L-100	L-100	L-100
۲	7	H-20	J-25	J-36	J-36	J-36	J-80	J-80	K-80	K-80	K-80	K-100	K-100	L-100						
	8	J-25	J-25	J-36	J-80	J-80	J-80	J-80	K-80	K-80	K-100	K-100	L-100	L-200C						
	9	J-25	J-36	J-80	J-80	J-80	J-80	K-100	K-100	K-100	K-100	L-100	L-100	L-100	L-100	L-100	L-100	L-200	L-200C	L-200C
	10	J-25	J-36	J-80	J-80	J-80	J-80	K-100	K-100	K-100	L-100	L-100	L-100	L-100	L-100	L-200			L-200C	L-200C
	11	J-25	J-36	J-80	J-80	J-80	K-80	K-100	K-100	K-100		L-100	L-100	L-100	L-200				L-200C	L-350C
	12	J-25	J-80	J-80	J-80	K-100	K-100	K-100	K-100	L-100	L-100	L-200	L-200	L-200		L-200C				L-350C
	13	J-36	J-80	J-80	J-80	K-100	K-100	K-100	K-100	L-100	L-100	L-200	L-200	L-200		L-200C				L-350C
	14																			L-3300
		J-36	J-80	J-80	J-80	K-100	K-100	K-100	L-100	L-200	L-200	L-200	L-200			L-350C				
	15	J-36	J-80	J-80	K-80	K-100	K-100	K-100	L-100	L-200	L-200	L-200	L-200	L-350	L-350C	L-350C	L-350C	L-350C	L-350C	
	16	J-36	J-80	J-80	K-80	K-100	K-100	K-100	L-100	L-200	L-200	L-200	L-200	L-350C	L-350C	L-350C	L-350C	L-350C		
	17	J-36	J-80	K-80	K-100	K-100	K-100	L-100	L-100	L-200	L-200	L-200	L-350	L-350C	L-350C	L-350C	L-350C			
	18	J-80	J-80	K-80	K-100	K-100	K-100	L-200	L-200	L-200	L-200	L-350	L-350	L-350C	L-350C	L-350C				
	19	J-80	J-80	K-80	K-100	K-100	L-200	L-200	L-200	L-200	L-200	L-350	L-350C	L-350C	L-350C					
	20	J-80	J-80	K-80	K-100	K-100	L-200	L-200	L-200	L-200	L-350	L-350	L-350C	L-350C						
	21	J-80	J-80	K-100	K-100	K-100	L-200	L-200	L-200	L-350	L-350	L-350C	L-350C	L-350C						
	22	J-80	J-80	K-100	K-100	K-100	L-200	L-200	L-200	L-350	L-350	L-350C	L-350C							
	23	J-80	K-80	K-100	K-100	K-200	L-200	L-200	L-200	L-350	L-350	L-350C	L-350C							
	24	J-80	K-80	K-100	K-100	K-200	L-200	L-200	L-350	L-350	L-350	L-350C								
	25	J-80	K-80	K-100	K-100	K-200	L-200	L-200	L-350		L-350C									
	26	J-80	K-80	K-100	K-100	L-200	L-200	L-200	L-350	L-350	L-350C									
		5-00	1-00	14-100	1.00	2-200	2-200	E00	2.000	2-000	F-9900	<del></del>	-						-	

K-100 SIZING CHART FOR FIGURES I, II, III

K-200 L-200 L-200

K-200 L-200

27 J-80 K-100 K-100 K-200 L-200 L-200 L-350 L-350 L-350 .-3500

28 J-80 K-100 K-100

29

J-80 K-100 K-100 K-200 L-200

J-80 K-100 L-350 L-350 L-350

L-350 L-350 L-350

L-200



# **DYNAPAC ROTATOR SIZING CHARTS cont.**

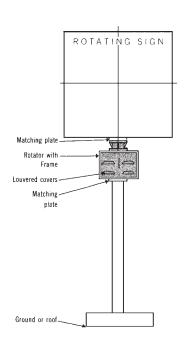


Fig. IV
Rotator with frame outside and under sign, frame stationary

	WIDT	H OF	SIGN																	
SIGN	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
9F	2	H-20	H-20	H-20	H-20	H-20	H-20	J-25	J-80	J-80	K-80	K-80	K-80	K-80						
нЕІGНТН	3	H-20	H-20	H-20	H-20	H-20	J-25	J-36	J-80	J-80	J-80	J-80	J-80	K-80	K-80	K-80	K-80	K-100	K-100	L-100
띭	4_	H-20	H-20	J-25	J-80	J-80	J-80	J-80	J-80	J-80	J-100	K-100	K-100	K-200	K-200	K-200	K-200	L-200	L-200	L-200
īl	5	H-20	J-36	j-80	J-80	J-80	J-100	J-100	J-200	J-200	K-200	K-200	K-200	K-200	K-200	L-200	L-200	L-200	L-200	L-200
$\downarrow$	6	J-36	J-80	J-80	J-100	J-100	J-200	J-200	J-200	K-200	K-200	K-200	K-200	K-200	L-200	L-200	L-350	L-350	L-350	L-350
	7	J-80	J-80	J-100	J-200	J-200	J-200	J-200	K-200	K-200	K-200	K-200	L-350							
	8	J-80	J-100	J-200	J-200	J-200	J-200	K-200	K-200	L-350										
	9	J-80	J-200	J-200	J-200	J-200	K-200	L-350												
	10	J-100	J-200	J-200	J-200	L-350														
	11	J-200	J-200	J-200	L-350	L-350	L-350	L-350	L-350	L-350										
	12	J-200	J-200	J-200	L-350	L-350	L-350	L-350												
	13	J-200	J-200	L-350	L-350	L-350	L-350													
	14	J-200	J-200	L-350	L-350	L-350														
	15	J-200	L-350	L-350	L-350															
	16	J-200	L-350	L-350																
	17	J-200	L-350	L-350																
	18	L-350	L-350																	
	19	L-350	L-350																	
	20	L-350	L-350																	

SIZING CHART FOR FIGURE IV

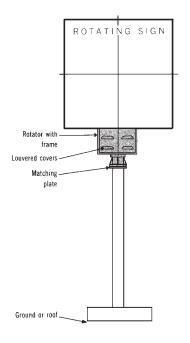


Fig. V
Rotator with frame outside and under sign, frame rotates with sign

	WIDT	WIDTH OF SIGN ——→																		
SIGN	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
нЕІGНТН ОF	2	H-20	H-20	J-25	J-25	J-25	J-36	J-80	J-80	J-80	J-80	J-80	J-80	J-80	J-80	J-80	K-100	K-100	K-100	K-100
	3	H-20	H-20	J-36	J-80	J-80	J-80	J-80	J-80	J-100	J-100	J-100	J-200	K-200	K-200	K-200	K-200	K-200	K-200	L-200
틸	4	H-20	J-80	J-80	J-80	J-100	J-100	J-200	J-200	J-200	J-200	K-200	K-200	K-200	K-200	K-200	K-200	L-200	L-200	L-200
ī	5	J-80	J-80	J-80	J-100	J-200	J-200	J-200	J-200	J-200	K-200	K-200	K-200	K-200	L-350	L-350	L-350	L-350	L-350	L-350
$\downarrow$	6	J-80	J-80	J-100	J-200	J-200	J-200	J-200	J-200	K-200	K-200	L-350								
	7	J-80	J-100	J-200	J-200	J-200	J-200	J-200	L-350											
	8	J-100	J-200	J-200	J-200	J-200	L-350	L-350	L-350	L-350	L-350	L-350	L-350	L-350						
	9	J-100	J-200	J-200	J-200	L-350	L-350	L-350	L-350	L-350	L-350									
	10	J-200	J-200	J-200	L-350	L-350	L-350	L-350	L-350											
	11	J-200	J-200	L-350	L-350	L-350	L-350	L-350												
	12	J-200	J-200	L-350	L-350	L-350	L-350													
	13	J-200	L-350	L-350	L-350	L-350														
	14	J-200	L-350	L-350	L-350															
	15	J-200	L-350	L-350																
	16	L-350	L-350	L-350																
	17	L-350	L-350				<u> </u>	<u> </u>												
	18	L-350	L-350																	
	19	L-350	L-350																	
	20	L-350																		

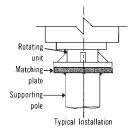
SIZING CHART FOR FIGURE V

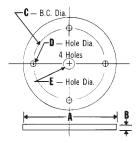
#### **DYNAPAC MATCHING PLATES**



Matching plates are flat steel circular plates, drilled to match the corresponding holes in the rotating unit turntable. Can be conveniently welded to the supporting sign pole or the sign itself, thus simplifying the rotator attachment. Special sizes made upon request.

Catalog Number	Description	A	В	С	D	E	Number of Holes	Weight (lbs.)
	Matching Plate, 9" Dia., (36 Series) Matching Plate, 10" Dia., (80 Series) Matching Plate, 10" Dia., (100 and 200 Series)	6-1/4 9 10 10 14	1/2 1/2 5/8 5/8 3/4	5-1/8 7 4-3/4 8 11	9/16 11/16 1/2 13/16 1-1/16	1-1/8 1-1/8 1-1/8 1-1/8 1-1/2	4 4 5 4	7 11 16 16 38

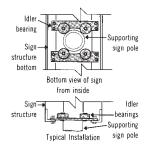


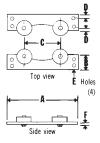


#### DYNAPAC IDLER BEARINGS

Idler bearings are stabilizers used in a Fig. I mounting situation only. Not designed to carry load. The neoprene wheels should only touch the supporting pole when wind blows against the sign thus forcing the sign against the pole. The idler wheels prevent the sign from cutting the supporting poles.

Catalog Number	Description	A	В	C	D	E	F	Number of Holes	Weight (lbs.)
DYN-523-025 DYN-523-026		10 14-7/8	2-1/2 2-1/2	3-6 7-9	1/2 1/2	3/8 3/8	1/4 1/4	3	7 8





#### **DYNAPAC SPECIAL IDLER BEARINGS**

Special idler bearings are available for very large signs to fit around any size pipe. Hardened steel wheels of varying quantities depending on size of pipe are furnished. A hardened steel ring is furnished as well to weld to the supporting pole where the hardened steel wheels roll thus preventing damage to the pipe. Special idler bearings are made to order.

#### DYNAPAC LOUVERED COVERS

Louvered covers are designed to cover the faces of the rotating unit frame to prevent moisture from getting to the rotator parts. Louvers are provided to allow air to get to the motor. Sizes for all rotators are available. Louvered covers give a finished look to installations.



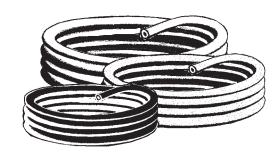




#### **RUBBER TUBING & HOSE**

Interstate Electric stocks a wide variety of tubing and hose for the bending and processing stages in neon tube fabrication. Items with an "HYG" prefix are amber surgical latex tubing. Items with an "LAB" prefix are red gum rubber. TRA-96408 is black Viton tubing.

Catalog Number	I.D.	Wall	Application	Put Up
HYG-00577 HYG-00604 HYG-00613 HYG-00622 HYG-00637 HYD-12066 LAB-R8200-14 LAB-R8200-25 LAB-8200-29 LAB-R8250-7 TRA-96408	1/8" 1/4" 5/16" 3/8" 1/2" 5/8" 1/4" 7/16" 7/8" 1/8"	3/64" 1/8" 3/32" 3/32" 1/8" 3/8" 3/16" 5/16" 3/8" 1/8"	Blow Hose Hand Torch Cross Fire Cross Fire Ribbon Burner Bokel Pump Pirani Gauge High Vacuum Hose Alcatel Pumps High Vacuum Tubulation High Vacuum Tubulation	1'/100' 1'/100' 1'/50' 1'/50' 1' 1' 1' 1' 1'

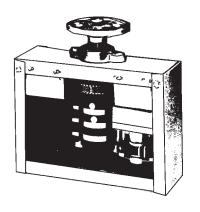


#### **DYNAPAC TURNTABLES**

Dynapac models IG-2 and IG-4 are compact yet powerful rotators. The torque relief mechanism slips harmlessly under load to provide a unique safety feature. Extreme versatility allows installation on ceiling, floor, wall or inside mount.

Dynapac models IR-300 and IR-600 turntables are designed with reliability, stability and ruggedness in mind. Reliability is built in with precision nylon tapered roller wheels that provide a quiet rolling surface on a machined race. A safety torque relief clutch provides assurance that the turntable will slip under overloaded conditions, rather than create a dangerous motor burnout. The three-wire grounded, switched input cord makes installation simple and easy. The sizable 15" turntable provides a stable mounting surface that gives action attraction to any display need.

Catalog Number	Description				
DYN-IG-2.5	150 lb. Capacity Rotator/Turntable				
DYN-IG-4	300 lb. Capacity Rotator/Turntable				
DYN-IR-300	300 lb. Capacity Turntable				
DYN-IR-600	600 lb. Capacity Turntable				







IR Turntable

#### **SPECIFICATION CHART FOR DYNAPAC TURNTABLES**

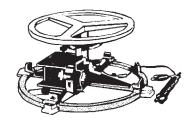
Model Number	Weight Capacity	RPM's Available	Electrical	Safety Clutch	Bearings	Main Drive	Overall Size	Bolt Pattern
IG-2	150 Lbs.	1, 2 (Standard), 6	10A at 110V	Standard Feature	-	-	L-6.75"x W-3.8"x H-6.5"	
IG-4	300 Lbs.	1, 2 (Standard), 3 4, 5 or 6	10A at 110V (3 Ring Collector Ring)	Standard Feature	Sealed Ball	Non-Slip Timing Belt	L-9.5"x W-3.5"x H-9.25"	
IR-300	300 Lbs.	1, 2 (Standard), 3 4, 5 or 6	10A at 110V (2 Ring Collector Ring)	Standard Feature	3 Sealed Ball	Non-Slip Timing Belt	Height 6-5/8" Diameter 15"	Six 3/8" NC on 12-1/2" B.C.
IR-600	600 Lbs.	1, 2 (Standard), 3 4, 5 or 6	10A at 110V (2 Ring Collector Ring)	Standard Feature	6 Sealed Ball	Rugged Spur Gear	Height-6-5/8" Diameter-15"	Six 3/8" NC on 12-1/2" B.C.
NOTE: La	NOTE: Larger capacity units, special motion, other RPMs and speed controls available upon request.							

# **ROTOLITE SKELETON TURNING UNITS BY VUE-MORE**

For motion or animation.

Catalog Number	Capacity (Lbs.)	RPM
VUE-ST105	25	3
VUE-ST115	75	3
VUE-ST120	100	2
VUE-ST125	150	2
VUE-ST150	300	2





#### **ROTOLITE CEILING TURNING UNITS BY VUE-MORE**

For hanging displays and disco motors. Items with an "E" suffix have a built in 2-wire electrical outlet for lighted revolving displays.

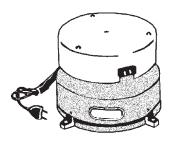
Catalog Number	Capacity (Lbs.)	RPM
VUE-CT105 VUE-CT115SC VUE-CT120SC VUE-CT125SC VUE-CT150SC	15 50 75 150 250	3 3 2 2 2 2
VUE-CT105E VUE-CT115E VUE-CT120E VUE-CT125E VUE-CT150E	15 50 75 150 250	3 3 2 2 2 2



# **ROTOLITE TURNING UNITS** WITH ROTATING ELECTRICAL OUTLET

For lighted revolving displays. Non-electrified models also available for motorized display purposes.

Catalog Number	Capacity (Lbs.)	RPM
VUE-MB105E	25	3
VUE-MB110E	50	2
VUE-MB115E	75	3
VUE-MB120E	100	2
VUE-MB125E	150	2
VUE-MB150E	300	2



# **ROTOLITE TURNTABLES BY VUE-MORE**

Complete with turntable/stage in a variety of diameters for display purposes. Add an "E" suffix for an electrified version.

Catalog	Capacity	RPM	Table Top
Number	(Lbs.)		Diameter (Inches)
VUE-TT105/8	25	3	8
VUE-TT110/12	50	2	12
VUE-TT115/17	75	3	17
VUE-TT120/17	100	2	17
VUE-TT125/17	150	2	17
VUE-TT125/23	150	2 2	23
VUE-TT150/23	300		23





SECTION B: EXTRUSIONS





# **SIGNCOMP Aluminum Sign Frame Systems**



SignComp extrusions and accessories offer a cost effective system for creating cabinets for rigid or flexible faced signs. Extrusions are available in stock lengths or in pre-cut kits. The following pages show these extrusions, give specifications and illustrations for different frame and retainer combinations and provide fabrication information. Pre-cut kits are available for most cabinets sizes, refer to page B-9 for ordering and application guidelines.

Catalog Number	Description/Application	Finish	Length	Cross Section	Assembly
SIC-2005	Wide Sign Cabinet Body Use for Double-Faced Signs of 15" to 17-3/4" depth Size typically limited by the ability and difficulty to open and support hinged sign face for servicing	Mill	24' - 5"	η <u>Σ</u>	4
SIC-2015	Medium Sign Cabinet Body Use for Double-Faced Signs of 11-3/4" to 14-1/2" depth and Faces No Larger than Approximately 64sq. ft.	Mill	24' - 5"	η <u>ς</u>	<u>_</u>
SIC-2025	Single Face Sign Cabinet Body Use for Single-Faced Signs of 8-1/4" to 9-5/8" depth Size typically limited by the ability and difficulty to open and support hinged sign face for servicing	Mill	24' - 5"	J.	
SIC-2040	Retro Sign Cabinet Body	Mill	24' - 5"	Th.	_
SIC-2055	Hingeable 1-1/2" Retainer for Rigid Faces	Mill	24' - 5"		
SIC-2045	Hingeable 2-1/4" Retainer for Rigid Faces	Mill	24' - 5"		
SIC-2065	Hingeable Dual Frame Retainer for Rigid or Flexible Faces	Mill	24' - 5"		
SIC-2075	Hingeable 2-1/4" Dual Frame Cover for Rigid or Flexible Faces	Mill	24' - 5"		
SIC-2085	Hingeable Tension Frame for Flexible Faces	Mill	24' - 5"	The second secon	
SIC-2095	Bleed Tension Frame Cover for Flexible Faces	Mill	24' - 5"	**************************************	
SIC-2084	1-1/2" Tension Frame Cover for Flexible Faces	Mill	24' - 5"		
SIC-2138	2" Divider Bar for Rigid Faces	Mill	24' - 5"	Ŧ	
SIC-2128	2-3/4" Divider Bar for Rigid Faces	Mill	24' - 5"		
SIC-2142	2-1/2" Dual Divider Bar for Rigid or Flexible Faces	Mill	24' - 5"	1111	
SIC-2146	Dual Divider Bar Cover for Rigid or Flexible Faces	Mill	24' - 5"		

# SIGNCOMP ALUMINUM SIGN FRAME SYSTEM COMPONENTS



Sold by the length or special order kits.

Catalog Number	Description/Application	Finish	Length	Cross Section
SIC-2050	1-1/2" Outer Frame Retainer	Mill	24' - 5"	
SIC-2098	Inner Frame Retainer	Mill	24' - 5"	_ <del>_</del>
SIC-2091	Wall Mount Retro Cover	Mill	24' - 5"	<u> </u>
SIC-2090	Wall Mount Retro Frame	Mill	24' - 5"	

#### SIGNCOMP ALUMINUM SIGN FRAME SYSTEM ACCESSORIES

Catalog Number	Description/Application	Finish	Length	Illustration
SIC-5150	Frame on Frame Lock	Mill	-	
SIC-5226	Frame on Frame Corner Key 1/8" Stamped Aluminum	Mill	-	
SIC-5195	1-1/2" Outer Frame Retainer Screw #8 x 1/4" Stainless Panhead	Mill	-	
SIC-5170	Hinge Screw 1/4" x 1/2" Stainless Allen Head	Mill	-	
SIC-5218	Wall Mount Retro Cover Screw #10 x 1/2" Stainless Hex Washer Tapping Screw - Type "A"	Mill	-	



# SIGNCOMP ALUMINUM SIGN FRAME COMPONENTS cont.



				∠ Signcomp
Catalog Number	Description/Application	Finish	Length	Cross Section/Illustration Assembly
SIC-1671	6" Radius Extrusion, Quarter Round End	Mill	24' - 2"	
SIC-1672	6" Radius Extrusion, Quarter Round Pole Cover	Mill	24' - 2"	
SIC-1673	8-1/2" Radius Extrusion, 3-Part End	Mill	24' - 2"	
SIC-2105	Bleed Retro Frame for Flexible Faces	Mill	24' - 5"	A A
SIC-2122	Bleed Retro Frame Cover for Flexible Faces	Mill	24' - 5"	
SIC-2112	2" Retro Frame for Flexible Faces	Mill	24' - 5"	
SIC-2115	2-3/8" Retro Frame Cover for Flexible Faces	Mill	24' - 5"	
SIC-2092	Bleed Fascia Frame for Flexible Faces	Mill	24' - 5"	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
SIC-2094	1-1/2" Fascia Frame for Flexible Faces	Mill	24' - 5"	
SIC-2175	Frame Support Tube, 3/4" x 1-5/8"	Mill	24' - 0"	
SIC-4560	1-1/2" Single Face Body Retainer Corner for Rigid Faces 4 Piece Kit	Mill	9" Radius	
SIC-4530	1-1/2" Medium Body Retainer Corner for Rigid Faces 4 Piece Kit	Mill	9" Radius	
SIC-4500	1-1/2" Wide Body Retainer Corner for Rigid Faces 4 Piece Kit	Mill	9" Radius	
SIC-4570	Single Face Body Dual Frame w/2-1/4" Cover for Rigid or Flexible Faces, 4 Piece Kit	Mill	9" Radius	
SIC-4540	Medium Body Dual Frame w/2-1/4" Cover for Rigid or Flexible Faces, 4 Piece Kit	Mill	9" Radius	
SIC-4510	Wide Body Dual Frame w/2-1/4" Cover for Rigid or Flexible Faces, 4 Piece Kit	Mill	9" Radius	

# SIGNCOMP ALUMINUM SIGN FRAME COMPONENTS cont.



		∠/SignComp*
Catalog Number	Description/Application	Illustration
SIC-5210	Corner Key, 1/8" Stamped Aluminum	
SIC-5350	Frame Brace, 1-1/2" Piece	
SIC-5360	Tension Clip Place clips 1-1/2" in from the edge of face material. For faces larger than 10', add 1/4" per 5 feet. For SIC-2065, SIC-2112 or SIC-2094, space clips 6" on center. For SIC-2085, SIC-2105, SIC-2092 or SIC-2142, space clips 5" on center.	
SIC-5312	Wide Body Corner Angle, 1-3/4" x 1-3/4" x 1/4" ● 10-1/16"	
SIC-5318	Medium Body Corner Angle, 1-3/4" x 1-3/4" x 1/4" ● 6-7/8"	
SIC-5322	Single Face Body Corner Angle, 1-3/4" x 1-3/4" x 1/4" ● 5-9/16"	
SIC-5305	Frame Corner Angle, 1-3/4" x 1-3/4" x 1/4" ● 1-1/16"	
SIC-5300	Divider Corner Angle, 1-3/4" x 1-3/4" x 1/4" ◆ 1-1/16" w/Notches	
SIC-5170	Hinge Screw ● To install, pre-drill 3/8" holes through the retainer along top, 36" on center 1/4" x 1/2" Stainless Allen Head	
SIC-5180	Closure Screw ● Install along sides and bottom, 48" on center 1/4" x 3/4" Stainless Machine Screw	
SIC-5195	Cover Screw ● Install 36" on center 1-1/2" Retainer Screw ● 2 per back corner key #8 x 1/4" Stainless Panhead SMS	(f) (Imae
SIC-5218	Corner Angle Screw • Install 2 per retainer corner, 4 per body corner Ballast Bracket Screw • Install 2 per ballast bracket Frame Brace Screw • Install 1 per frame brace Radius Corner Screw • Install 4 per corner #10 x 1/2" Stainless Hex Washer Tapping Screw - Type A	
SIC-5290	Raceway Cover Screw ● Install 24" on center #8 x 1/2" Coated Hex Washer Slotted Screw - Type A	

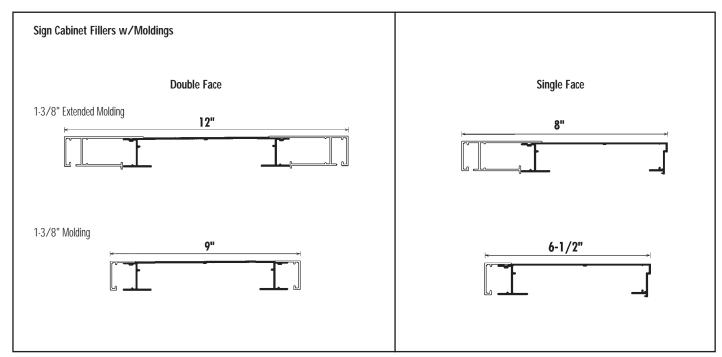


# **ECONOCOMP ALUMINUM SIGN FRAME COMPONENTS**



The EconoComp extrusion system is an economical yet simple solution for smaller signs with rigid 1/8" faces.

Catalog Number	Description/Application	Finish	Length	Cross Section/Illustration
SIC-2032	Double Face Sign Cabinet Filler	Mill	24' - 5"	
SIC-2034	Single Face Sign Cabinet Filler	Mill	24' - 5"	
SIC-2056	1-3/8" Molding	Mill	24' - 5"	
SIC-2058	1-3/8" Extended Molding	Mill	24' - 5"	
SIC-2140	1-3/8" Divider Bar	Mill	24' - 5"	H
SIC-5210	Corner Key, 1/8" Stamped Aluminum	Mill	-	
SIC-5325	Divider Attachment Angle	Mill	-	
SIC-5218	Corner Angle Screw #10 x 1/2" Stainless Hex Washer Tapping Screw - Type A	-	-	
SIC-5290	Molding Fastener #8 x 1/2" Coated Hex Washer Slotted Screw - Type A		-	



# SIGNCOMP EXTRUSION COMBINATIONS Depth Specifications



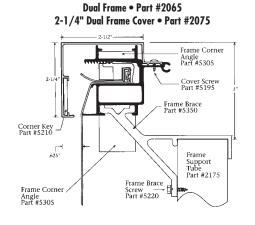
Medium Body	Wide Body	Single Face Body	Retro Body
For Rigid Plastic Faces			
1-1/2" Retainer 11-3/4"	15"	8-1/4"	3-5/8"
11-3/4"		8-1/4"	3-5/8"
2-1/4" Retainer			
13-3/4"	17"	9-1/4"	4-5/8"
For Rigid Plastic or Flexible Faces  Dual Frame w/2-1/4" Dual Frame Cover			
	17"	9-1/4"	4-5/8"
13-3/4"	17"	9-1/4"	
(1)		(- <del>L</del> )	L. L. J
For Flexible Faces			
Tension Frame w/Bleed Tension Frame Cover	17-1/4"	9-3/8"	4-3/4" ⊭
14"	17-1/4"	9-3/8"	
Tension Frame w/1-1/2" Tension Frame Cover	17 2 /48	0.5/00	FII
14-1/2"	17-3/4"	9-5/8"	<b>5</b>
Fine	, <del>kim-</del> <b>m</b> \text{\text{\text{A}}},	· Kinn -	, 57m
For Flush 1/8" Aluminum Faces			
1-1/2" Retainer <b>12"</b>	15-1/4"	8-3/8"	3-3/4"
2.1 / A" Patainar			
2-1/4" Retainer	17-1/4"	9-3/8"	4-3/4"

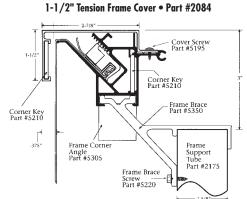


#### SIGN FRAME SYSTEM SPECIFICATIONS



# **Hingeable Retainer Extrusions for Flexible Faces**



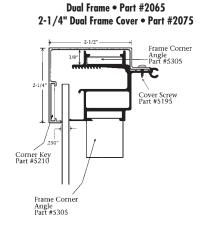


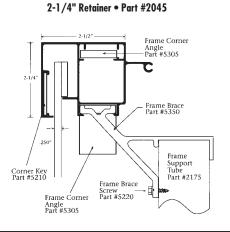
Tension Frame ● Part #2085

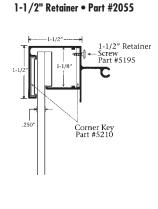


Bleed Tension Frame Cover • Part #2095

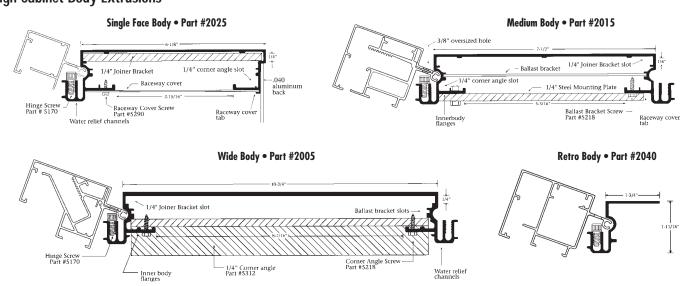
#### **Hingeable Retainer Extrusions for Rigid Plastic Faces**







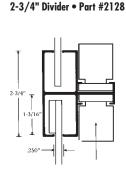
#### **Sign Cabinet Body Extrusions**

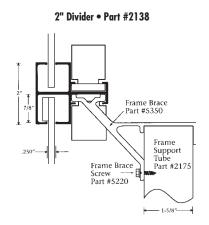


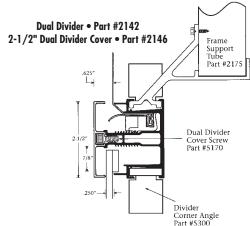
# SIGN FRAME SYSTEMS SPECIFICATIONS cont.



#### **Divider Bars**

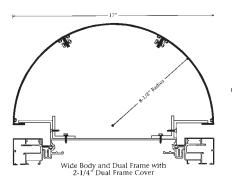




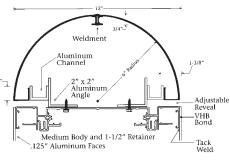


#### **Radius Extrusions**

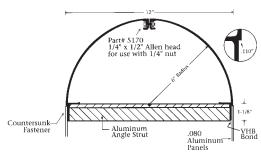
8-1/2" Radius 3 Part End • Part #1673



6" Radius Quarter Round End • Part #1671



6" Radius Quarter Round Pole Cover • Part #1672



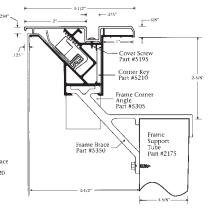
#### **Retro Fit and Retro Fascia Frame Extrusions**

2" Retro Frame • Part #2112

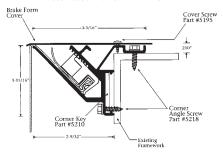
2-3/8" Retro Frame Cover • Part #2115

# Corner Key Part #5305 Part #5350 Part #5210 Frame Brace Part #5350 Frame Brace Part #5210 Frame Brace Part #5350

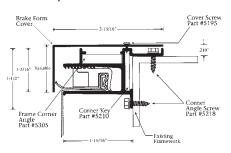
#### Bleed Retro Frame ● Part #2105 Bleed Retro Frame Cover ● Part #2122



#### Bleed Fascia Frame • Part #2092



#### 1-1/2" Fascia Frame • Part #2094





#### **SIGNCOMP**

#### **Sign Frame Component Guidelines**

- 1. Some selection information has been included in the description/application of the component column listing.
- 2. For servicing large signs where opening hinged faces is not feasible:
  - a. Use access panels through the fabricated cabinet.
  - b. Use SIC-2065/SIC-2075, 2-1/4" dual frame retainer/cover on one or more sides to allow the sliding of the rigid plastic face.
  - c. Tension clips easily release for removing flexible faces.

#### 3. Steel support pipes:

- a. Use 3" x 3" square or 3" round steel pipe with SIC-2015 medium body.
- b. Use up to 4" x 6" steel tube with SIC-2005 wide body.

#### 4. Flexible vinyl fabric requirements:

a. For SIC-2065 dual frame, SIC-2112 2" retro frame & SIC-2094 1-1/2" fascia frame:

Add 1-1/2" of face material on all four sides to the outside dimension of the assembled frame.

(Add a total of 3" of face material to both the height and width of the assembled frame.)

b. For SIC-2142 dual divider:

Measure from the center of the dual divider and add 1-1/2" of face material to all four sides.

(Add a total of 3" of face material to both the height and width of the assembled frame. Measure from the center of the dual divider.)

c. For SIC-2085 tension frame, SIC-2105 bleed retro frame & SIC-2092 bleed fascia frame:

Add 3" of face material on all four sides to the outside dimension of the assembled frame.

(Add a total of 6" of face material to both the height and width of the assembled frame.)

#### 5. Compression bracing for flexible vinyl faces:

a. For SIC-2065 dual frame, SIC-2085 tension frame & SIC-2142 dual divider:

Place a vertical frame brace/frame support tube assembly approximately every 36" on center.

Cut and insert horizontal pieces of frame support tube approximately every 36" in between the vertical assemblies.

b. For retro frames:

Where the retro frame is carrying the compression load, placement of the frame brace/frame support tube assembly is as per dual frame, tension frame and dual divider.

#### 6. Wind bracing for rigid plastic faces:

a. For SIC-2045 2-1/4" retainer & SIC-2065 dual frame:

The frame brace/frame support tube assembly may be used to tie the top retainer to the bottom retainer for large hingeable face applications.

b. For SIC-2128 2-3/4" divider & SIC-2138 2" divider:

Place a minimum of one vertical frame brace/frame support tube assembly in the center of each 12' span. (12' span, on assembly - 18' span, two assemblies.)

c. Place the frame brace/frame support tube assemblies directly between parallel lamps, but not directly in front of parallel steel support structures. Frame brace/frame support tube assemblies that are perpendicular to lamps will not cast shadows.

#### 7. Kit ordering:

Please supply the following information when ordering kits:

Date required

Overall kit size (height and width)

Number of kits

Body extrusions

Retainer extrusions

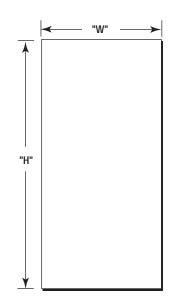
Single face or double face

Finish (mill on all one in

Finish (mill or otherwise)

Face type (rigid or flexible)

Raceway necessary? (yes or no)



# Included in rigid sign cabinet kit:

Cut to size and mitred body extrusion Cut to size and mitred retainers All fasteners except raceway cover screws All body and frame corner angles

All corner keys Ballast bracket (s)

# 

#### Add in flex sign cabinet kit:

Tension clips Frame braces

Commerce: 323.803.2000 / 800.225.5432 (CALL IEC) / Fax 323.803.2019

#### MISCELLANEOUS ALUMINUM SIGN FRAME COMPONENTS

MRW-PF14 and MRW-PF75 are border frames which allow wall mounted signs to be installed with very little or no fasteners showing.

INT-WW is a special wireway that consists of a body and snap cover. This body's unique "step" design allows for various lampholders such as the KUL-1548 to be fastened in place snuggly. The snap cover can then be trimmed and used to "fill-in" the open areas of the wireway between lampholders. Can be used in single or double face applications. Sold as a set.

Extrusions sold in stock lengths, mill finish only.

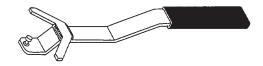
Catalog Number	Description/Application	Finish	Stock Length	Mfgr.	Cross Section Assembly
INT-DB-1.5	1-1/2" Face Divider Bar	Mill	26'	-	11/2"
INT-DB-2.5	2-1/2" Face Divider Bar	Mill	26'	,	234"
INT-WW	Wireway with Snap Cover	Mill	25' ( <i>t</i> )		1-3/4"
MRW-PF14	Border Frame Fits .375" Thick Faces Recessed flange allows invisible fastening to wall	Mill	24' - 3"	MRW	21/16"
MRW-PF75	Border Frame Fits .177" Thick Faces Recessed flange allows invisible fastening to wall y is 25' in length. Snap Cover is 24' in length.	Mill	24' - 3"	MRW	1½" 3¼"



#### SIGNCOMP TENSIONING TOOL

To be used in conjunction with Signcomp SIC-5360 tension clips in flex face applications.

Catalog Number	Description
SIC-5135	Tensioning Tool



# McGILL SIGN FRAME COMPONENTS

McGill has improved the standard shapes used by the sign industry for many years. Designed with additional wall thickness for 3/16" thick corner angles. "F" retainers are soft aluminum, easily formed by hand around rounded or irregular shapes. Additional shapes available upon request.

Catalog Number	Description	Finish	Length	Illustration
MCG-F-SMALL	Small F Clip 3/4" x 3/8"	Mill	12'	
MCG-F-LARGE	Large F Clip 1" x 5/8"	Mill	12'	



#### 3M/SIGNCOMP WEDGE CLAMPS

Wedge clamp complete with body & stud, nut, bar, (2) Tinnerman clips and (4) stainless steel clips.

Catalog Number	Description
MMM-WC-1.5	Wedge Clamp, 1.5" Bolt
MMM-WC-2.5	Wedge Clamp, 2.5" Bolt

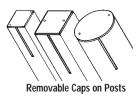


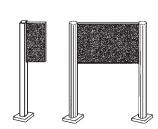
### SIGNCOMP **Aluminum Architectural Systems**

### SERIES 1 ● 1/8" ALUMINUM FACE AND POST SYSTEM

Available either in stock lengths or in cut-to-size kits which include extrusions, caps and screws. Assembly components are also available separately. Removable caps allow faces to slide out from post for easy sign changing. Slotting the post accommodates custom face heights.

		•		_
Catalog Number	Description	Finish	Length	Cross Section
SIC-1000	2" Square Post	Mill	24' - 0"	
SIC-1005	3-1/4" Square Post	Mill	24' - 0"	c 5
SIC-1007	3-1/4" Round Post	Mill	24' - 0"	$\odot$
SIC-5250	2" Square Cap	Mill	-	0
SIC-5252	3-1/4" Square Cap	Mill	-	0 0
SIC-5254	3-1/4" Round Cap	Mill	-	00
SIC-5040	Cap Screw #10 x 1/2" Stainless Flat Head	-	-	







#### **Ordering Information**

Kits contain: posts, reveals, bodies, caps and screws. Please supply the following information when ordering pre-cut kits:

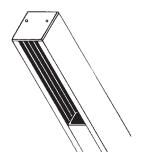
Post length (include section below grade/foundation). Post shape (square, round, etc.).



# **SERIES 2 • 2" POST & PANEL SYSTEM**

Available in stock lengths or in cut-to-size kits which include extrusions, caps and screws. Components are also available separately. Removable caps allow reveal to slide out for easy sign changing. By selecting the appropriate post grooves, reveal can be positioned 3/8" or 3/4" away from post or directly against post.

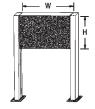
Catalog Number	Description	Finish	Length	Cross Section	
SIC-1100	2" Square Post	Mill	24' - 0"		
SIC-1200	3 Position Reveal (1)	Mill	24' - 0"	Ц	
SIC-1120	Bleed Body	Mill	24' - 2"	П	
SIC-1110	Slide Body Top body can be removed for face change	Mill	24' - 2"	الجسني	
SIC-5260 SIC-5261 SIC-5262	Square Cap, 0" Tab Square Cap, 3/8" Tab Square Cap, 3/4" Tab	Mill	-	0 0	
SIC-5040	Cap Screw #10 x 1/2" Stainless Phil. Countersunk Screw - Type A	-	-		
SIC-5220	Reveal to Body Screw #10 x 3/4 Stainless Hex Washer Tapping Screw - Type A	-	-		
SIC-5330	Corner Angle for Slide Body	Mill	-		
SIC-5240	Slide Body Corner Screw #10 x 3/4" Stainless Phil. Countersunk Thread Cutting Screw	-	-		
NOTE: (1)	NOTE: (1) Also used in Series 3.				



Removable Caps on Posts Shown with SIC-1200 reveal below body space



SIC-1100 Square Post with SIC-1200 Reveal and SIC-1120 Bleed Body Shown with fixed faces attached





SIC-1100 Square Post with SIC-1200 Reveal and SIC-1110 Slide Body Into 2" square post for removable faces

#### **Ordering Information**

Kits contain: posts, reveals, bodies, caps, corner angles and screws. Please supply the following information when ordering pre-cut kits:

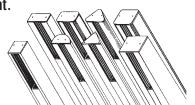
Post length (include section below grade/foundation). Body type (bleed or slide). Body overall height (H) and width (W).



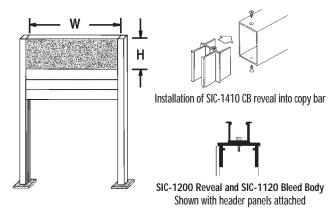
# **SERIES CB • 2" COPY BAR SYSTEM**

Available in stock lengths or in cut-to-size kits which include extrusions, caps and screws. Assembly components are also available separately. Removable caps allow faces to slide out from post for easy sign changing. By selecting the appropriate post grooves and cap, copy bars can be positioned 3/8" or 3/4" away from post or directly against post.

Catalog Number	Description	Finish	Length	Cross Section
SIC-1100	2" Square Post	Mill	24' - 0"	
SIC-1210	3-1/4" Radius Post	Mill	24' - 0"	
SIC-1220	3-1/4" Rectangular Post	Mill	24' - 0"	3 5
SIC-1240	3-1/4" Triangular Post	Mill	24' - 0"	
SIC-1233	3-1/4" Square Post	Mill	24' - 0"	
SIC-1230	3-1/4" Rectangular Post w/Radius Edges	Mill	24' - 0"	
SIC-1250	3-1/4" Triangular Post w/Radius Edges	Mill	24' - 0"	
SIC-1235	3-1/4" Square Post w/Radius Edges	Mill	24' - 0"	
SIC-5260 SIC-5261 SIC-5262	Square Cap, 0" Tab Square Cap, 3/8" Tab Square Cap, 3/4" Tab	Mill	-	0 0
SIC-5000 SIC-5002 SIC-5004	Radius Cap, 0" Tab Radius Cap, 3/8" Tab Radius Cap, 3/4" Tab	Mill	-	<u>•</u>
SIC-5010 SIC-5012 SIC-5014	Rectangular Cap, O" Tab Rectangular Cap, 3/8" Tab Rectangular Cap, 3/4" Tab	Mill	-	0 0
SIC-5015 SIC-5016 SIC-5017	Triangular Cap, 0" Tab Triangular Cap, 3/8" Tab Triangular Cap, 3/4" Tab	Mill	-	
SIC-5405 SIC-5406 SIC-5407	Square Cap, 0" Tab Square Cap, 3/8" Tab Square Cap, 3/4" Tab	Mill	-	0 0
SIC-5006 SIC-5007 SIC-5008	Rec. w/Radius Cap, 0" Tab Rec. w/Radius Cap, 3/8" Tab Rec. w/Radius Cap, 3/4" Tab	Mill	-	
SIC-5400 SIC-5401 SIC-5402	Tri. w/Radius Cap, 0" Tab Tri. w/Radius Cap, 3/8" Tab Tri. w/Radius Cap, 3/4" Tab	Mill	-	
SIC-5410 SIC-5411 SIC-5412	Sq. w/Radius Cap, 0" Tab Sq. w/Radius Cap, 3/8" Tab Sq. w/Radius Cap, 3/4" Tab	Mill	-	
SIC-5040	Cap Screw #10 x 1/2" Stainless Phil. Countersunk Screw - Type A		-	



**Removable Caps on Posts** Shown with SIC-1200 reveal below copy bar space



#### **Ordering Information**

Kits contain: posts, copy bars, reveals, bodies, caps and screws. Please supply the following information when ordering pre-cut kits:

Post length (include section below grade/foundation).

Post shape (square, round, etc.).

Number of copy bars.

Copy bar width (W) and heights (2", 3", 4", etc.).

Header panel height (H) if any.

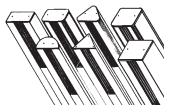
Catalog Number	Description	Finish	Length	Cross Section
SIC-1420	2" x 2" Copy Bar	Mill	24' - 0"	
SIC-1430	2" x 3" Copy Bar	Mill	24' - 0"	
SIC-1440	2" x 4" Copy Bar	Mill	24' - 0"	
SIC-1450	2" x 5" Copy Bar	Mill	24' - 0"	
SIC-1460	2" x 6" Copy Bar	Mill	24' - 0"	
SIC-1410	Copy Bar Reveal	Mill	24' - 0"	11
SIC-1200	3 Position Reveal	Mill	24' - 0"	Ц
SIC-1120	Bleed Body	Mill	24' - 2"	П
SIC-5220	Reveal To Body Screw #10 x 3/4" Stainless Hex Tapping Screw - Type A	-	-	



#### SERIES 3 • 3-1/4" POST & PANEL SYSTEM

Available in stock lengths or in cut-to-size kits which include extrusions, caps and screws. Assembly components are also available separately. Removable caps allow reveal to slide out from post for easy sign changing. By selecting the appropriate post grooves and cap, reveal can be positioned 3/8" or 3/4" away from post or directly against post.

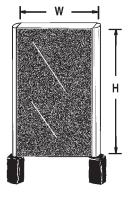
Catalog Number	Description	Finish	Length	Cross Section
SIC-1210	3-1/4" Radius Post	Mill	24' - 0"	
SIC-1220	3-1/4" Rectangular Post	Mill	24' - 0"	
SIC-1240	3-1/4" Triangular Post	Mill	24' - 0"	
SIC-1233	3-1/4" Square Post	Mill	24' - 0"	
SIC-1230	3-1/4" Rectangular Post w/Radius Edges	Mill	24' - 0"	
SIC-1250	3-1/4" Triangular Post w/Radius Edges	Mill	24' - 0"	
SIC-1235	3-1/4" Square Post w/Radius Edges	Mill	24' - 0"	
SIC-5000 SIC-5002 SIC-5004	Radius Cap, 0" Tab Radius Cap, 3/8" Tab Radius Cap, 3/4" Tab	Mill	-	· •
SIC-5010 SIC-5012 SIC-5014	Rectangular Cap, 0" Tab Rectangular Cap, 3/8" Tab Rectangular Cap, 3/4" Tab	Mill	-	0 0
SIC-5015 SIC-5016 SIC-5017	Triangular Cap, 0" Tab Triangular Cap, 3/8" Tab Triangular Cap, 3/4" Tab	Mill	-	
SIC-5405 SIC-5406 SIC-5407	Square Cap, O" Tab Square Cap, 3/8" Tab Square Cap, 3/4" Tab	Mill	-	0 0
SIC-5006 SIC-5007 SIC-5008	Rec. w/Radius Cap, 0" Tab Rec. w/Radius Cap, 3/8" Tab Rec. w/Radius Cap, 3/4" Tab	Mill	-	0 0
SIC-5400 SIC-5401 SIC-5402	Tri. w/Radius Cap, 0" Tab Tri. w/Radius Cap, 3/8" Tab Tri. w/Radius Cap, 3/4" Tab	Mill	-	
SIC-5410 SIC-5411 SIC-5412	Sq. w/Radius Cap, 0" Tab Sq. w/Radius Cap, 3/8" Tab Sq. w/Radius Cap, 3/4" Tab	Mill	-	
SIC-5040	Cap Screw #10 x 1/2" Stainless Phil. Countersunk Screw - Type A			



Removable caps on post shown with SIC-1200 Reveal below reveal space



SIC-1220 Post with installation of SIC-1200 Reveal and SIC-1260 Slide Body into SIC-1220 Rectangular Post





SIC-1210 Post with installation of SIC-1200 Reveal and SIC-1270 Bleed Body into SIC-1210 Radius Post

Catalog Number	Description	Finish	Length	Cross Section
SIC-1200	3 Position Reveal <sup>(1)</sup>	Mill	24' - 0"	Ц
SIC-1270	3-1/4" Bleed Body	Mill	24' - 2"	П
SIC-1280	3-1/4", 1/4 Round Body	Mill	24' - 2"	
SIC-1260	3-1/4" Slide Body Top Body can be removed for face change	Mill	24' - 2"	<u>ι<del>ζ</del>ξ</u> ι
SIC-5335	Corner Angle	Mill	-	
SIC-5220	Reveal To Body Screw #10 x 3/4" Stainless Hex Tapping Screw - Type A		-	
SIC-5240	Slide Body Corner Screw #10 x 3/4" Stainless Phil. Countersunk Thread Cutting Screw	-	-	

#### **Ordering Information**

Kits contain posts, reveals, bodies, corner angles, caps and screws. Please supply the following information when ordering pre-cut kits:

Post length (include section below grade/foundation).

Post shape (square, round, etc.).

Body type (bleed or slide).

Body overall height (H) and width (W) of copy area.



#### SERIES 7 • 7" POST & PANEL SYSTEM

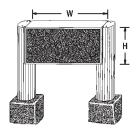
Available in stock lengths or in cut-to-size kits. Assembly components are also available separately. By selecting the appropriate post grooves and cap, reveal can be positioned 1/2" or 1" away from post or directly against post.

Catalog	Description	Finish	Loueth	Cross
Number	Description	Finish	Length	Section
SIC-1500	7" Radius Post	Mill	24' - 0"	
SIC-1510	7" Rectangular Post	Mill	24' - 0"	- P
SIC-1520	7" Rectangular Post w/Radius Edges	Mill	24' - 0"	
SIC-1530	7" Triangular Post	Mill	24' - 0"	
SIC-1602	Single Face Hinge Body	Mill	24' - 2"	₩ <u></u>
SIC-1592	Double Face Hinge Body	Mill	24' - 2"	المج عام
SIC-1624	Slide Retainer	Mill	24' - 2"	E
SIC-1690	Access Frame	Mill	24' - 2"	£
SIC-1694	Slide Cover	Mill	24' - 2"	
SIC-5020 SIC-5024 SIC-5026	Radius Cap, 0" Tab Radius Cap, 1/2" Tab Radius Cap, 1" Tab	Mill	-	· · ·
SIC-5030 SIC-5034 SIC-5036	Rectangular Cap, 0" Tab Rectangular Cap, 1/2" Tab Rectangular Cap, 1" Tab	Mill	-	0 0
SIC-5420 SIC-5421 SIC-5422	Rec. w/Radius Cap, 0" Tab Rec. w/Radius Cap, 1/2" Tab Rec. w/Radius Cap, 1" Tab	Mill	-	0 0
SIC-5425 SIC-5426 SIC-5427	Triangular Cap, O" Tab Triangular Cap, 1/2" Tab Triangular Cap, 1" Tab	Mill	-	
SIC-5102	Ballast Bracket for Double Face Hinge Body	Mill	-	
SIC-5104	Ballast Bracket for Single Face Hinge Body	Mill	-	
SIC-5040	Cap Screw #10 x 1/2" Stainless Phil. Countersunk Screw - Type A	-	-	3 Dame

#### **Ordering Information**

Kits contain posts, reveals, bodies, corner angles, caps and screws. Please supply the following information when ordering pre-cut kits:

Post length (include section below grade/foundation). Post shape (square, round, etc.). Body type (single face or double face, bleed or slide). Body overall height (H) and width (W). Type of retainers (if any). Which side(s) will use access frame and slide cover.



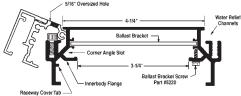
Typical Series 7 architectural sign radius posts have been tack-welded below the copy board



Removable caps on posts shown with SIC-1550 Reveal below reveal space



SIC-1690 Access Frame and SIC-1694 Slide Cover



SIC-1592 Double Hinge and SIC-1694 Access Frame



SIC-1592 Hinge Body shown with SIC-1632 slide retainer



SIC-1500 Post with SIC-1550 Reveal and SIC-1570 Bleed Body shown with header panels attached

Catalog Number	Description	Finish	Length	Cross Section
SIC-1550	3 Position Reveal	Mill	24' - 0"	
SIC-1560	7" Slide Body	Mill	24' - 2"	L 35 J
SIC-1570	7" Bleed Body	Mill	24' - 2"	
SIC-1580	7" 1/4 Round Body	Mill	24' - 2"	
SIC-5335	Corner Angle for Slide Body	Mill	-	
SIC-5344	Corner Angle for Double Face Hinge Body	Mill	-	
SIC-5346	Corner Angle for Single Face Hinge Body	Mill	-	
SIC-5280	Hinge Screw #10 x 5/8" Stainless Allen Head	-	-	
SIC-5230	Closure Screw #10 x 7/8" Stainless Phil. Flat Countersunk	-	-	
SIC-5220	Ballast Bracket Screw Corner Angle Screw #10 x 3/4" Stainless Hex	-	-	
SIC-5290	Raceway Cover Screw #8 x 1/2" Coated Hex Head	-	-	



# **SERIES 12 • INTERNALLY ILLUMINATED CABINET SYSTEMS**

Available in stock lengths or in cut-to-size kits. Assembly components are also available separately. Optional SIC-1671 6" radius ends can also be added.

Catalog Number	Description	Finish	Length	Cross Section
SIC-1612	Hinge Body	Mill	24' - 2"	и <u>Е</u> <u>З</u> у
SIC-1624	Slide Retainer	Mill	24' - 2"	
SIC-1690	Access Frame	Mill	24' - 2"	
SIC-1694	Slide Cover	Mill	24' - 2"	_
SIC-1632	Bleed Retainer	Mill	24' - 2"	
SIC-1640	1/4 Round Retainer	Mill	24' - 2"	ſ
SIC-1650	Extended 1/4 Round Retainer	Mill	24' - 2"	
SIC-1655	Extended 1/4 Round Retainer w/Reveal	Mill	24' - 2"	
SIC-1671	6" Radius End Quarter Round	Mill	24' - 2"	
SIC-5107	Ballast Bracket for Hinge Body	Mill	-	
SIC-5342	Corner Angle for Hinge Body	Mill	-	
SIC-5210	Corner Key	Mill	-	
SIC-5280	Hinge Screw #10 x 5/8" Stainless Allen Head		-	
SIC-5220	Corner Angle Screw #10 x 3/4" Stainless Hex Countersunk Screw - Type A		-	[pennen»

# Ordering Information

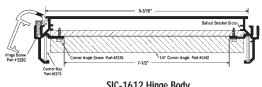
Kits contains body and retainer extrusions, corner angles and keys, screws and ballast brackets. Please supply the following information when ordering pre-cut kits:

Body overall height (H) and width (W).

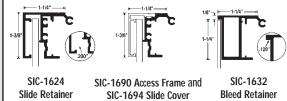
Cabinet type (single face or double face).

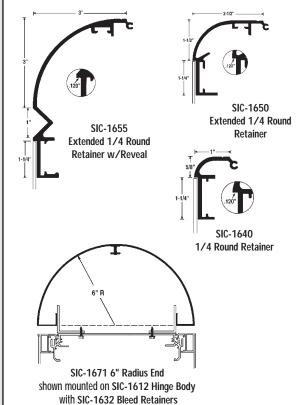
Type of retainers (if any).

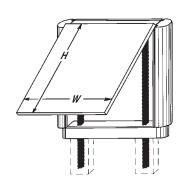
Which side(s) will use access frame and slide cover.



SIC-1612 Hinge Body with SIC-1640 1/4 Round Retainer









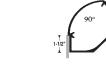


# **MONOLITHIC EDGES**

Can be used as structural edge elements for monument and architectural sign projects.

Catalog Number	Description	Finish	Length	Cross Section
SIC-1880	2" Radius Edge, 90°	Mill	24' - 0"	0
SIC-1890	3" Radius Edge, 90°	Mill	24' - 0"	0
SIC-3000	Sharp Edge, 60°	Mill	24' - 0"	$\triangle$
SIC-1870	2-1/2" Radius Edge, 60°	Mill	24' - 0"	$\bigcirc$
SIC-1860	1-1/2" Radius Edge, 60°	Mill	24' - 0"	$\bigcirc$



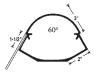




SIC-1880 2" Radius Edge

SIC-1890 3" Radius Edge

SIC-3000 Sharp Edge

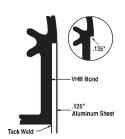


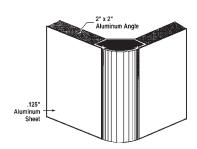
SIC-1870 2-1/2" Radius Edge



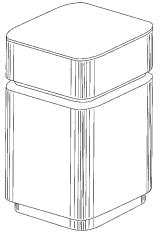
SIC-1860 1-1/2" Radius Edge

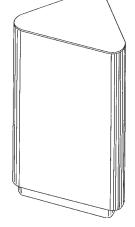






Showing some typical fabrication techniques





Monument signs using 90° and 60° Edges

# **SIGNCOMP Standard Aluminum Extrusions**



Sold by the length or special order kits

Sold by the lengt	h or special order kits.			
Catalog Number	Description/Application	Finish	Length	Cross Section
SIC-1924	1 Part 12" Double Face Sign Cabinet Body	Mill	24' - 5"	
SIC-1929	2 Part 12" Double Face Sign Cabinet Body	Mill	24' - 5"	
SIC-1923	1 Part 9" Double Face Sign Cabinet Body	Mill	24' - 5"	
SIC-1928	2 Part 9" Double Face Sign Cabinet Body	Mill	24' - 5"	
SIC-1922	1 Part 8" Single Face Sign Cabinet Body	Mill	24' - 5"	
SIC-1927	2 Part 8" Single Face Sign Cabinet Body	Mill	24' - 5"	
SIC-1944	2 Part Retainer	Mill	24' - 5"	
SIC-1905	2 Part Divider	Mill	24' - 5"	
SIC-1960	2 Part Inner Frame	Mill	24' - 5"	
SIC-1942	2 Part Outer Frame	Mill	24' - 5"	Ţ <u>.</u>
SIC-1943	1-3/8" Standard "L" Molding	Mill	24' - 5"	
SIC-1945	1" Standard "H" Molding	Mill	24' - 2"	<u> </u>
SIC-1946	1" Standard "Z" Molding	Mill	24' - 2"	
SIC-1947	1.5" Standard "Z" Molding	Mill	24' - 2"	
SIC-1990	2" Beveled Frame	Mill	24' - 2"	



# **SIGNCOMP Raceway Extrusions and Accessories**



Catalog Number	Description/Application	Finish	Length	Illustration
SIC-1980	1 Piece Transformer Raceway	Mill	24' - 2"	
SIC-1981	2 Piece Transformer "R" Raceway	Mill	24' - 2"	
SIC-1982	2 Piece Transformer "L" Raceway	Mill	24' - 2"	SIC-1982 and SIC-1981 Shown Assembled
SIC-1986	Transformer Raceway Cover	Mill	24' - 2"	
SIC-1989	Transformer Raceway Mounting Clip	Mill	12' - 0"	ļ
SIC-5974	Transformer Bracket 6-3/4" x 18" x 1/8"	Mill	-	
SIC-5976	Transformer Raceway Lifting Bracket 1-3/4" x 1-3/4" x 1/4" - 6"	Mill	-	
SIC-5972	Transformer Raceway Brace 2" x 6" x .090	Mill	-	
SIC-5989-3IN	Transformer Raceway 3" Mounting Clip	Mill	-	
SIC-5987	Transformer Raceway End Cap 8-1/2" x 7-1/4" x .090	Mill	-	

# **SIGNCOMP Standard Aluminum Extrusion Accessories**



Catalog Number	Description/Application	Finish	Length	Illustrations
SIC-5977	1 Part 2 Part 12" Body Corner Angle 1-3/4" x 1-3/4" x 1/4" - 9-5/16"	Mill	-	
SIC-5978	1 Part 2 Part 9" Body Corner Angle 1-3/4" x 1-3/4" x 1/4" - 6-5/16"	Mill	-	0 0 0
SIC-5979	1 Part 2 Part S/F Body Corner Angle 1-3/4" x 1-3/4" x 1/4" - 6-3/16"	Mill	-	
SIC-5210	Corner Key 1/8" Stamped Aluminum	Mill		
SIC-5975	2 Part Outer Frame Corner Angle 2" x 2" x 1/8" - 3/8"	Mill	-	
SIC-5970	1 Part 2 Part 12" Body Ballast Pan 7-11/16" x 24" x .080	Mill	-	
SIC-5971	1 Part 2 Part 9" Body or S/F Body Ballast Pan 4-5/8" x 24" x .080	Mill	-	
SIC-5973	1 Part 2 Part 12" Body Raceway Cover 9-3/4" x 48" x .040 (white)	Mill	-	
SIC-5088	1 Part 2 Part 9" Body or S/F Body Raceway Cover	Mill	-	
SIC-1995	Top Hinge 3/4" x 72" Aluminum Hinge	Mill		
SIC-1996	Bottom & Side Hinge 1-1/16" x 72" Aluminum Hinge	Mill	-	
SIC-1994	2 Part Lock	Mill	-	
SIC-5290	2 Part Retainer Screw Transformer Bracket Screw #8 x 1/2" Coat Hex Washer Slotted Screw - Type "A" 6-1/2" x 48" x .040 (white)	-	-	



SECTION C: ELECTRICAL





# MAGNETEK • UNIVERSAL RAPID START FIXTURE BALLASTS









60Hz • Electromagnetic

Lamp Type	Catalog Number	Line olts	Power Factor	Line Current Amps.	Input Watts ANSI	Min. Start R Temperature	Reduced Wattage Lamps	e CBM Certified	ty. Per Carton	Weight/Carton (Lbs.)
One Lamp F30T12/RS F40T12/RS	413CTCP	120	High	.65	35	+50°F			20	38.0
F30T12/RS	691LTCP 697LTCP	120 277	High High	.35 .15	46 46	+50°F +50°F		<b>√</b>	10 10	31.0 30.0
F40T12/RS	412SLHTCP 458SLHTCP	120 277	High High	.44 .19	50 50	+50°F +50°F	1	√ √	10 10	34.0 35.0
Two Lamps F30T12/RS	573LTCP 588LTCP	120 277	High High	.65 .28	75 75	+50°F +50°F	1	✓	10 10	35.0 35.0
F40T12/RS	446LSLHTCP W589DTCP 592LTCP 443LSLHTCP	120 120 240 277	High High High High	.75 .80 .40 .33	86 90 90 87	+50°F 0°F +50°F +50°F	✓ ✓ ✓	√ √	10 10 10 10	33.9 42.0 34.5 34.3
F40T12/RS (Dimming)	502ATCP (1) 678ATCP (1)	120 277	High High	.85 .37	98 100	+50°F +50°F			6	39.0 40.2
Reversed items in	dicate Watt Reducer ballasts	NOTE: (1) Rapi	d start dimming	ballast to be us	sed in conjunctio	on with proper co	ontrol device.			

# MAGNETEK • UNIVERSAL TRIGGER START FIXTURE BALLASTS





60Hz • Electromagnetic

Lamp	Catalog	Line	Power	Line Current	Input Watts	Min. Start	CBM	Qty.	Weight/Carton
Type	Number	Volts	Factor	Amps	ANSI	Temperature	Certified	Per Carton	(Lbs.)
One Lamp	546BTCP	120	Low	.60	26	+50°F		20	38.0
F14T12 or F15T8 or	565LTCP	120	High	.28	32	+50°F		10	31.0
F15T12 or F20T12	562LTCP	277	High	.12	32	+50°F		10	31.0
Two Lamps	447CRTCP	120	Low	.62	42	+50°F		10	28.0
F14T12 or F15T8 or	564LTCP	120	High	.48	58	+50°F		10	31.0
F15T12 or F20T12	554LTCP	277	High	.20	58	+50°F		10	35.0
F15T8 or F15T12 or F20T12	447LRTCP	120	Low	.55	43	+50°F		20	49.0

# MAGNETEK • UNIVERSAL PREHEAT FIXTURE BALLASTS (4)





60Hz ● Electromagnetic

Lamp Type	Catalog Number	Line olts	Power Factor	Line Current Amps	Min. Start Temperature	CBM Certified	ty. Per Carton	Weight/Carton (Lbs.)
One Lamp F4T5	548H2 <sup>(1)</sup>	120	Low	.13	+50°F		40	28.0
F6T5 or F8T5	549H2 <sup>(1)</sup>	120	Low	.16	+50°F		40	28.0
F14, 15, 20T12 or 15T8	200H2 <sup>(1)</sup>	120	Low	.35	+50°F		40	26.0
F25T12	340H2 <sup>(1)</sup>	120	Low	.40	+50°F		40	30.0
F30T8 or F40T12	202BTCP 202SBTCP (2)	120 120	Low Low	.67 .67	+50°F +50°F		20 20	38.0 38.0
Two Lamps F40T12	205TCP	120	High	.85	+50°F	<b>√</b>	10	38.0

# **Interstate** Electric Co.

# MAGNETEK • UNIVERSAL SLIMLINE FIXTURE BALLASTS (9)









60Hz • Electromagnetic • High Power Factor

Lamp Type	Catalog Number	Line olts	Line Current Amps.	Input Watts ANSI	Min. Start Temperature	Reduced Wattage Lamps	CBM Certifie <b>d</b>	ty. Per Carton	Weight/Carton (Lbs.)
One Lamp • 425 F24T12 or F36T12 or F42T12 or F48T12	539TCP 531TCP	120 277	.60 .24	60 60	0°F 0°F		<i>\</i>	10 10	46.6 45.9
F60T12 or F64T12	875LTCP	120	.52	60	0°F			10	37.0
F72T12 or F84T12 or F96T12	822BRTCP 828BRTCP	120 277	.85 .39	100 100	0°F 0°F	<b>1</b>	√ √	6 6	46.5 46.0
Two Lamps • 42 F24T12 or F36T12 or F42T12 or F48T12	5mA 213TCP 212ATCP 532BRTCP	120 120 277	.80 .98 .35	95 104 97	+50°F 0°F +32°F		√ √ √	6 4 6	35.0 51.0 46.5
F60T12 or F64T12	881BRTCP	120	1.05	118	0°F			6	42.0
F72T12 or F84T12 or F96T12	806SLHTCP 808BRTCP 827SLHTCP	120 220 277	1.05 .75 .46	122 132 122	+50°F 0°F +50°F		√ √ √	6 6 6	48.2 48.0 48.8
One Lamp • 200 F42T6	0mA <b>843TCP</b>	120	.32	37	0°F		✓	10	42.5
F64T6 or F72T8	811TCP 801TCP	120 120	.50 .55	52 55	0°F 0°F		✓	10 10	44.1 39.0
F96T8	801TCP	120	.60	67	0°F			10	41.0
Two Lamps • 20 F42T6	OmA <b>871SLTCP</b>	120	.65	72	0°F			6	44.0
F64T6 or F72T8	825BRTCP 810TCP	120 120	.90 .95	98 105	+50°F 0°F			6 4	44.0 51.0
F96T8	825BRTCP	120	1.00	125	+50°F			6	45.0
Reversed items in	ndicate Watt Reducer ballast	S							

# MAGNETEK • UNIVERSAL VHO FIXTURE BALLASTS (4)





For very high output 1500mA lamps. 60Hz • Electromagnetic • High Power Factor

Lamp Type	Catalog Number	Line olts	Line Current Amps.	Input Watts	Min. Start Temperature	Reduced Wattage Lamps	CBM Certified	ty. Per Carton	Weight/Carton (Lbs.)
One Lamp F48	949LHTCP	120	1.20	138	-20°F			10	53
F72 to F96	951STCP <sup>(1)</sup> 951STCP <sup>(1)</sup>	120 120	1.80 2.00	180 235	-20°F -20°F			6 6	59 58
Two Lamps F48 to F72	960VLHTCP	120	2.60	300	-20°F			4	64
F72 to F96	930KTCP (1) 936XTCP 937KTCP (1)	120 240 277	3.20 1.90 1.25	340 360 345	-20°F -20°F -20°F			4 3 4	63 63 58
Three Lamps F48 to F96	939TCP	120	4.00	530	-20°F			3	63
F72 to F96	933TCP	120	4.80	750	-20°F			3	63
NOTE: (1) Cann	ot be used with T10 lamps.	ı						I	



#### MAGNETEK • UNIVERSAL HO FIXTURE BALLASTS (4)



For high output 800mA lamps. 60Hz • Electromagnetic • High Power Factor







Lamp Type	Catalog Number	Line olts	Line Current Amps.	Input Watts ANSI	Min. Start Temperature	Reduced Wattage Lamps	CBM Certified	ty. Per Carton	Weight/Carton (Lbs.)
One Lamp F24T12/H0 or F36T12/H0 or F42T12/H0 or F48T12/H0	498LHTCP 481LHTCP (2) 490XLHTCP (3) 628LHTCP (4)	120 120 120 277	.80 .87 .86 .35	91 85 95 95	-20°F -20°F -20°F -20°F			6 4 4 6	46.0 45.0 40.0 47.0
F60T12/H0 or F64T12/H0	481LHTCP 490XLHTCP (3)	120 120	1.05 1.00	110 110	-20°F -20°F			4 4	45.0 40.0
F72T12/H0 or F84T12/H0 or F96T12/H0	483LHTCP 481LHTCP 490XLHTCP (3) 482LHTCP 491XLHTCP (5)	120 120 120 277 277	1.20 1.20 1.20 .50 .55	135 140 135 135 135	+50°F -20°F -20°F +50°F -20°F		√ √	6 4 4 6 4	49.0 45.0 40.0 49.5 42.0
Two Lamps F24T12/H0 or F36T12/H0 or F42T12/H0 or F48T12/H0	620LHTCP 490XLHTCP (3) 627LHTCP 491XLHTCP (5) 628LHTCP (4)	120 120 277 277 277	1.25 1.40 .53 .61	145 145 145 145 145	+50°F -20°F +50°F -20°F -20°F		<i>\ \</i>	6 4 6 4 6	47.0 40.0 48.0 42.0 47.0
F60T12/H0 or F64T12/H0	490XLHTCP (3) 491XLHTCP (5)	120 277	1.60 .70	180 180	-20°F -20°F			4 4	40.0 42.0
F72T12/H0 or F84T12/H0 or F96T12/H0	480XLHTCP (1) 480SLHTCP (1) 487XLHTCP (1) 487SLHTCP (1) 491XLHTCP (6)	120 120 277 277 277	2.10 2.10 .87 .87 .70	257 237 257 237 190	-20°F -20°F -20°F -20°F -20°F	<b>\</b> \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	\ \ \	4 4 4 4	38.9 48.8 45.0 49.6 42.0

Reversed items indicate Watt Reducer ballasts.

NOTE: $^{(1)}$  Used in any two lamp combination of listed lamps.  $^{(2)}$  Cannot be used with 1/F24, 36 or 42T12H0 lamp.

- (3) Used in any one or two lamp combination with a total maximum lamp length of 12 feet or a minimum of 4 feet. Cannot be used with 1/F24, 36 or 42T12HO lamp.
  (4) Used in any one or two lamp combination with a total maximum lamp length of 6 feet or a minimum of 3 feet. Cannot be used with 1/F24, 42 or 48T12HO lamp.
- (5) Used in any two lamp combination with a total maximum lamp length of 12 feet or a minimum of 6 feet. Cannot be used with 2/F24T12HO lamps.
- (6) Cannot be used with 2/F84 or 96T12H0 lamps.

#### MAGNETEK • UNIVERSAL CIRCLINE FIXTURE BALLASTS (4)







60Hz • Electromagnetic

Lamp Type	Catalog Number	Line olts	Power Factor	Line Current Amps.	Input Watts ANSI	Min. Start Temperature	ty. Per Carton	Weight/Cartor (Lbs.)
One Lamp • Preheat FC6T9 or FC8T9	200H2 <sup>(3)</sup>	120	Low	.27		+32°F	40	26
One Lamp • Rapid Start FC8T9/RS	547RSWSTCP (1)	120	Low	.68	29	+50°F	20	39
FC12T9/RS or FC16T9/RS	445RSWSTCP (1)	120	Low	.65	38	+50°F	10	20
Two Lamps ● Rapid Start FC8T9/RS and FC12T9/RS	449LRWSTCP (1)	120	Low	.80	51	+50°F	20	57
FC12T9/RS and/or FC16T9/RS	W589DTCP (2)	120	High	.80	79	0°F	10	42

NOTE: (1) Ballasts are pre-wired with connecting socket. (2) Can be used with any 2 lamp combination of F30, 40T12 or FC12, 16T9 lamps. (3) Core & coil.

# MAGNETEK • UNIVERSAL COMPACT FLUORESCENT LAMP BALLASTS (9)





60Hz • Electromagnetic • Normal Power Factor • Class P

Catalog	Lamp	Normal	Lamp	Line	Max. Line	Min. Start	ty.	Weight/Carton
Number	Type	Watts	Configuration	olts	Current Amps.	Temperature	Per Carton	(Lbs.)
4101	CFT5W/G23	5	Twin	120	.175	-0°F	30	14
4205		5	Twin	277	.185	-0°F	30	21
4105	CFT7W/G23	7	Twin	120	.200	-0°F	30	14
4205		7	Twin	277	.185	-0°F	30	21
4105	CFT9W/G23 or	9	Twin	120	.200	+25°F	30	26
4205	CFQ9W/G23-2	9	Quad	277	.185	-0°F	30	21
4111	CFT13W/GX23 or CFQ13W/GX23-2	13	Twin	120	.400	+32°F	30	26
4211		13	Quad	277	.345	+32°F	24	37
4119	CFQ18W/G24d-2	18	Quad	120	.600	+15°F	20	34
4219		18	Quad	277	.280	+15°F	24	37
4123	CFQ26W/G24d-3	26	Quad	120	.880	+15°F	20	40
4223		26	Quad	277	.370	+15°F	24	37

#### **Ordering Information**

**Octron T8 Systems** Normal Light Output:

All ballasts available: For encased ballast add suffix "P", open core coil without mounting feet "F1P", open core coil with mounting feet "F2P".



Open Core & Coil Ballast With Mounting Feet



**Encased Ballast** 

OSRAM

SYLVANIA

**SYLVANIA** 

#### **OSRAM SYLVANIA ELECTRONIC BALLASTS**







Up to 40% energy savings over F40T12, magnetic systems with comparable light output.

Up to 33% more light output than standard electronic T8 systems for high light output applications. High Light Output:

Low Power: Up to 15% energy savings over standard electronic T8 systems, up to 30% over F34T12 magnetic systems.

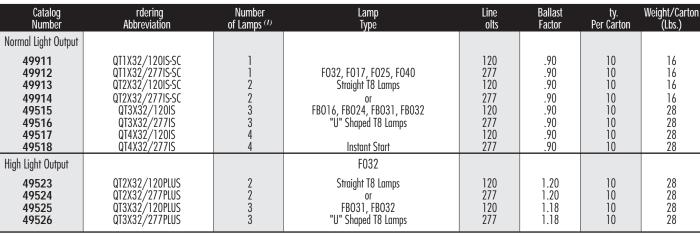
Eight Foot T8: Up to 30% energy savings over F96T12 magnetic systems.

#### Slimline T12 and T12/HO Systems

System 96 and 96/HO: Up to 15% energy savings over standard magnetic systems.

#### **Compact Fluorescent TT5 Systems**

Over 30% more lumen output than 34W T12 systems. Contains QUICKSENSE end of lamp life sensing technology. TT5 Instant Start: Over 20% more lumen output than 34W T12 systems. Contains QUICKSENSE end of lamp life sensing technology. TT5 Programmed Rapid Start:



**NOTE:** (1) Ballasts can be downwired one lamp by capping any unused blue lead.



# OSRAM SYLVANIA ELECTRONIC BALLASTS cont.



#### OSRAM SYLVANIA

Catalog Number	rdering Abbreviation	Number of Lamps (1)	Lamp Type	Line olts	Ballast Factor	ty. Per Carton	Weight/Carton (Lbs.)
Low Power 49533 49534 49535 49536 49537 49538	QT2X32/120LP QT2X32/277LP QT3X32/120LP QT3X32/277LP QT4X32/120LP QT4X32/277LP	2 2 3 3 4 4	F032, F017, F025, F040 Straight T8 Lamps or FB016,FB024, FB031, FB032 "U" Shaped T8 Lamps Instant Start	120 277 120 277 120 277	.77 .77 .77 .77 .77	10 10 10 10 10 10	28 28 28 28 28 28
Eight T8 Normal Light 49581 49582	Output QT2X59/120IS QT2X59/277IS	2 2	F096T8 59W-T8 Lamps Instant Start	120 277	.88 .88	10 10	28 28
Eight Foot T8 High Li 49583 49584	ght Output QT2X59/120PLUS QT2X59/277PLUS	2 2	F096T8 59W-T8 Lamps Instant Start	120 277	1.19 1.19	6 6	21 21
Slimline T12 49881 49882	QT2X96/120IS QT2X96/277IS	2 2	F96, F48, F60, F72,F84 T12 Lamps, Instant Start	120 277	.88 .88	10 10	35 35
Slimline T12 H0 49883 49884	QT2X96/120H0 QT2X96/277H0	2 2	F96, F48, F60, F72,F84 T12 H0 Lamps, Rapid Start	120 277	.88 .88	10 10	35 35
Compact Fluorescent 49641 49642 49643 49644 49645 49646	TT5 QT1X40/120DL QT1X40/277DL QT2X40/120DL QT2X40/277DL QT3X40/120DL QT3X40/277DL	1 1 2 2 2 3 3	FT40DL 40W T5 Lamps QUICKSENCE End of Lamp Life Shut Down Circuitry Instant Start	120 277 120 277 120 277	.96 .96 .96 .96 .96	10 10 10 10 10	28 28 28 28 28 28 28
Pentron T5 (Prostart) 49681 49682 49683 49684	QT1X28/120PS QT1X28/277PS QT2X28/120PS QT2X28/277PS	1 1 2 2	FP28, FP21, FP14, FP35 28W T5 Lamp TT5 Programmed Rapid Start	120 277 120 277	1.00 1.00 1.00 1.00	20 20 20 20 20	25 25 25 25 25
Pentron T5 H0 (Prost 49651 49652 49653 49654	art) QT1X54/120PH0 QT1X54/277PH0 QT2X54/120PH0 QT2X54/277PH0 an be downwired one lamp by cappin	1 1 2 2	FP54T5HO, FT55DL, FPC55 54W or 55W T5 Lamp T5HO Programmed Rapid Start	120 277 120 277	1.00 1.00 1.00 1.00	20 20 20 20 20	20 20 20 20 20

TECHNICAL DATA: Input Frequency: 50/60Hz Low Harmonic Distortion: Less than 20% THD Power Factor: Less than 97% Voltage Range: Sound Rating:

# ROBERTSON FIXTURE BALLASTS (4)



Robertson ballasts are known for having very compact cases and small cross-sections. Ordered upon request. Most orders filled within 48 hours.



#### **ADVANCE FIXTURE BALLASTS**



Interstate Electric is an authorized distributor for Advance fixture ballasts. Selected models stocked, other models available upon request.

#### MAGNETEK • UNIVERSAL HID CORE & COIL BALLAST REPLACEMENT KITS ... 5AL

For High Pressure Sodium Lamps.
Kits contain: Core & coil, capacitor, ignitor and set of adjustable mounting feet.
Capacitors and ignitors available separately under separate catalog numbers.
60Hz ● -40°F Min. Start Temp. ● Individually Boxed



Replacement Kit Catalog Number	Line oltage	Max. Line Amps.	Input Watts	Capacitor MFD	Specifications AC	Separate Capacitor Catalog No.	Separate Ignitor Catalog No.	Weight (Lbs.)
One 50 Watt S68 HPS Lamp 12310-95-5 (S50MLTLC3M500K)	120 or 208 or 240 or 277	1.24 .59 .50 .44	64	5	300	0051466BH	HPS-150-3A	5.0
One 70 Watt S62 HPS Lamp 12310-153-5 (S70MLTLC3M500K)	120 or 208 or 240 or 277	1.40 .83 .72 .62	94	7	300	0051410MF	HPS-150-3A	5.0
One 100 Watt S54 HPS Lamp	120	2.90	115	10	300	0051413MF	HPS-150-3A	6.5
12310-90-5 (\$100MLTLC3M500K)	120 or 208 or 240 or 277	2.20 1.40 1.10 .95	128	10	300	0051413MF	HPS-150-3A	6.5
One 150 Watt S55 HPS Lamp 12310-165-5 (S150MLTLC3M500K)	120 or 208 or 240 or 277	3.00 1.65 1.45 1.25	188	14	300	0051415BH	HPS-150-3A	8.0
12310-160S5K	480	.72	188	14	300	0051415BH	HPS-150-3A	10.0
One 250 Watt S50 HPS Lamp 1230-925-5K (S250MLTAC4M500K)	120 or 208 or 240 or 277	2.50 1.43 1.25 1.10	295	35	300	0051421BH	HPS-400-3A	11.5
1230-32S-5K (S25048TAC4M500K)	480	.65	300	35	300	0051421BH	HPS-400-3A	11.5
One 400 Watt S51 HPS Lamp 1230-93U-5K (S400MLTAC4M500K)	120 or 208 or 240 or 277	3.90 2.25 1.95 1.70	465	56	240	0051594ВН	HPS-400-3A	15.5
1230-33S-5K (S40048TAC5M500K)	480	1.00	465	48	300	0051422MF	HPS-400-3A	16.5
One 1000 Watt S52 HPS Lamp 1230-97S-5K (S1000MLTAC5M500K)	120 or 208 or 240 or 277	9.5 5.5 4.8 4.1	1100	26	525	0052776ВН	HPS-1000-4B	27.5
1230-57S-5K (S100048TAC5M500K)	480	2.4	1100	26	525	0052776ВН	HPS-1000-4B	27.5

**NOTE:** Substitute suffix "500" or "5K" with a "700" for a core & coil kit with fixed mounting feet.

(1) Without mounting brackets.



# MAGNETEK • UNIVERSAL HID CORE & COIL BALLAST REPLACEMENT KITS - 5/1

For Metal Halide Lamps. Can also be used with mercury vapor lamps as indicated. Kits contain: Core & coil, capacitor, ignitor (as required) and set of adjustable mounting feet. Capacitors and ignitors available under separate catalog numbers. 60Hz ● -20°F Min. Start Temp. ● Individually Boxed



Replacement Kit Catalog Number	Line oltage	Max. Line Amps.	Input Watts	Capacitor Sp MFD	ecifications AC	Separate Capacitor Catalog No.	Separate Ignitor Catalog No.	Kit Weight (Lbs.)
One 70 Watt M85 Metal Halide I 11310-281-5	120 or 208 or 240 or 277	1.70 1.04 .87 .78	95	8	300	0051411ВН	MH-70-3B	4.25
One 70 Watt M98 or One 75 Wat	ntt M101 Metal Halid 120 or 208 or 240 or 277	e Lamp   1.70   1.04   .87   .78	95	8	300	0051411BH	MH-100-3A	4.25
One 100 Watt M90 or One 100 11310-90-5 (M100MLTLC3M500K)	Watt M92 Metal Hal 120 or 208 or 240 or 277	ide Lamp   2.30   1.30   1.10 .95	130	10	300	0051413BH	MH-100-3A	6.25
One 150 Watt M81 Metal Halide 11310-177-5	120 or 208 or 240 or 277	3.32 1.93 1.66 1.48	185	16	300	0051498ВН	MH-70-3B	7.25
One 175 Watt M57 or One 175	Watt M109 Metal Ho	alide or H39 Mercury	Lamp 210	10	400	0051184BH	Not Required	6.75
1130-31-5 (M17548TAC3M500K)	480	.51	210	10	400	0051184BH	Not Required	8.25
1130-91R-5K (M175MLTAC3M500K)	120 or 208 or 240 or 277	1.80 1.10 .90 .78	210	10	400	0051184BH	Not Required	6.75
One 250 Watt M58 or One 250 1130-92-5 (M250MLTAC3M500K)	Watt M103 Metal Ho 120 or 208 or 240 or 277	alide or M37 Mercury 2.60 1.58 1.30 1.12	Lamp 294	15	400	0051185ВН	Not Required	9
1130-32R-5K (M25048TAC4M500K)	480	.70	293	15	400	0051185BH	Not Required	9.75
One 400 Watt M59 Metal Halide of 1130-33R-5K (M40048TAC4M500K)	r One H33 Mercury Lo 480	mp   1.00	465	24	400	0052664BH	Not Required	12.75
1130-93R-5K (M400MLTAC4M500K)	120 or 208 or 240 or 277	4.00 2.30 2.00 1.70	455	24	400	0052664BH	Not Required	12.75
One 1000 Watt M47 Metal Halide 1130-57-5 (M100048TAC5M500K)	or One H36 Mercury I 480	.amp   2.30	1080	24	480	0052779ВН	Not Required	24
1130-97-5 (M1000MLTAC5M500K)	120 or 208 or 240 or 277	9.20 5.30 4.60 4.00	1080	24	480	0052779ВН	Not Required	24
One 1500 Watt M48 Metal Halide 1130-69R-5K (M150048TAC5M500K)	Lamp 480	3.50	1610	32	525	0051474ВН	Not Required	29.5
1130-99R-5K (M1500MLTAC5M500K)	120 or 208 or 240 or 277	14.00 8.00 7.00 6.00	1610	32	525	0051474BH	Not Required	29.5
NOTE: (1) Equipped with fixed	mounting feet.							

# MAGNETEK • UNIVERSAL HID CORE & COIL BALLAST REPLACEMENT KITS 594

For Mercury Lamps.

Kits contain: core & coil, capacitor and set of adjustable mounting feet.
Capacitors available under separate catalog numbers.
60Hz • -20°F Min. Start Temp. • Individually Boxed







Replacement Kit Catalog Number	Line oltage	Max. Line Amps.	Input Watts	Capacitor Spe MFD	ecifications AC	Separate Capacitor Catalog No.	Kit Weight (Lbs.)
One 100 Watt H38 Mercury Lamp 1030-90R-5K	120 or 208 or 240 or 277	1.05 .60 .52 .45	125	10	300	0051413ВН	4
One 175 Watt H39 Mercury Lamp 1030-91-5	120 or 208 or 240 or 277	1.80 1.10 .90 .78	205	17.5	300	0051417ВН	5.25
One 250 Watt H37 Mercury Lamp 1030-92-5 (H250MLTAC3M500K)	120 or 208 or 240 or 277	2.50 1.50 1.25 1.10	285	22.5	300	0051419ВН	6.75
One 400 Watt H33 Mercury Lamp 1030-33-5 (H40048TAC5M500K)	480	.97	454	35	300	0051421BH	9.63
1030-93-5	120 or 208 or 240 or 277	3.80 2.20 1.90 1.65	454	35	300	0051421ВН	9.63
One 1000 Watt H36 Mercury Lamp 1030-57-5 (H100048TAC5M500K)	480	2.30	1075	24	480	0052779ВН	19.5
1030-97-5	120 or 208 or 240 or 277	9.20 5.30 4.60 4.00	1075	24	480	0052779ВН	19.5
Two 400 Watt H33 Mercury Lamps <b>2030-13-5</b>	120	7.50	880	16	525	0051893BH	19.5
2030-17-5	277	3.25	880	16	525	0051893BH	19.5
2030-33-5	480	1.95	880	16	525	0051893BH	19.5

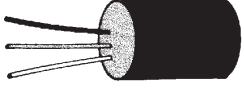
# **ADVANCE IGNITORS**

Available as direct replacements for service work. Should not be used with Magnetek/Universal ballasts.

Catalog	Lamp	Lamp
Number	Type	Watts
One, Two, Three, Four, Five or LI-551-H4 LI-501-H4 LI-533-H4 LI-571-H5	Six Lamps HPS HPS HPS HPS HPS	35 to 150 200 to 400 350 1,000



A ADVANCE



# MAGNETEK • UNIVERSAL ENCASED & POTTED HID BALLASTS (9)





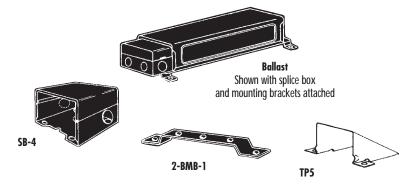
Enclosed in a fluorescent style ballast can. Quieter than open core & coils thus suitable for indoor applications. Built-in automatic resetting thermal protection. 60Hz



Lamp Watts/Type	Catalog Number	Line oltage	Max. Line Current Amps.	Input Watts	Min. Start Temp.	nits Per Carton	Weight/Carton (Lbs.)
One Lamp • High Pre	scura Sadium						
50 S68	12210-236CTC	120 or 277	1.40 .60	75	-40°F	4	36
70 S62	12210-237CTC	120 or 277	1.60 .70	97	-40°F	4	37
100 S54	12210-239CTC	120 or 277	2.10 1.00	125	-40°F	4	42
150 S55	12210-241CTC	120 or 277	2.80 1.20	185	-40°F	4	58
One Lamp • Metal Ho	alide or Mercury where shown 11210-236CTC	120 or 277	.64 .65	70	-20°F	4	44
70 M98	11210-506CTC	120 or 277	.78 .90	90	-20°F	4	44
100 M90	11210-239CTC	120 or 277	2.20 1.00	125	-20°F	4	44
175 M57 or H39	1110-245SCTC	120 or 277	1.75 .75	205	-20°F	4	56
250 M58 or H37	1110-246CTC	120 or 277	2.5 1.1	295	-20°F	4	70
400 M59 or H33	1110-247SCTC	120 or 277	3.9 1.7	460	-20°F	3	69
400 M59 or H33	1111-247SCTC	120 or 277	3.9 1.7	460	-20°F	4	56
One Lamp • Mercury 50 H46	1010-236RCTC	120 or 277	.60 .24	68	-20°F	4	36
75 H43	1010-238CTC	120 or 277	.82 .35	90	-20°F	4	38
100 H38	1010-239RCTC	120 or 277	1.05 .45	120	-20°F	4	39
175 H39	1010-245CTC	120 or 277	1.70 .70	198	-20°F	4	45
250 H37	1010-246CTC	120 or 277	2.40 1.05	285	-20°F	4	58
400 H33	1010-247SCTC	120 or 277	3.80 1.65	450	-20°F	4	74

# **ACCESSORIES FOR ENCASED & POTTED BALLASTS**

Catalog Number	Description
SB-4	Splice Box
2-BMB-1	Mounting Brackets (Set of 2)
TP5	Lead Wire covers



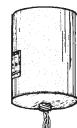
Available in other primary voltages. 120V • 60Hz • Individually Boxed







Lamp Watts/Type	Catalog Number	Line oltage	Max. Line Current Amps.	Input Watts	Min. Start Temp.	Case Length	Case Diameter	Weight Each (Lbs.)
One HPS Lamp • 150 S55	Normal Power Factor ● Built in St 1253-154	tarter 120	4.80	178	-40°F	8"	2 - 1/2"	5.0
One Mercury Lamp 50 H46	p ● High Power Factor 1050-35	120	.68	72	-20°F	12"	2 - 35/64"	6.5
75 H43	1050-36	120	.80	95	-20°F	12"	2 - 35/64"	6.5
100 H38	1050-10	120	1.05	122	-20°F	12"	2 - 35/64"	6.5
175 H39	1050-11	120	1.85	205	-20°F	12"	2 - 35/64"	6.5
250 H37	1050-12	120	2.70	305	-20°F	18"	2 - 35/64"	10.0









# MAGNETEK • UNIVERSAL OUTDOOR HID BALLASTS (9)

For Metal Halide and Mercury Lamps. 60Hz • -20°F Min. Start Temp. ● Individually Boxed



Lamp Watts/Type	niversal Number	Line oltage	Max. Line Current Amps.	Input Watts	Case Length	Case Diameter	Weight Each (Lbs.)	
One 400 M59 or H33	WP-1130-93	120 or 208 or 240 or 277	4.00 2.30 2.00 1.70	455	7"	6 1/2"	31	
Two 400 M59 or H33	WP-2130-73	120 or 240	8.00 4.00	910	11 3/8"	6 1/2"	50	
Two 400 M59 or H33	WP-2130-17	277 or 480	3.40 2.00	910	11 3/8"	6 1/2"	50	
	MB-200 MB-400	Optional Mountin Optional Mountin	Optional Mounting Bracket for One Lamp Ballast. (Not included with ballast) Optional Mounting Bracket for Two Lamp Ballast. (Not included with ballast)					



# ADVANCE HID CORE & COIL BALLASTS 571

For Low Pressure Sodium Lamps. 60Hz • -30°F Min. Start Temp.

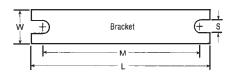


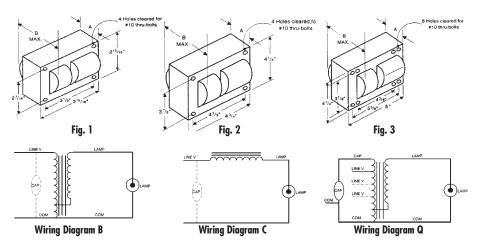


Catalog	utput	Current	Watts	Max Input	Nom. pen	Wiring		Di	mensions (In	choc)		Non-PCB	Capacitor	Dry Film	il Filled	Weight
Number	olts	Туре	Input	Current	Circuit .	Dia.	Fig.	A	B	Mfd	Min olts	Dia (In.)	Ht (In.)	val (In.)	Ht (In.)	(lbs.)
18 Watt Li	PS Lamp															
71A0201	120	HX-NPF HX-PFC	31 31	1.10 0.90	315 315	B B	] ]	0.70 0.70	2.1 2.1	20.0	120	- 1.25	- 2.75	-	-	2.5 3.0
71A0280	120/277	HX-NPF HX-PFC	30 30	0.98/0.43 0.90/0.40	315 315	Q Q	1 1	1.00 1.00	2.4 2.4	5.0	250	1.25	2.75	-	-	4.0 4.5
35 or 55 V	Vatt LPS Lam	p														
71A0450	120/240	HX-PFC	60/80	2.50/1.25	480	Q	1	2.25	3.5	14	240	1.50	2.75	-	-	8.0
71A04H0	120/220	HX-HPF	60/80	2.50/1.40	480	Q	1	2.25	3.5	14	240	1.50	2.75	-	-	8.0
71A0410	208	HX-HPF	60/80	1.45	480	Q	1	2.25	3.5	14	240	1.50	2.75	-	-	8.0
71A0430	277	HX-HPF	60/80	1.10	480	Q	1	2.25	3.5	14	240	1.50	2.75	-	-	8.0
71A0440	480	R-PFC	60/80	0.60	480	C	1	2.00	3.3	3.3	480	-	-	1.25	2.65	7.0
90 Watt LF	PS Lamp															
71A0550	120/240	HX-PFC	125	4.0/2.0	500	Q	2	1.75	3.3	17.5	280	1.50	3.65	-	-	11
71A05H0	127/220	HX-HPF	125	3.9/2.25	500	Q	2	1.75	3.3	17.5	280	1.50	3.65	-	-	11
71A0560	208/277	HX-HPF	125	2.3/1.7	500	Q	2	1.75	3.3	17.5	280	1.50	3.65	-	-	11
71A0540	480	R-PFC	125	0.90	480	C	2	1.75	3.3	5.0	480		-	1.25	2.65	11
135 or 180 71A0750	<b>Watt LPS La</b>	IMIP HX-PFC	178/220	5.2/2.6	680	Q	3	2.40	4.0	16.0	330		-	1.50	3.65	16.8
71A07H0	127/220	HX-PFC	178/220	5.0/2.8	680	Q	3	2.40	4.0	16.0	330	-	-	1.50	3.65	16.8
71A0760	208/277	HX-PFC	178/220	2.9/2.3	680	Q	3	2.40	4.0	16.0	330	-	-	1.50	3.65	16.8
71A0740	480	R-PFC	178/220	1.30	680	С	3	2.40	4.0	16.0	330	-	-	1.50	3.65	16.8

# **BRACKET DIMENSIONS**

Ballast Dimensions Fig.	L	W	M	S
1 2 3	5.1	1.00	4.50	0.25
	6.5	1.25	5.75	0.28
	7.8	2.75	6.13	0.25





#### **ADVANCE HID CORE & COIL BALLAST REPLACEMENT KITS 1?**®

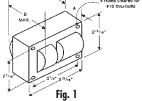
For High Pressure Sodium Lamps.

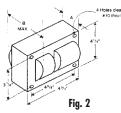
Kits contain: Core & coil, capacitor, mounting brackets and hardware. 60Hz • -40°F Min. Start Temp.

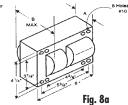


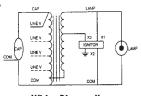


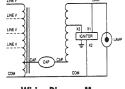
												Non-PCB	Capacitor			
Catalog Number	Input olts	Current Type	Watts Input	Max Input Current	Nom. per Circuit .	n Wiring Dia.	Fig.	Dir A	nensions (In B	ches) Mfd	Min olts	Dia (In.)	Ht (In.)	Dry Film val (In.)	il Filled Ht (In.)	Weight (lbs.)
50 Watt S	68 HPS Lamp															
71A7801-0	120/277	HX-HPF	66	1.0/0.5	125	K	1	1.0	2.2	5.0	300	1.25	2.90	-	-	3.5
70 Watt S	62 HPS Lamp															
71A7971-0	120/208/ 240/277	HX-HPF	91	1.4/0.9/ 0.8/0.7	120	K	1	1.5	3.1	7	300	1.25	2.90	-	-	5.5
100 Watt 9	554 HPS Lamp															
71A8071-0	120/208/ 240/277	HX-HPF	130	2.2/1.3/ 1.1/0.9	120	K	1	2.0	3.6	10	280	1.50	2.90	-	-	7.5
150 Watt	S55 HPS Lam	)														
71A8172-0	120/208/ 240/277	HX-HPF	188	2.8/1.6/ 1.4/1.3	120	K	1	2.5	3.8	14	280	1.50	2.90	-	-	7.5
71A8142-0	<b>01D</b> 480	HX-HPF	188	0.7	120	K	1	3.0	4.3	14	280	1.50	2.90	-	-	9.0
250 Watt 9	550 HPS Lamp															
71A8271-0	120/208/ 240/277	CWA	295	2.5/1.5/ 1.3/1.1	185	М	2	1.8	3.5	35	240	1.75	3.75	-	-	11.0
71A8241-0	<b>01D</b> 480	CWA	310	0.7	185	M	2	1.8	3.5	35	240	1.75	3.75	-	-	11.0
400 Watt	S51 HPS Lam	)														
71A8473-0	120/208/ 240/277	CWA	464	3.8/2.2/ 1.9/1.7	190	М	2	2.3	4.0	55	240	1.75	5.15	-	-	13.5
71A8443-0	<b>001D</b> 480	CWA	464	1.0	190	М	2	2.6	4.3	55	240	1.75	5.15	-	-	15.0
1000 Wat	t S52 HPS Lan	np														
71A8773-0	120/208/ 240/277	CWA	1100	9.5/5.5/ 4.8/4.2	435	M	8a	3.8	5.8	26	525	-	-	1.75	5.25	28.0
71A8743-0	<b>001</b> <sup>(1)</sup> 480	CWA	1100	2.8	435	M	8a	3.8	5.8	26	525		-	1.75	5.25	28.0
NOTE: All u	se LI-551-H4 ignito	or. <sup>(1)</sup> Equi	pped with a	n auto-reset the	rmal protec	tor to pre	ent igni	tor from ov	erheating in	the event	of lamp fail	Jre.			·	











Wiring Diagram K

Wiring Diagram M



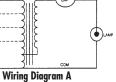
#### **ADVANCE HID CORE & COIL BALLAST REPLACEMENT KITS** *1***?**®

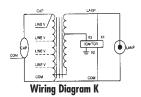
For Metal Halide Lamps.
Kits contain: Core & coil, capacitor, mounting brackets and hardware.
60Hz ● -20° F Min. Start Temp.

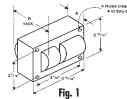


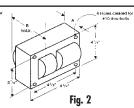


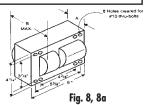
												•				
Catalan	lame of	Command	Motte	May beaut	None no	18/5::		D:-		اممطم		Non-PCB	Capacitor	Dry Film	:1 F:11 a d	Wo: abs
Catalog Number	Input olts	Current Type	Watts Input	Max Input Current	Nom. pe Circuit .		Fig.	A DII	nensions (In B	icnes) Mfd	Min olts	Dia (In.)	Ht (In.)	val (In.)	il Filled Ht (In.)	l Weight (lbs.)
70 Watt M	98 (Medium I		M143 M	H Lamp												
71A5292-0		Jusej VI I	WI 75 IV	ii Euliip												
/ IAJZ7Z-U	120/208/	HX-HPF	90	1.9/1.0/	255	K	1	1.5	2.8	8.0	280	1.25	2.90			5.0
	240/277			0.9/0.8												
100 Watt /	M90 or M140	MH Lar	np													
71A5390-0			•													
7 1113070	120/208/	HX-HPF	129	2.6/1.5/	280	K	1	1.5	2.9	12	280	1.50	2.90	-	-	5.5
	240/277			1.3/1.2												
175 Watt /	M57 or H39;	or 150 V	att M10	7 MH Lamp												
71A5570-0	01D															
	120/208/	CWA	210	1.8/1.1/	305	A	1	2.5	3.7	10	400	1.50	3.75	-	-	6.8
	240/277			0.9/0.8										-	-	
71A5540-0	<b>01D</b>   480	CWA	210	0.5	305	А	1	2.5	40	10	400	1.50	3.75	_		8.5
			210	0.5	303	А	ı	2.5	40	10	400	1.50	3.73	-	-	0.5
	N58 or H37 N	AH Lamp														
71A5770-0		CHA	005	0.5 /3.4 /	000		•	, ,		1.5	400	1.75	0.75			0.0
	120/208/ 240/277	CWA	295	2.5/1.4/ 1.3/1.1	300	A	2	1.5	3.0	15	400	1.75	3.75	-	-	9.0
71A5740-0	· '			1.0/ 1.1												
/ IA3/4U-U	480	CWA	295	0.7	315	A	2	1.7	3.1	15	400	1.75	3.75	-	-	10.0
400 Watt	M59 or H33 I															
		MIT LUMP														
71A6071-0	120/208/	CWA	458	4.0/2.3/	300	A	2	2.2	4.0	24	400	1.75	5.15		_	11.5
	240/277	CVA	130	2.0/1.7		_ ^	L	L.L	1.0	21	100	1.75	3.13			11.5
71A6041-0	001D															
	480	CWA	462	1.0	300	Α	2	2.2	4.0	24	400	1.75	5.15	-	-	12.0
1000 Wati	M47 or H36	MH Lam	p													
71A6572-0	01 <sup>(3)</sup>		•													
	120/208/	CWA	1080	9.0/5.2/	430	A	8	2.8	4.5	24	480	-	-	1.75	3.90	21.0
	240/277			4.5/3.9												
71A6542-0		CIMA	1000	0.0	400		0	0.0	4.5	0.4	400			1.75	0.00	01.0
	480	CWA	1080	2.2	430	A	8	2.8	4.5	24	480	-	-	1.75	3.90	21.0
1500 Watt	M48 MH Lar	np														
71A6772-0			.,	105 (5 )	,				<u>, .</u>							0.5.1
	120/208/ 240/277	CWA	1605	13.5/7.8/ 6.8/5.9	450	A	8a	4.1	6.1	32	525	-	-	2.00	3.90	30.0
74.000.00	· '			0.0/ 5.9												
71A5540-0	1 <b>01</b> (3)   480	CWA	1625	3.4	450	A	8a	4.2	6.2	32	525	-	_	2.00	3.90	31.0
NOTE STATE					130	А	- u	1.2	J.2	32	323			2.00	5.70	01.0
NOTE: (1) U	ses LI-533-H4 ign	itor. <sup>(3)</sup> UL	Class N 20	10° €.												











#### **ADVANCE HID CORE & COIL BALLAST REPLACEMENT KITS .8**2

For Mercury Lamps.
Kits contain: Core & coil, capacitor, mounting brackets and hardware.
60Hz ◆ -20° F Min. Start Temp.





												Non-PCB	Capacitor			
Catalog Number	Input olts	Current Type	Watts Input	Max Input Current	Nom. pen Circuit .	Wiring Dia.	Fig.	Dir A	nensions (In B	ches) Mfd	Min olts	Dia (In.)	Ht (In.)	Dry Film val (In.)	il Filled Ht (In.)	Weight (lbs.)
	H38 MV Lamp	٠,					J									
71A2571-0	001D   120/208/   240/277	CWA	125	1.1/0.6/ 0.6/0.5	250	A	1	1.5	2.8	10	280	1.50	2.90	-	-	5.0
175 Watt	H39 MV Lamp	)														
71A3072-0	001D   120/208/   240/277	CWA	205	1.9/1.1/ 1.0/0.9	215	А	1	1.8	2.9	17.5	240	1.50	3.75	-	-	5.0
71A3042-	<b>001D</b> 480	CWA	200	0.5	240	А	1	1.8	2.9	17.5	240	1.50	3.75	-	-	5.5
250 Watt	H37 MV Lamp															
71A3572-0	001D   120/208/   240/277	CWA	285	2.5/1.4/ 1.3/1.1	250	A	1	2.5	3.7	22.5	280	1.75	3.75	-	-	7.5
71A3542-0	001D 480	CWA	285	0.7	250	А	1	2.3	3.4	22.5	280	1.75	3.75	-	-	7.0
400 Watt	H33 MV Lamp	)														
71A4071-0	001D   120/208/   240/277	CWA	454	3.9/2.2/ 2.0/1.7	245	A	2	1.8	3.3	35	240	1.75	5.15	-	-	10.5
71A4041-0	<b>001D</b> 480	CWA	454	1.0	245	А	2	1.7	3.2	35	240	1.75	5.15	-	-	10.0
1000 Wat	t H36 MV Lam	ıp														
71A5070-0	001   120/208/   240/277	CWA	1075	9.8/5.6/ 4.9/4.3	425	A	8	2.9	4.8	24	450	-	-	1.75	3.90	25.0
71A5040-0	<b>001</b>   480	CWA	1080	2.3	425	А	8	2.9	4.8	24	450	-	-	1.75	3.90	25.0

#### **BRACKET DIMENSIONS**

Ballast Dimensions Fig.	L	W	М	S
1	5.1	1.00	4.50	0.25
2	6.5	1.25	5.75	0.28
8	7.8	2.75	6.13	0.25

Wiring Diagram A

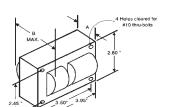
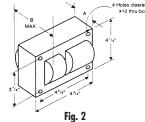
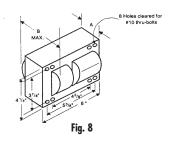


Fig. 1



Bracket





#### **BALLAST WARRANTY INFORMATION**

This compilation of information is presented only for the convenience of our customers, and not as a statement or affirmation of the manufacturers warranty policies. Warranties are offered by the manufacturers, not by Interstate Electric (Interstate), and Interstate is in no way responsible for the performance or suitability of any warranty. Interstate's role in the warranty process is only to facilitate ballast exchanges for the convenience of the contractor and the manufacturer. The full statements of the warranties can usually be found in the manufacturers specific product catalogs. Terms and conditions of the warranties are subject to change without notice.

Interstate Electric is a warranty service station for most of the ballasts shown in this catalog and is authorized to give a one-for-one exchange for defective ballasts still under warranty. Interstate can usually give over-the-counter exchanges. However, some manufacturers, for some product lines, for particular installations or quantities, require the old ballasts to be returned for testing or evaluation before an exchange can be given. Some manufacturers return ballasts that test good rather than provide an exchange.

Most ballast manufacturers warranty their products against failure due to defects in material or workmanship if the ballasts have been installed and operated in accordance with the applicable provisions of the National Electric Code and the Underwriters Laboratories standards for safety. Most also require that the ballasts have been grounded and must not have been subjected to abnormal stresses including being operated at temperatures in excess of 90 degrees C. The manufacturers, in general, state that their liability on any claim of any kind shall in no case exceed the cost of the ballast which gives rise to the claim. They make no claim as to the suitability of their products and reserve the right to be the sole judge if the ballast is in fact defective. Some specific warranty qualifying and handling conditions are given below.

- MAGNETEK JEFFERSON & UNIVERSAL FLUORESCENT SIGN BALLASTS are warranted for 2 years from date of manufacture. A date code is both stamped on the ballast case and printed on the white lead wire signifying the month and year of manufacture. Example: E96 denotes May, 1996.
- 2. MAGNETEK UNIVERSAL & TRIAD FLUORESCENT FIXTURE BALLASTS have the following warranty periods from date of manufacture:

Magnetic	. 2 ye	ears
Watt-Reducer (efficient magnetic)		
Universal-Plus (hybrid electronic/magnetic)		
Electronic	. 5 ye	ears

A date code is stamped on the ballast case to identify the month and year of manufacture. Example: H96 denotes August, 1996.

Labor allowances may be allowed to the contractor replacing defective ballasts. In

these cases the contractor must return the ballasts directly to MagneTek for both the allowance and the replacement unit. Please call MagneTek at 1-800-BALLAST to arrange for replacement and labor authorization directly from MagneTek. Interstate is not involved in these labor allowance and exchange situations.

MagneTek's Technical Engineering Service (TES) program applies to Universal and Triad electronic ballasts. TES provides technical and warranty support. Contractors must return the ballast directly to MagneTek for both replacement and possible labor allowance. Please call MagneTek at 1-800-BALLAST and ask for TES to arrange for replacement and labor authorization directly from MagneTek. Interstate is not involved in these labor allowance and exchange situations. Any of these electronic ballasts returned to Interstate for replacement only will be forwarded to MagneTek for testing and approval. Replacements can be given only after

- 3. MAGNETEK UNIVERSAL H.I.D. BALLASTS are warranted for 2 years from date of manufacture and have a date code stamped on the ballast. The date code for core and coil ballasts is prefixed with the meaningless letter "R" The late code indicates the month of the state of the month of the state of the month of the state of the sta code indicates the month and year of manufacturer. Example: B95D denotes the year 1995 and the month April; B96J denotes 1996, October. The date code for encased and potted ballasts are different. The year of manufacture is preceded with a letter indicating the month of manufacture. Example: A95 denotes January, 1995.
- 4. OSRAM-SYLVANIA (OSI) QUICKTRONIC ELECTRONIC FIXTURE BALLASTS are warranted to the purchaser for up to 60 months in an Osram approved installation. A serial number is stamped on the end of the ballast which contains the year and week of manufacture in the first four digits. Example: 95410538S2 denotes 1995, 41st week. Contractors contemplating an OSI ballast installation should contact Interstate or phone OSI at 1-800-LIGHTBULB to determine the warranty period allowed for that installation. The period will depend on operating conditions.

Contractors wishing to return ballasts for replacement should call or write OSI to obtain an authorization. Ballasts must then be returned to OSI for testing and replacement. Ballasts that test good will be returned to the contractor. OSI will sometimes reimburse the purchaser reasonable and customary labor charges to install the replacement ballast. Any labor charges must be approved by OSI prior to installation. Contact OSI at 1-800-LIGHTBULB or write to: OSI; ELS Quality Dept.: 105 Andover Street; Danvers, MA 01923.

5. AD ANCE BALLASTS have the following limited warranty periods from the date of manufacture:

Electronic (all)	5 years
	5 years
Mark III Energy-Saver & E-PAK 34	3 years
Standard Magnetic Fluorescent	2 years
Fluorescent & HID Sign Ballasts	2 years
High Intensity Discharge (HID)	2 years

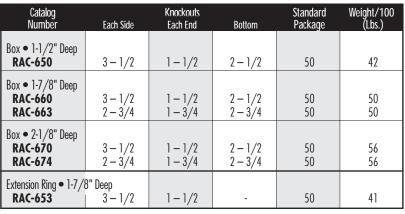
RACO

**RAC-653** 

#### 4" X 2-1/8" STEEL UTILITY BOXES & COVERS

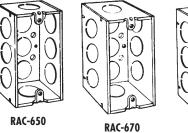
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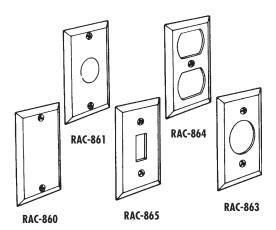
Galvanized Steel • Non-Weatherproof



Cover • Raised 1/4" RAC-860 RAC-863 RAC-861 RAC-864 RAC-865	Blank	100	11
	Single Receptacle	25	10
	With 1/2" Knockout	25	11
	Duplex Flush Receptacle	100	9
	One Toggle Switch	100	10







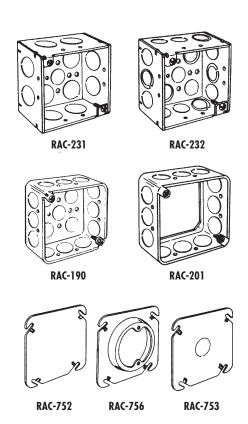
#### 4" SQUARE STEEL BOXES & COVERS

Galvanized Steel • Non-Weatherproof

Catalog Number	Each Side	Knockouts Each End	Bottom	Standard Package	Weight/100 (Lbs.)
Box ● 1-1/2" Deep RAC-190 RAC-192	3 – 1/2 2 –3/4	3-1/2 2-3/4	5 – 1/2 3 – 1/2 and 2 – 3/4	50 50	66 66
RAC-189 (1)	2-1/2 and 1-3/4	2-1/2 and 1-3/4	3 - 1/2 and $2 - 3/4$	50	66
Box ◆ 2-1/8" Deep RAC-231	2-3/4	2-3/4	3 – 1/2 and 2 – 3/4	25	82
RAC-232 (1)	2 -1/2 and 1 -3/4	2 -1/2 and 1 -3/4	3-1/2 and $2-3/4$	25	82
Extension Ring • 1-1/ RAC-201	2" Deep   3 – 1/2	3-1/2	-	50	43
NOTE: (1) Eccentric K	nockouts.				

 $(U_{\underline{l}})$ 

Cover ● Raised 1/4" <b>RAC-752</b>	Flat, blank	100	31
RAC-756	Center blanked with tapped ears Flat with 1/2" Knockout	50	24
RAC-753		50	31

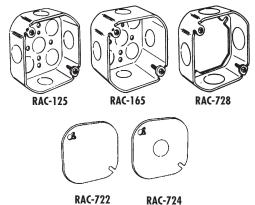


#### 4" OCTAGON STEEL BOXES & COVERS \*\*

Galvanized Steel • Non-Weatherproof

Catalog Number	Each Side	Knockouts Each End	Bottom	Standard Package	Weight/100 (Lbs.)
Box ● 1-1/2" Deep <b>RAC-125</b>	1-1/2	1 – 1/2	5 – 1/2	50	52
Box ● 2-1/8" Deep RAC-165	1-1/2	1-1/2	5 – 1/2	25	62
Extension Ring • 1-1/ RAC-128	2" Deep   1 – 1/2	1-1/2	-	25	37

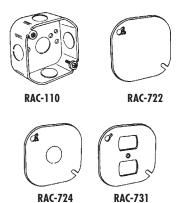
Cover • Raised 1/4" RAC-722 RAC-724	Flat, blank	50	26
	Flat with 1/2" Knockout	50	27



#### 3-1/2" OCTAGON STEEL BOXES & COVERS (9)

Galvanized Steel • Non-Weatherproof

Catalog Number	Each Side	Knockouts Each End	Bottom	Standard Package	Weight/100 (Lbs.)
Box ● 1-1/2" Deep <b>RAC-110</b>	1 – 1/2	1 – 1/2	1 – 1/2	50	42
Cover • Raised 1/4" RAC-722 RAC-724 RAC-731		ank h 1/2" Knockout Receptacle	100 25 50	18 18 18	



## WEATHERPROOF OUTLET BOXES & COVERS (9)

Die cast aluminum with powder coated silver finish. MUL-30480A/30482/30486 are lever switch covers pre-assembled with appropriate switch.

Catalog Number	HL No. utlet Holes	IDS utlet Holes Dia.	Finish	Standard Package	weight/100 (Lbs.)
One - Gang Box BEL-5320-0 BEL-5324-5 BEL-5321-0 BEL-5330-0	3 3 4 4	1/2 3/4 1/2 3/4	Gray Gray Gray Gray	25 25 25 25 25	64 64 70 64
One - Gang Extension <b>BEL-5400</b>	Ring 4	1/2	Gray	25	136
Two - Gang Box BEL-5335-0 BEL-5343-0	4 4	1/2 3/4	Gray Gray	10 10	110 110
One - Gang Cover BEL-5173-0 BEL-5712-5 BEL-5155-0	5173-0 Blank 5712-5 Duplex Receptacle, Self closing lid		Gray Gray Gray	100 25 25	7 45 32
MUL-30480A MUL-30482 MUL-30486	With Switch, Single Pole, 10A/125V With Switch, Single Pole, 20A/120-277V With Switch, Double Pole, 20A/120-277V		Gray Gray Gray	25 25 25	43 50 60
Two - Gang Cover BEL-5175-0	Blank		Gray	25	15



BEL-5320-0

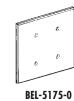




BEL-5155-0

BEL-5321-0





BEL-5400

BEL-5173-0

Mulberry



BEL-5712-5



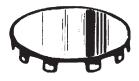
MUL-30480A, MUL-30482, MUL-30486

#### **CONDUIT PLUGS & SEALS**



Catalog Number	Description	Put p			
Closure Plugs RAC-5269 RAC-5270	1/2" Slotted Plug, Aluminum, Gray 3/4" Slotted Plug, Aluminum, Gray	100 50			
Snap in Seals (1) RAC-1042 RAC-1043 RAC-1044 RAC-1046	1/2" Knockout Seal 100 3/4" Knockout Seal 1" Knockout Seal 1-1/2" Knockout Seal 50	100 50			
NOTE: (1) Not UL listed.					





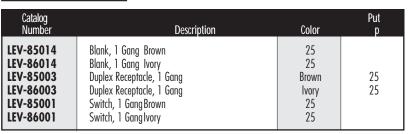
**Slotted Plug** 

**Knockout Seal** 

## LEVITON.

RACO

#### **PLASTIC WALLPLATES**





LEV-85014 LEV-86014



LEV-85003 LEV-86003



LEV-85001 LEV-86001

**728** 

#### **CONDUIT BENDERS**

Catalog	Description	se	Put	Weight
Number		Handle	p	(Lbs.)
THO-18-701	Bender for 1/2" EMT	THO-18-719	1	4.1
THO-18-702	Bender for 3/4" EMT, 1/2" Rigid	THO-18-719	1	4.2
THO-18-703	Bender for 1" EMT, 3/4" Rigid	THO-18-720	1	6.5
THO-18-719	Bender Handle 3/4" x 38"	-	]	3.6
THO-18-720	Bender Handle 1" x 44"		]	6.0



Handle

#### CIRCUIT BREAKERS (9)

Catalog Number	Description	Put p
SQD-Q0115	Single Pole, 15A, 120/240VAC, 1 Space Required	1
SQD-Q0120	Single Pole, 20A, 120/240VAC, 1 Space Required	1
SQD-Q0130	Single Pole, 30A, 120/240VAC, 1 Space Required	1







EEYED



**INSULATED BUSHINGS** 

Catalog Number	Description	Color	.D.	I.D.	Mfgr.	Put p
EAG-28 EAG-77	Plastic with Locknut Rubber Snap-In	Black Black	1/2 KO 1/2 KO	1/2 1/2	Eagle Eagle	50 50
UB-875 UB-1000 SB-250-2 SB-375-4 SB-500-6 SB-625-8 SB-750-8 SB-875-11	Plastic Snap-In Plastic Snap-In Plastic Snap-In Plastic Snap-In Plastic Snap-In Plastic Snap-In Plastic Snap-In Plastic Snap-In	Black Black Black Black Black Black Black Black	1/2 K0 3/4 K0 .250" .325" .500" .625" .750"	- 1/8 1/4 3/8 1/2 1/2 11/16	Heyco Heyco Heyco Heyco Heyco Heyco Heyco Heyco Heyco	500 500 500 500 500 500 500 500



EAG-28

EAG-77



**UB Bushing** 



**SB Bushing** 

#### STRAIN RELIEF BUSHINGS

Black molded nylon. 105°C. Max. Temp.







Catalog Number	Cable Type	Cable Conductors	(A) Min. Hole Dia.	(B) No Rotation	(C) Max. Thickness	(D) Body Length	Put p
SR-2P-4 SR-3P-4 SR-6P-4	SPT-1 SPT-1 SJ, SJT & SJO	18/2 18/2 18/2	.375 .437 .625	.345 .390 .550	.062 .040 .125	.406 .406 37/64	100 100 100
SR-6N3-4	SJ, SJT & SJO	16/2, 18/3, 14/2, 16/3 or 18/4	.625	.550	.062	37/64	100
SR-6P3-4		16/2, 18/3, 14/2,	.625	.550	.125	37/64	100
SR-8P-2	S & ST	14/2, 14/3 or 12/2	.875	.840	.125	51/64	100
HEY-R29	Adjustable Hand Pliers for Heyco Strain Relief Bushings that assemble into holes up to 7/8" Diameter.						

#### **INSULATED CABLE BUSHINGS**

For protecting and insulating GTO-15 cable passing through panels. ABS-CASINO casino bushing is a slim profile borosilicate glass bushing that may be used to pass GTO cable, GTO and GTO cover when used in dry or damp locations. When used as a neon housing it may be used in wet locations. Casino bushing will accommodate up to a 15mm electrode. Requires 1" drilled hole. 3/4" electrode opening. UL Recognized (UR) for dry locations.

Catalog Number	Description	Color	Fits pening	Length	Mfgr.	Put p
MUL-20 MUL-20-1 MUL-30	Glazed Porcelain w/Lockring Spring for MUL-20 Glazed Porcelain w/Lockring	White - White	1/2 KO 3/4 KO	1-1/8" - 1-5/16"	Multi Multi Multi	100 100 100
FMS-18 FMS-18-WASH FMS-18-CLIP	Glass w/Springclip & Washer Replacement Washer for FMS-18 Replacement Clip for FMS-18	Clear	3/4"	4"	FMS FMS FMS	100 100 100
ABS-CASINO	Glass w/Metal Ferrule	Clear	1"		Absko	25
WES-BU-1/2	Un-Glazed Porcelain w/Locknut	White	1/2 KO		Westrim	100

MULTI-ELECTRIC ABSKO FMS







MUL-30

**ABS-CASINO** 

FMS-18



## **QUICK-CONNECT THROUGH-WALL CABLE INSULATORS**

For protecting and insulating GTO-15 cable passing through walls. Black thermoplastic. Refer to Flexible Conduit section for 3/8" non-metallic Greenfield flex.

Catalog Number	Description	Put p
DIV-101-A DIV-101-B DIV-101-C DIV-101-D DIV-101-E DIV-101-F	2" Quick-Connect Bushing 4" Quick-Connect Bushing 6" Quick-Connect Bushing 8" Quick-Connect Bushing Quick-Connect Bushing Quick-Connect 1/2" Spacer Quick-Connect 3/8" Greenfield Coupling	100 50 50 50 100 100





3/8" Greenfield Coupling

Selecta Clip

#### **TEST CLIPS**

Insulators sold separately.

<b>Catalog</b> Number	Description	Clip Length	<b>Jaw</b> pening	Put p
SEL-SC27-BX SEL-SC29B-BX SEL-SC29R-BX	Test Clip Insulator for #27 Black Insulator for #27 Red	2-7/16"	5/8"	10 10 10
SEL-SC45-BX SEL-SC47B-BX SEL-SC47R-BX	Pee Wee Test Clip Insulator for #45 Black Insulator for #45 Red	1 - 1/2"	5/16"	10 10 10
SEL-SC48B-BX SEL-SC49B-BX SEL-SC49R-BX	Alligator Test Clip Insulator for #48 Black Insulator for #48 Red	2"	1/2"	10 10 10
SEL-SC85-BX SEL-SC87B-BX SEL-SC87R-BX	Crocodile Test Clip Insulator for #85 Black Insulator for #85 Red	2 - 1/8"	5/16"	10 10 10



SEL-SC27 Shown with Insulator



SEL-SC48B Shown with Insulator



SEL-SC45 Shown with Insulator



SEL-SC85 Shown with Insulator

#### **CABLE TIES**

Natural color. Many other sizes and colors also available.

Catalog Number	Description	Color	Length	Max. Bundle	Put p
IDE-15-609	Plain Head Nylon Miniature Cable Tie	Natural	4"	7/8"	100

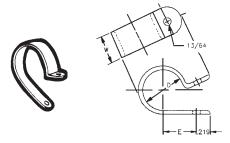




#### **NYLON CLAMPS**

With hole for #10 screw. Natural color. -40°F to 176°F

Catalog Number	D	Dimensions W	E	Put p
THO-12-104	1/4"	3/8"	13/32"	100
THO-12-105	5/16"	3/8"	29/64"	100
THO-12-106	3/8"	3/8"	15/32"	100
THO-12-108	1/2"	3/8"	35/64"	100
THO-12-110TB	5/8"	1/2"	21/32"	100



#### **CABLE SUPPORTS**

Used to run GTO-15 cable in neon installations and provide a wire standoff distance in accordance with the National Electric Code (NEC).

Catalog Number	Description	Length	Put p	Weight/100 (Lbs.)
WES-CSMS	White Porcelain, Machine Screw Mounted	2 - 1/2"	100	17



## **ELECTRICAL CONNECTOR BODIES, PLUGS & OUTLETS** (9)





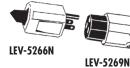


T&B



Catalog Number	Description	Color	Configuration	NEMA	Rating	Mfgr.	Put p
EAG-84	90° Rubber Plug	Black	2 Pole, 2 Wire	1-15P	15A/125V	Eagle	25
LEV-5266N	Nylon Plug	White	2 Pole, 3 Wire, U-Ground	5-15P	15A/125V	Leviton	10
LEV-5269N	Nylon Connector Body	White	2 Pole, 3 Wire, U-Ground	5-15R	15A/125V	Leviton	10
LEV-113	Rubber Plug	Black	2 Pole, 3 Wire, U-Ground	5-15P	15A/125V	Leviton	10
LEV-515CR	Rubber Connector Body	Black	2 Pole, 3 Wire, U-Ground	5-15R	15A/125V	Leviton	10
LEV-5320-ICP	Duplex Receptacle <sup>(1)</sup>	Ivory	2 Pole, 3 Wire, U-Ground	5-15R	15A/125V	Leviton	10
KUL-227-B	Phenolic Snap-in Outlet	Black	2 Pole, 3 Wire, U-Ground	5-15R	15A/125V	Kulka	100/500
LEV-5362-I	Duplex Receptacle <sup>(2)</sup>	Ivory	2 Pole, 3 Wire, U-Ground	5-20R	20A/125V	Leviton	10
EAG-2473	Armored Nylon Twistlock Plug	Yellow	2 Pole, 3 Wire, Grounded	L5-15P	15A/125V	Eagle	10
EAG-2493	Armored Nylon Twistlock Body	Yellow	2 Pole, 3 Wire, Grounded	L5-15R	15A/125V	Eagle	10









**KUL-227** 

LEV-5320-ICP





NOTE: (1) Push-In and Side Wired. (2) Back and Side Wired.







EAG-2473

EAG-2493

LTV

picoma

# Since 1946

EMT CONDUIT (9)

Inch marked w/guide lines. Internal knurling to reduce friction. Sold by the foot in 10' lengths.

Catalog Number	.D.	I.D.	Wall	Feet Per Bundle	Weight/100 Ft. (Lbs.)
EMT-1/2	.706	.622	.042	100	30
EMT-3/4	.922	.824	.049	100	47



#### **EMT CONDUIT TUBING CUTTER**

Suitable for cutting EMT conduit to 1-1/8" O.D. One spare cutting wheel included.

Catalog Number	Description	Mfgr.
IMP-TC1000	Tubing Cutting Tool	Imperial
IMP-75015	Replacement Cutter Wheel	Imperial



#### **RIGID CONDUIT**

Galvanized steel with coupling on one end. Sold by the foot in 10' lengths.

Catalog Number	.D.	I.D.	Threads Per Inch	Feet Per Bundle	Weight/100 Ft. (Lbs.)
RIG-1/2	.840	.622	14	100	80.3
RIG-3/4	1.050	.824	14	50	106.4
RIG-1	1.315	1.049	11.5	50	154.4



#### **RIGID CONDUIT NIPPLES**

High Quality • Galvanized Steel

Catalog Number	Conduit Size	Length	Put p	Weight/100 (Lbs.)
PIC-1/2XCLO PIC-1/2X1.5 PIC-1/2X2 PIC-1/2X2.5 PIC-1/2X3 PIC-1/2X3.5 PIC-1/2X4 PIC-1/2X5	1/2 1/2 1/2 1/2 1/2 1/2 1/2 1/2	1" 1.5" 2" 2.5" 3" 3.5" 4" 5"	25 25 25 25 25 25 25 25 25	(Lbs.)  6  8  12  15  19  22  26  33
PIC-1/2X6 PIC-1/2X8 PIC-3/4XCLO	1/2 1/2 3/4	6" 8" 1"	25 25 25	40 54 9

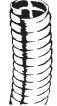


#### **FLEXIBLE CONDUIT**

Catalog	Conduit	Description	Min. Bend	Put	Weight/100 Ft.
Number	Size		Radius	p	(Lbs.)
FLX-3/8A	3/8	Aluminum Flex	2"	100'	7.0
FLX-1/2A	1/2	Aluminum Flex	3"	100'	9.5
FLX-3/4A	3/4	Aluminum Flex	4"	100'	13.5
SPI-NMG-3/8	3/8	Non-Metallic Greenfield, 10mm	2"	50'	5.0
LT-3/8	3/8	Liquid Tight Flex	4"	100'	21.0
LT-1/2	1/2	Liquid Tight Flex	6.5"	100'	22.0



**Liquid Tight Flex** 



**Aluminum Flex** 



ALFLEX Spiraduct inc.

Non-Metallic Greenfield

#### **THREADED PIPE CONDUIT**

Galvanized steel.

Catalog	Conduit	Length	Put	Weight/100
Number	Size		p	(Lbs.)
THR-1/2	1/2	36"	15'	85
THR-3/4	3/4	36"	15'	110



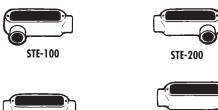
#### **ALUMINUM CONDUIT BODIES • CONDULETS**

Die cast copper-free aluminum. For use with rigid and intermediate conduit. Covers and gaskets sold separately except for STE-500/501.

Catalog Number	Size	Description	Mfgr.	Put p	Weight/100 (Lbs.)
STE-100 STE-101 STE-200 STE-201 STE-300 STE-301 STE-600 STE-601 STE-700 STE-701	1/2 3/4 1/2 3/4 1/2 3/4 1/2 3/4 1/2 3/4	Out Right Body Out Left Body Out Left Body Out Left Body Out End Body Out End Body Out End Body Out Back Body Out Back Body Out Back Body Out "T" Body Out "T" Body	Stephens Stephens Stephens Stephens Stephens Stephens Stephens Stephens Stephens Stephens Stephens	10 10 10 10 10 10 10 10 10	33.0 47.0 33.0 47.0 29.0 41.0 33.0 45.0 33.0 50.0
STE-COV-12A STE-COV-34A STE-FG-12 STE-FG-34		Cover for 1/2" Bodies Cover for 3/4" Bodies Fiber Gasket for 1/2" Bodies Fiber Gasket for 3/4" Bodies	Stephens Stephens Stephens Stephens	50 50 100 100	5.8 7.4 .56 .80
STE-500 (1) STE-501 (1) STE-CG/SLB-1	1/2 3/4	Short, Out Back Body, Cover, Gasket Short, Out Back Body, Cover, Gasket Cover and Gasket for STE-500	Stephens Stephens Stephens	10 10 10	20.5 26.0 6.36
NOTE: (1) Comp	lete with Co	ver and Gasket.			•



M. Stephens







#### **CONDUIT BUSHINGS**

Catalog Number	Size	Description	Made of	Mfgr.	Put p	Weight/100 (Lbs.)
REG-631	1/2	End Bushing	Iron/Zinc plated Iron/Zinc plated	Regal	100	3.0
REG-632	3/4	End Bushing		Regal	50	4.0
REG-931	1/2	Insulated End Bushing	Plastic	Regal	100	1.0
REG-932	3/4	Insulated End Bushing	Plastic	Regal	100	1.0
REG-8401	3/4 to 1/2	Reducing Bushing	Iron/Zinc plated	Regal	100	4.0
REG-8402	1 to 1/2	Reducing Bushing	Iron/Zinc plated	Regal	50	12.0
REG-8403	1 to 3/4	Reducing Bushing	Iron/Zinc plated	Regal	50	7.0







**Insulated End Bushing Reducing Bushing** 

#### **EMT CONNECTORS**

Connectors are cement tight.

Catalog Number	Size	Description	Made of	Mfgr.	Put p	Weight/100 (Lbs.)
REG-601	1/2	Compression	Die Cast Zinc	Regal	50	5.0
REG-602	3/4	Compression	Die Cast Zinc	Regal	25	4.0
REG-701	1/2	Set Screw	Die Cast Zinc	Regal	50	6.4
REG-702	3/4	Set Screw	Die Cast Zinc	Regal	25	10.4
RAC-2072	1/2	90° Compression	Malleable Iron	Raco	25	18.1



**REG-601 REG-701** 



#### **RIGID CONNECTORS**

Catalog Number	Size	Description	Made of	Mfgr.	Put p	Weight/100 (Lbs.)
RAC-1802	1/2	Straight Threadless	Malleable Iron	Raco	100	18.2
RAC-1803	3/4	Straight Threadless	Malleable Iron	Raco	100	26.7







#### FLEX CONNECTORS (9)



Items with suffix "ST" are Snap-Tite connectors and do not need locknuts. GLO-1888/1889 features a built-in ground clamp. Insulated versions may also be available.

Catalog Number	Size	Description	Made of	Mfgr.	Put p	Weight/100 (Lbs.)
REG-671	3/8	Straight, Screw-In	Die Cast Zinc	Regal	100	5.7
ARL-GF38	3/8	Straight, Screw-In	Die Cast Zinc	Arlington	50	5.7
REG-672	1/2	Straight, E-Z On (Screw-In)	Die Cast Zinc	Regal	100	5.5
REG-673	3/4	Straight, E-Z On (Screw-In)	Die Cast Zinc	Regal	100	8.2
ARL-GF38ST	3/8	Straight, Screw-In, Snap-Tite	Die Cast Zinc	Arlington	50	6.0
ARL-GF50ST	1/2	Straight, Screw-In, Snap-Tite	Die Cast Zinc	Arlington	50	6.0
REG-643	3/8	90° Clamp Type	Die Cast Zinc	Regal	25	9.8
REG-644	1/2	90° Clamp Type	Die Cast Zinc	Regal	25	13.6
REG-645	3/4	90° Clamp Type	Die Cast Zinc	Regal	25	22.0
REG-9672	1/2	90° E-Z On (Screw-In, Jake)	Die Cast Zinc	Regal	25	16.0
GED-AC-38	3/8	45° Clamp Type	Malleable Iron	Gedney	50	11.0
GED-AC-50	1/2	45° Clamp Type	Malleable Iron	Gedney	25	21.0
GLO-1888	1/2	Screw-In w/Ground Clamp	Die Cast Zinc	-	25	19.0
GLO-1889	1/2	90° Screw-In w/Ground Clamp	Die Cast Zinc		25	21.8
REG-654	1/2	Set Screw	Die Cast Zinc	Regal	100	4.3











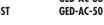


**REG-672** ARL-GF38

**ARL-GF38ST** 

GED-AC-38

0







**REG-9672** 

**REG-643** 



GLO-1888

Shown with ground

wire attached.

GLO-1889 Shown with ground wire attached.

<b>IQUID</b>	<b>TIGHT</b>	<b>FLEX</b>	CONNECTORS	$(U_{\underline{L}})$
			_	
Catalo	n			

Catalog Number	Size	Description	Made of	Mfgr.	Put p	Weight/100 (Lbs.)
RAC-3402	1/2	Straight	Malleable Iron	Raco	25	17.0
RAC-3403	3/4	Straight	Malleable Iron	Raco	25	20.4
RAC-3421	3/8	90°	Malleable Iron	Raco	25	22.8
RAC-3422	1/2	90°	Malleable Iron	Raco	25	23.4
RAC-3423	3/4	90°	Malleable Iron	Raco	10	36.9
ARL-LT38	3/8	Straight	Die Cast Zinc	Arlington	25	14.0
ARL-LT50	1/2	Straight	Die Cast Zinc	Arlington	25	17.8
ARL-9050	1/2	90°	Die Cast Zinc	Arlington	10	28.5





**RAC-3402** 



ARL-9050

**CONNECTOR FOR ROMEX & CORDSET CABLE** 

Catalog				Put	Weight/100
Number	Size	Made of	Mfgr.	р	(Lbs.)
REG-6623	3/8	Die Cast Zinc	Regal	100	5





#### **EMT COUPLINGS** (4)

Catalog Number	Size	Description	Made of	Mfgr.	Put p	Weight/100 (Lbs.)
REG-611	1/2	Compression EMT-EMT	Die Cast Zinc	Regal	50	10.0
REG-612	3/4	Compression EMT-EMT	Die Cast Zinc	Regal	25	14.0
REG-711	1/2	Set Screw EMT-EMT	Die Cast Zinc	Regal	50	7.1
REG-712	3/4	Set Screw EMT-EMT	Die Cast Zinc	Regal	25	10.0
REG-1611	1/2	Compression/Screw-In EMT-Flex	Die Cast Zinc	Regal	50	7.1







**REG-611 REG-711** 

**REG-1611** 

#### RIGID COUPLINGS (4)

Catalog Number	Size	Description	Made of	Mfgr.	Put p	Weight/100 (Lbs.)
PIC-RC-1/2	1/2	Threaded Rigid-Rigid	Galv. Steel	Picoma	100	14
PIC-RC-3/4	3/4	Threaded Rigid-Rigid	Galv. Steel	Picoma	100	20
RAC-1822	1/2	Threadless Rigid-Rigid	Mal. Iron	Raco	25	26
RAC-1823	3/4	Threadless Rigid-Rigid	Mal. Iron	Raco	25	42
TAC-LP101	1/2	Short Threaded Riaid-Riaid	Galv. Steel		100	4.8











PIC-RC-1/2

**RAC-1822** 

TAC-LP101

#### FLEX COUPLINGS (9)

Electrica

Catalog Number	Size	Description	Made of	Mfgr.	Put p	Weight/100 (Lbs.)
REG-676	1/2	Screw-In Flex-Flex	Die Cast Zinc	Regal	100	4.5
REG-677	3/4	Screw-In Flex-Flex	Die Cast Zinc	Regal	100	6.0



#### **CONDUIT NIPPLES** (9)

Catalog Number	Size	Description	Made of	Mfgr.	Put p	Weight/100 (Lbs.)
REG-791 REG-1791 REG-792	1/2 1/2 3/4	Chase Nipple 1/2" Long Chase Nipple 1" Long Chase Nipple 1/2" Long	Die Cast Zinc Die Cast Zinc Die Cast Zinc	Regal Regal Regal	100 100 100	3.2 5.1 5.1
REG-661	1/2	Offset Nipple 3/4" Offset	Die Cast Zinc	Regal	25	12.8



**REG-791** 





**REG-1791** 

**REG-661** 

M. Stephens

#### **CONDUIT LOCKNUTS** (9)

Catalog Number	Size	Description	Made of	Mfgr.	Put p	Weight/100 (Lbs.)
STE-132	1/2	Locknut	Steel, Zinc Plated	M. Stephens	100	1 2
STE-133	3/4	Locknut	Steel, Zinc Plated	M. Stephens	100	







#### **ELBOWS** (4)

Catalog Number	Size	Description	Made of	Mfgr.	Put p	Weight/100 (Lbs.)
REG-2652	1/2	Pull Corner Elbow	Die Cast Zinc	Regal	100	27







#### **REDUCING WASHERS**

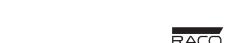
Since
1946
Interstate Electric Co

Catalog	Size	Made	Put	Weight/100
Number		of	p	(Lbs.)
REG-8120	3/4 to 1/2	Steel, Zinc Plated	250	1.6
REG-8121	1 to 1/2	Steel, Zinc Plated	250	2
REG-8122	1 to 3/4	Steel, Zinc Plated	250	2
REG-8123	1-1/4 to 1/2	Steel, Zinc Plated	100	4
REG-8128	1-1/2 to 1	Steel, Zinc Plated	100	4
REG-8129	1-1/2 to 1-1/4	Steel, Zinc Plated	100	4



#### **CONDUIT STRAPS**

Catalog Number	Size	Description	Made of	Put p	Weight/100 (Lbs.)
RAC-2082	1/2	One Hole EMT Strap	Steel	100	2.7
RAC-2083	3/4	One Hole EMT Strap	Steel	50	2.8
RAC-2084	1	One Hole EMT Strap	Steel	50	7.7
RAC-2092	1/2	Two Hole EMT Strap	Steel	200	2.3
RAC-2093	3/4	Two Hole EMT Strap	Steel	100	3.0
RAC-2094	1	Two Hole EMT Strap	Steel	100	5.7
RAC-1332	1/2	One Hole Rigid Strap	Steel	100	4.4
RAC-1333	3/4	One Hole Rigid Strap	Steel	100	5.8
RAC-1334	1	One Hole Rigid Strap	Steel	50	7.1
RAC-2232	1/2	Two Hole Rigid Strap	Steel	200	1.9
RAC-2233	3/4	Two Hole Rigid Strap	Steel	200	2.8
RAC-2234	1	Two Hole Rigid Strap	Steel	100	3.6





Strap





Two Hole EMT/Rigid Strap

#### **CONDUIT NAIL STRAPS**

Catalog	EMT	Rigid/IMC	Flex	Made	Mfgr.	Put	Weight/100
Number	Size	Size	Size	of		p	(Lbs.)
RAC-2252 RAC-2253 RAC-2254	1/2 3/4 1	1/2 3/4	3/8 1/2	Steel Steel Steel	Raco Raco Raco	100 100 100	1.8 2.2 2.5





#### DUCTSEAL (4)

Seals around junction boxes, flashings and countless other applications. Easily forms around irregular surfaces and configurations. Cuts and trims easily. Highly resistant to cracking, drying and shrinking. Gray in color, can be painted immediately after application.

Catalog Number	Description	Put p
DUCTSEAL-1	Sealing Compound	1 Lb. Slug
DUCTSEAL-5	Sealing Compound	5 Lb. Slug







## **GROUNDING DEVICES** (9)

Catalog Number	Trade Size	Description	Wire se	Mfgr.	Put p	Weight/100 (Lbs.)
RAC-975 REG-8191 THO-11-104 (1)	, ,	Grounding Clip, Green Grounding Clamp Grounding Screw, Green (2)	12 - 14 Bare Copper -	Raco Regal T&B	50 20 100	1.0 3.5
NOTE: (1) Not U.L. Listed. (2) Taps its own threads.						



**RAC-975** 



THO-11-104



CAROL

Minimum purchase is one 250' spool. Other varieties also available.

#### **Definitions:**

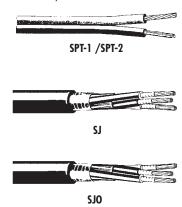
SPT-1: All thermoplastic, parallel-jacketed, two-conductor light duty cord for pendant or portable use in damp locations. 300V/60°C.

SPT-2: Same as SPT-1, but heavier construction, with or without third conductor for grounding purposes. 300V/60°C.

Junior hard service, rubber-insulated pendant or portable cord. 300V/60°C.

Same as SJ, but carolprene, oil-resistant compound outer jacket. Can also be made "water-resistant," 300V/60°C. SJO:

Catalog Number	Туре	Conductors	Color	Rating	Mfgr.	Put p
AIW-10196 AIW-10199	SPT-1 SPT-1	18/2 18/2	Black Clear	300V/60°C 300V/60°C	AIW AIW	250' 250'
AIW-10263	SPT-2	16/2	Brown	300V/60°C	AIW	250'
AIW-15804 AIW-15809 AIW-15812	SJ SJ	16/3 14/3 12/3	Black Black Black	300V/60°C 300V/60°C 300V/60°C	AIW AIW AIW	250' 250' 250'
AIW-20775	SJ0	14/3	Black	300V/90°C	AIW	250'



#### **CORDSETS** (4)

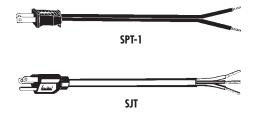


#### **Definitions:**

SPT-1: All thermoplastic, parallel-jacketed, two-conductor light duty cord for pendant or portable use in damp locations. 300V/60°C.

Junior hard service thermoplastic or plastic jacket 300V/105°C.

Catalog Number	Туре	Conductors	Length	Color	Rating	Mfgr.	Put p
CAR-04596	SPT-1	18/2	6'	White	300V/60°C	Carol	100
AIW-3171-01 AIW-3172-01 AIW-3151-01 AIW-3155-01	TLS TLS TLS TLS	16/3 16/3 18/3 18/3	6' 8' 6' 8'	Black Black Black Black	300V/60°C 300V/60°C 300V/60°C 300V/60°C	AIW AIW AIW AIW	75 50 100 100



#### **CLIP LIGHTS**

Clip Lights are movable low voltage sockets and bulbs designed to be spaced as desired on AIW-10199 18/2 SPT-1 cord. A maximum of 110 24V bulbs may be used per single 18/2 SPT-1 circuit. Use a 24 volt step-down transformer for the power supply, allowing 1.1 watt output capacity per bulb. Example: A 250W transformer will power 225 bulbs. The snap mounting ring slips over the barrel of the socket and will secure it to thin panels. Many other accessories also available.

Catalog Number	Description	Put p
AME-CL24-00	Socket and 24 volt clear bulb	100/1,000
AME-CL-RR	Snap mounting ring	100/1,000





AME-CL24-00

AME-CL-RR

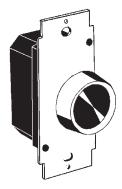


#### **FLUORESCENT DIMMERS**

Dimmer has line voltage drop compensation, full-range dimming and low-end trim setting. Other variations and brands also available.

Catalog Number	Description	se With	Color	Put p
LEV-6675-I	Rotary, SP,120V	2 to 12 F40RS Lamps	Ivory Knob	1





## Rocox LEVITOR

#### **INCANDESCENT DIMMERS** (1)

Other variations and brands also available.

Catalog Number	Description	Rating	Color	Put p
LEV-6600 LEV-61500-I ROC-D20	Rotary, SP, with Push Switch Rotary, SP Rotary, SP	600W/120V 1500W/120V 20A/120V	Ivory Knob Ivory Knob -	1 2 1
ROC-WD	Wave Dimmer (1)	10A/120V	-	1

**NOTE:** (1) Linearly moves the light from glow to full glow in 10 to 20 seconds depending on cycle setting. Also has auto/manual select switch.



LEV-61500-I



**LEV-6600** 





#### **NEON DIMMERS** 4

Not for use with High Power Factor (HPF) transformers.

Diversified dimmers have built-in radio interference filters and push on-off switches. Avoid underloading.

A dimmer can dim several transformers so long as the dimmer rating is not exceeded but it may not be effective with transformers rated less than 5,000 volts. Field trim enables the user to set the low of the dimmina range.

Catalog Number	Description	Mounting	Rating	Trim	Mfgr.	Put p	
DIV-NE5 (1) DIV-NE5P DIV-NE10 DIV-NE15	Rotary Rotary, Plug-in Rotary Rotary	1 Gang Plug-in 1 Gang 2 Gang	5.2A/120V 4.2A/120V 8.4A/120V 12.5A/120V	Field Adjust None Field Adjust Field Adjust	Diversified Diversified Diversified Diversified	1 1 1	
ROC-D20	Rotary	Universal	20A/120V	Field Adjust	Rocox	1	
NOTE: (1) St	NOTE: (1) Strap-mount. Wallplate not included.						



DIV-NE5P



ROC-D20



DIV-NE10



DIV-NE15

**EXIT SIGNS EMERGI-LITE** 

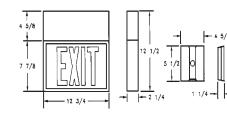
Complete with two faces, backplate, bracket and canopy for wall or ceiling mounting. Use for single or double face applications. Other variations and brands also available.

Catalog Number	Туре	Input	Lettering Color	Housing Color
EME-WX14G120	AC Only	120VAC	Green	White
EME-WX14G277	AC Only	277VAC	Green	White
EME-WX14R120	AC Only	120VAC	Red	White
EME-WSMX14G	AC & DC Emergency (1) AC & DC Emergency (1)	120/277VAC	Green	White
EME-WSMX14R		120/277VAC	Red	White
EME-WXGFP EME-WXRFP EME-WMXAP	Replacement Green Face Replacement Red Face Replacement Battery (1)		Green Red	

NOTE:	(1)	Lead	calcium	battery	Ι.
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EME-WX14 EME-WSMX14



#### Miller

#### **FILTERS FOR INTERFERENCE**

Neon signs can cause interference in two ways. Signs can radiate electromagnetic energy which the receiver picks up as unwanted signal. Signs can also put electrical interference back into the line which also powers the receiver. If the radiated type of interference comes directly from the high voltage components of the sign, little can be done to eliminate it. However, if the radiated interference is caused by flashing or animating the secondary voltage of the transformer, the MIL-7875 high tension choke will often suppress that interference. If the interference is being fed back into the line, the MIL-7804 capacitor and the MIL-7825 are often effective.

Catalog Number	Description	Mfgr.	Put p
MIL-7804 MIL-7875 MIL-D-7825 MIL-7826	Capacitor, 2MF/22OV High Voltage Choke 15,000V/100Ma 2A (each winding) Dual Line Choke 5A Single Line Choke	J.W. Miller J.W. Miller J.W. Miller J.W. Miller	1 1 1



MIL-7804

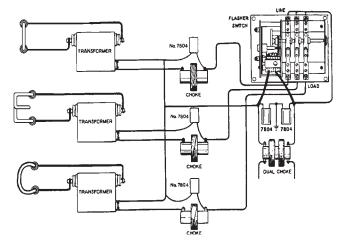


MIL-7875

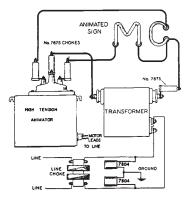


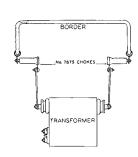
MIL-D-7825

MIL-D-7826



**Low Tension Neon Filter Circuit** 





**High Tension Neon Filter Circuits** 



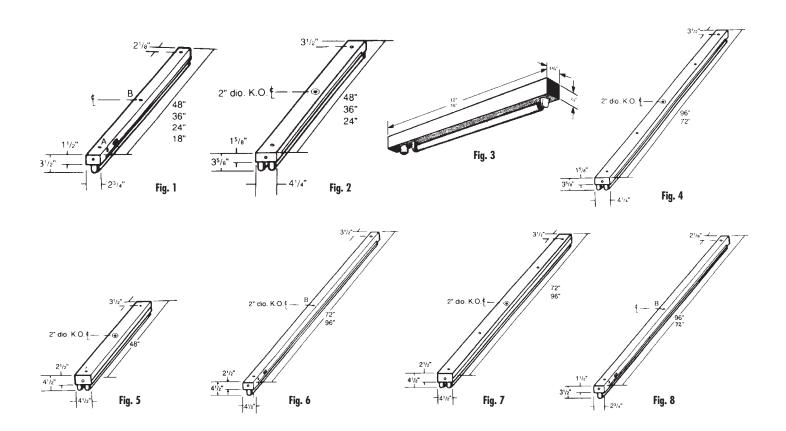
#### **STRIP LIGHT FIXTURES • GENERAL PURPOSE • PREMIUM**

Rapid Start • Trigger Start • Preheat • Slimline • High Output 120V • 60Hz



Catalog Number	ld Catalog Number	Lamp Type	Circuit	Length (Inches)	Fig.	Ballast Note	Туре	Mfg	Approval
MS108PH-LPF	-	One F8T5	PH	15	3	PH	General Purpose	Brilliant	-
C115121Y	C115T	One F15T8 or T12	TS	18	1	LPF	General Purpose	Crescent	UL Damp Location
C120121Y	C120TSU	One F20T12	TS	24	1	LPF	General Purpose	Crescent	UL Damp Location
SCF220	-	Two F20T12	TS	24	2	-	General Purpose	Crescent	UL Damp Location
C130141Y	C130TSU	One F30T12	RS	36	1	LPF	General Purpose	Crescent	UL Damp Location UL Damp Location UL Damp Location UL Damp Location
SCF2301V2Y	SCF230SU	Two F30T12	RS	36	2	-	General Purpose	Crescent	
C134141Y	C140R	One 40T12	RS	48	1	-	General Purpose	Crescent	
SCF234152Y	SCF240ESBSU	Two 40T12	RS	48	2	Energy Saver	General Purpose	Crescent	
SCF1721A1Y	SCF172	One F72T12	SL	72	8	-	General Purpose	Crescent	UL Damp Location
SCF2721A2Y	SCF272	Two F72T12	SL	72	4	-	General Purpose	Crescent	
SCF1961A1Y	SCF196	One F96T12	SL	96	8	-	General Purpose	Crescent	
SCF2961A2Y	SCF296ESB	Two F96T12	SL	96	4	Energy Saver	General Purpose	Crescent	
SCN2601B2Y (1) SCN1851B1Y (1) SCN2851B2Y (1) SCN1951B1Y (1) SCN2951B2Y (1)	SCN248HO SCN172HO SCN272HO SCN196HO SCN296HO	Two F48T12H0 One F72T12H0 Two F72T12H0 One F96T12H0 Two F96T12H0	HO HO HO HO	48 72 72 96 96	5 6 7 6 7		Premium Premium Premium Premium Premium	Crescent Crescent Crescent Crescent Crescent	UL Damp Location

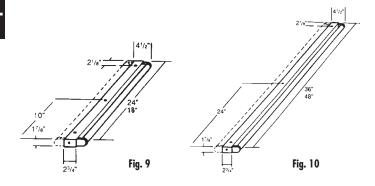
**NOTE:** (1) Do not flush mount HO units. HO units should be suspended a minimum of 1-1/2" from surface.



crescent

Catalog Number	Lamp Type	Circuit	Length (Inches)	Fig.	Ballast Note	Mfgr.	Approval
SM115TSLPF SM120121Y SM220122Y SM130141Y SM2301V2Y SM134141Y SM234152Y	One F15T12 One F20T12 Two F20T12 One F30T12 Two F30T12 One 40T12 Two 40T12	TS TS TS RS RS RS	18 24 24 36 36 48 48	9 (I) 9 9 10 10 10	LPF LPF LPF LPF LPF Energy Saver	Brilliant Crescent Crescent Crescent Crescent Crescent Crescent	UL UL Damp Location
SM1251K1Y SM2251K2Y SM2321K2Y	One F025 Two F025 Two F032	RS RS RS	36 36 48	10 10 10	LPF LPF LPF	Crescent Crescent Crescent	UL Damp Location UL Damp Location UL Damp Location

**NOTE:** (1) Depth is 2-1/8"

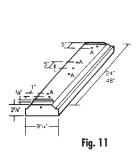


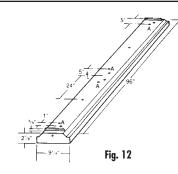
#### **WRAP-AROUND FIXTURES**

Rapid Start ● Slimline 120V ● 60Hz

Catalog Number	Lamp Type	Circuit	Length (Inches)	Fig.	Ballast Note	Mfgr.	Approval
NLT234152Y NLT434158Y NLT2961A2Y	Two F40T12 Four F40T12 Two F96T12	RS RS SL	48 48 96	11 13 12	Energy Saver Energy Saver (1) Energy Saver	Crescent Crescent Crescent	UL UL UL
NLT240LEN NLT440LEN	Replacement Acryli Replacement Acryli					Crescent Crescent	

**NOTE:** (1) Uses Two, 2 Lamp Ballasts.





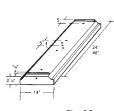


Fig. 13

crescent

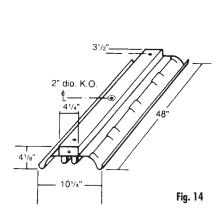


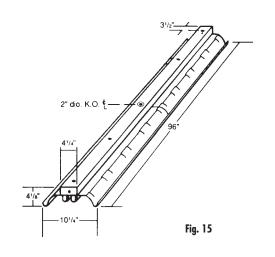
#### **INDUSTRIAL FIXTURES**

Rapid start and slimline for general purpose use.  $120V \bullet 60 Hz$ 



Catalog Number	Lamp Type	Circuit	Length (Inches)	Fig.	Ballast Note	Mfgr.	Approval
RN234152Y	Two F40T12	RS	48	14	Energy Saver	Crescent	UL Damp Location
RN2961A2Y	Two F96T12	SL	96	15		Crescent	UL Damp Location

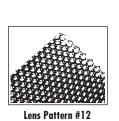


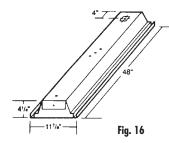


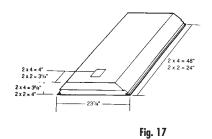
#### **RECESSED FLUORESCENT FIXTURES**

Premium grid troffer. Flush white steel with built-in seismic tabs.
Standard lens is acrylic pattern #12 as shown below. Other patterns available.
120V • 60Hz

Catalog Number	Lamp Type	Circuit	Nominal Length	Fig.	Ballast Note	Mfgr.	Approval
14GP240A12ES 22GP420A12 24GP340A12ES 24GP440A12ES	Two F40T12 Four F20T12 Three F40T12 Four F40T12	RS TS RS RS	1'x4' 2'x2' 2'x4' 2'x4'	16 17 17 17	Energy Saver - Energy Saver Energy Saver	Crescent Crescent Crescent Crescent	UL UL UL UL
24GP340A12SO 24GP434FSA58 NOTE: (1) Electronic	Three F032T8 Four F040	RS RS	2'x4' 2'x4'	17 17	Energy Saver <sup>(1)</sup> Energy Saver <sup>(1)</sup>	Crescent Crescent	UL UL



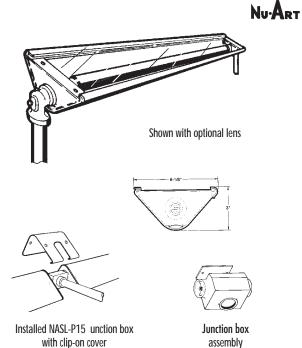




#### SIGN & FACIA OUTDOOR FIXTURES

All aluminum, fully assembled fixtures have 3/4" 90° elbows on each end. Wires exit from one end. Fixtures are usually mounted on arms made of 3/4" rigid conduit with the wiring running through the arm(s) to remote weatherproof or outdoor ballasts (sold separately). The junction box w/cover can be used between fixtures to effect a continuous run of fixtures and allows for the use of only one arm between two fixtures. Plastic covers are available to enclose fixtures aimed upwards.

Catalog Number	Lamp Type	verall Length (Inches)
NASL-1-4 NASL-1-6 NASL-1-8 NASL-1-12 NASL-1-16 NASL-1-24 (1)	One F48T12 HO or VHO One F72T12 HO or VHO One F96T12 HO or VHO Two F72T12 HO or VHO Two F96T12 HO or VHO Three F96T12 HO or VHO	54 78 102 150 198 298
NASL-P15 NASL-RBB-S NASL-RBB-SWB	Junction Box with Clip-on Cover Remote Ballast Box Only Remote Ballast Box w/HO Ballast (2)	
NASL-P-20-6 NASL-P-20-8	6' Plastic Cover with Retaining Clips 8' Plastic Cover with Retaining Clips	-
NOTE: (1) Wires exit from bo	oth ends. (2) Ballast runs One F48-96 or Two F24-84	HO lamps at 120V.



#### SIGN & FACIA FIXTURES WITH INTEGRAL BALLAST



Catalog	Lamp	verall Length
Number	Type	(Inches)
NASL-1-4	One F48T12 HO or VHO	54
NAML-1-4-800	One F48T12/HO	54-1/8
NAML-1-6-800	One F72T12/HO	78-1/8
NAML-1-8-800	One F96T12/HO	102-1/8
NAML-JBOX	Junction box for joining NAML fixtures	-

# 5-3/8" NAML-JX

#### **STONCO QUARTZ LIGHT FLOOD FIXTURES**

For applications requiring true color rendition including billboard lighting, sports fields, temporary lighting and safety lighting. 1/2" NPS threaded arm mounting. Finished in dark bronze.

Catalog Number	Description	Watts	Lamp Type	Lamp Included
STO-EQX500L	Economy Fixture	500	500T3Q	Yes
STO-Q515L	Quality Fixture	500	500T3Q	Yes
STO-EQX1500	Economy Fixture	1,000/1,500	1000/1500T3Q	No







**STONCO** 

310-431

**STONCO** 



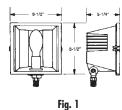
#### **STONCO MINI FLOOD FIXTURES**

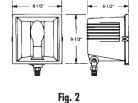
quadrants." Medium base lamp included.

For general purpose floodlighting. Aluminum housing finished bronze. Lens frame is fully gasketed and hinged to body. Tempered glass lens is sealed to lens frame. Above and below horizontal aiming. 1/2" NPS threaded arm with cast-in aiming

Catalog Number	Watts	Lamp Type	Base	olts	Ballast	Fig.	Weight (Lbs.)
High Pressure Sodium STOSLA7ONLXL STOSLA10ONLX STOSLA15ONLX	70 100 150	E/B17 E/B17 E/B17	Medium Medium Medium	120 120 120	Reactor (NPF) Reactor (NPF) Reactor (NPF)	1 1 1	7 8 8
Metal Halide STOSLA70MAL STOSLA100MAL STOSLA150MAL	70 100 150	ED17 ED17 ED17	Medium Medium Medium	120/277 120/277 120/277	HX-HPF HX-HPF CWA-HPF	2 2 2	10 11 12







#### **STONCO MAXI FLOOD FIXTURES**

For security, roadway, accent, recreational and sign lighting. Aluminum housing finished bronze. Lens frame is fully gasketed and hinged to body. Tempered glass lens. Above and below horizontal aiming. Heavy duty steel trunion for use with 1/2" or 3/4" bolts. Supplied with multi-tap 120V/208V/240V/277V ballast. 480V ballast also available. Lamp not included.

Catalog Number	Watts	Lamp Type	Base	Ballast	Fig.	Weight (Lbs.)		
High Pressure Sodium STOSLM250LX STOSLM400LX	250 400	BT28/E18 BT28/E18	Mogul Mogul	CWA CWA	3 3	43 48		
Metal Halide STOSLM175MA STOSLM250MA STOSLM400MA (1)	175 250 400	E/BT28 E/BT28 T18/ED28	Mogul Mogul Mogul	CWA CWA CWA	3 3 3	23 35 46		
Factory Installed Options  FS In-line Fusing for 120V and 277V (to protect HID circuitry).  In-line Fusing for 208V, 240V and 480V (to protect HID circuitry).  Tury  Tury  Tury  Tury  Twist-Lock Photocontrol								
Field Installed Accessories  STO-P105A  STO-P105M  STO-USF10  Button Photocontrol for Automatic Dusk-to-Dawn Lighting (for 120V).  Button Photocontrol for Automatic Dusk-to-Dawn Lighting (for 208V, 240V or 277V).  Adapter for 2" Tenon Mounting.								
NOTE: (1) Lamp inclu	ded.							



**STONCO** 

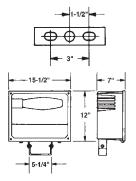


Fig. 3



STO-USF10 **Tenon Mount Adapter** 

#### STONCO POWERHOUSE 1000 WATT FLOOD FIXTURES

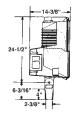


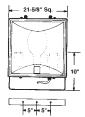
**STONCO** 

For floodlighting applications requiring rugged, heavy duty construction. Massive one-piece aluminum deep-finned housing. Finished in Duraplex II bronze polyester powder. Die-cast aluminum lens frame with integrally cast hinges. Captive neoprene rubber gasketing assures weathertight performance. High purity anodized aluminum reflector. Supplied with multi-tap 120V/208V/240V/277V ballast. 480V ballast also available. Lamp not included.

Catalog Number	Watts	Lamp Type	Base	Ballast	Mount	Weight (Lbs.)	
High Pressure Sodium STOPHA1001LX STOPHY1001LX STOPHW1001LX (1)	1,000 1,000 1,000	E25 E25 E25	Mogul Mogul Mogul	CWA CWA CWA	Arm Yoke Wall	80 80 80	
Metal Halide STOPHA1001MA STOPHY1001MA STOPHW1001MA (1)	1,000 1,000 1,000	BT56 BT56 BT56	Mogul Mogul Mogul	CWA CWA CWA	Arm Yoke Wall	75 75 75	
Factory Installed Options FS FFS TLR/SC TLR/PC							
Field Installed Accessories STO-CM1152 STO-CM1151	Clear Polycarbonate Visor Shields. Spaced for Air Flow. Black Aluminum Glare Shields. Four Sides Matte.						
<b>NOTE:</b> (1) Use with STO	-CMC-12 wall bra	cket.					







PHA **Arm Mount** 

**PHY** Yoke Mount



**PHW Wall Mount** 

#### Glare Shield

Four segments for full or partial shading









#### STONCO LYTE-PRO WALL MOUNTED LUMINAIRES



For accent, security, area and perimeter lighting. Die-cast aluminum mounting box contains four 1/2" NPS tapped holes for wiring and/or installation of photocontrol. Component cover is impact resistant polycarbonate in a dark bronze finish. Reflector/lens is constructed of injection molded high impact acrylic. Reflector system is hydroformed anodized aluminum. Exterior hardware is stainless steel. Clear medium base lamp included.

Catalog Number	Watts	Lamp Type	olts	Ballast	Fig.	Weight (Lbs.)
High Pressure Sodium STOLPSR70LX STOLPMR150LX STOLPLR250LX	70 150 250	E/B17 E/B17 E18	120-277 120-277 120-480	HX-HPF HX-HPF CWA (HPF)	4 5 6	10 12 19
Metal Halide STOLPSR70MA STOLPMR150MA STOLPMR175MA STOLPLR250MA	70 150 175 250	E/B17 E/D17 E/D17 BT28	120-277 120-277 120-277 120-480	HX-HPF CWA CWA CWA (HPF)	4 5 5 6	10 12 12 19
Field Installed Accessorie	S					

STO-P105A STO-P105M STO-LPTP

Button Photocontrol for Automatic Dusk-to-Dawn Lighting (for 120V). Button Photocontrol for Automatic Dusk-to-Dawn Lighting (for 277V). Tamperproof Kit - 2 Allen Screws to Prevent Access by Intruders.



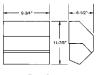


Fig. 4

Fig. 5



Fig. 6



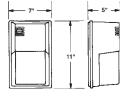
#### STONCO TWILIGHTER WALL PRISM FIXTURES (4)

For security, accent and perimeter lighting. Polycarbonate prismatic refractor directs light into  $0^\circ$  -  $60^\circ$  zone. Aluminum reflector provides smooth "down-and-out" distribution. Also available with factory installed photocontrol. Lamp included.





Catalog Number	Watts	Lamp Type	Base	Ballast	olts	Weight (Lbs.)
High Pressure Sodium STOTLW35NLXL STOTLW50NLXL STOTLW70NLXL	35 50 70	E17 E17 E17	Medium Medium Medium	Reactor (NPF) Reactor (NPF) Reactor (NPF)	120 120 120	5 5 6
Metal Halide STOTLW50NMAL	50	ED17	Medium	Reactor (NPF)	120	7
Compact Fluorescent STOTLW28NFL	28	PLC	GX32d-3	NPF	120	5



**STONCO** 

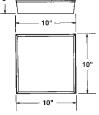
#### STONCO TWILIGHTER CANOPY LIGHTS (4)

For security and safety lighting under canopies, eaves, enclosed entrance ways or along covered walkways. Polycarbonate housing finished in architectural dark bronze. Lamp included.



+	
5"	
	-

Catalog Number	Watts	Lamp Type	Base	Ballast	olts	Weight (Lbs.)
High Pressure Sodium STOTLC50NLXL STOTLC70NLXL	50 70	E17 E17	Medium Medium	Reactor (NPF) Reactor (NPF)	120 120	6 6
Compact Fluorescent STOTLC28NFL	28	PLC	GX32d-3	Reactor (NPF)	120	5



#### STONCO SIGNATURE CANOPY LIGHTS (9)

Factory Pre-Lamped

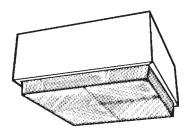
Bronze Finish

**FFS** 

**BRZ** 

GL

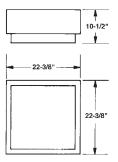
For outdoor canopy and soffit lighting with mounting heights of 10 to 20 feet such as gasoline islands and drive-throughs. Housing is formed aluminum finished with Duraplex II polyester powder coat. Aluminum lens frame uses a form-in-place gasket for a complete seal to the lens. A closed cell neoprene gasket provides maximum sealing between the housing and lens assembly. Anodized aluminum reflector for high efficiency with high impact resistant injection molded acrylic lens. Supplied with multi-tap 120V/208V/240V/277V ballast. Lamp not included.





Catalog Number	Watts	Lamp Type	Base	Ballast	
High Pressure Sodium STO-SCL255LX STO-SCL405LX	250 400	E18 E18	Mogul Mogul	CWA CWA	
Metal Halide STO-SCL255MA STO-SCL405MA	250 400	BT37 BT37	Mogul Mogul	CWA CWA	
Factory Installed Options  In-line Fusing for 120V and 277V (to protect HID circuitry)					

In-line Fusing for 208V and 240V (to protect HID circuitry). Flat Tempered Glass Prismatic Lens



#### STONCO ROADWAY LUMINAIRES



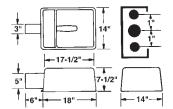
**STONCO** 

For roadway, parking lot or any outdoor application where tight light control is desired. Die-cast aluminum housing finished in Duraplex II bronze polyester powder. Aluminum lens frame with integral hinges. Alzak reflector is precisely designed for IES type II cut-off. Supplied with multi-tap 120V/208V/240V/277V ballast. 480V ballast also available. Mounting arm is equipped with steel reinforcing plate. Arm attaches to fixture and pole via two 9" threaded studs.



Lamp not included.

Catalog Number	Watts	Lamp Type	Base	Ballast	Weight (Lbs.)
High Pressure Sodium STORCL3150LX STORCL3250LX STORCL3400LX	150 250 400	E18, Clear E18, Clear E18, Clear	Mogul Mogul Mogul	HPF-CWA HPF-CWA HPF-CWA	34 38 42
Metal Halide STORCL3175MA STORCL3250MA STORCL3400MA	175 250 400	B28, Clear B28, Clear B37, Clear	Mogul Mogul Mogul	HPF-CWA HPF-CWA HPF-CWA	32 34 36
Factory Installed Options FS FFS TLR/PC PCB	In-line Fusing for 120V and 277V (to protect HID circuitry). In-line Fusing for 208V, 240V and 480V (to protect HID circuitry). Twist-Lock Photocontrol Button Type Photocontrol				
Field Installed Accessories STO-RL550 STO-RL552 STO-RC14	S Glare Shield Lexan Visor 4" Round Pole Add	apter			



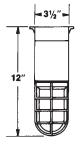
#### STONCO INDUSTRIAL SURFACE MOUNTED FIXTURES

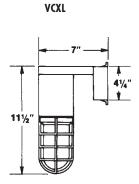
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For surface mounted industrial applications. Die-cast aluminum construction with prismatic glass globe in die-cast aluminum guard. VCX units supplied with 3-1/2" or 4" round box for surface mounting and conduit access. VWX units supplied with 4" round box. Lamp included.

Catalog Number	Watts	Lamp Type	Base	olts	Ballast	Mounting	Weight (Lbs.)
High Pressure Sodium STOVCXL50NLX STOVWXL50NLX	50 50	E17 E17	Medium Medium	120 120	Reactor (NPF) Reactor (NPF)	Ceiling Wall	7 7
Compact Fluorescent (1) STOVCXL28N STOVWXL28N	28 28	PLC PLC	GX32d-3 GX32d-3	120 120	NPF Trans. NPF Trans.	Ceiling Wall	6 6
NOTE: (1) Rated for -20°F.							

#### **STONCO**





**VWXL** 

#### INTERSTATE ELECTRIC CO., INC.



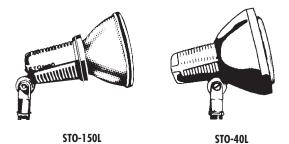
#### **STONCO LAMPHOLDER FIXTURES**



**STONCO** 

Medium base 1/2" NPS arm mounting. Die-cast aluminum lampholder. Plated steel wire guards.

Catalog	Description	Lamp	Max	Put
Number		Type	Watts	p
STO-150L	Medium Base Lampholder	PAR38	250	36
STO-3300	Economy Medium Base Lampholder	PAR38	150	72
STO-40L	Medium Base Lampholder	PAR38, QPAR38	300	12
STO-80 STO-207	Wire Guard for STO-150L Wire Guard for STO-40L			1 6
STO-P134 STO-7704	Replacement Gasket for STO-150L Replacement Gasket for STO-3300			6 6





STO-207



STO-80 Wire Guard Installed on ST -150L fixture

#### STONCO VAPORTIGHT INCANDESCENT FIXTURES

Fits all 3 1/2" round & octagon boxes and 4" round boxes.

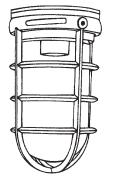
Catalog Number	Description	Watts	Height (Inches)	Dim. (Inches)
STO-VK1GC STO-VK2GC	Surface Mount Fixture with Glass Globe & Cast Guard Surface Mount Fixture with Glass Globe & Cast Guard	100 200	7-1/2 9-1/4	4-1/4 5-1/4
STO-VGC100 STO-VGC200	Clear Glass Globe Only Clear Glass Globe Only	100 200	-	-
STO-V131 STO-V127 STO-V132	Cast Guard Only for 100 Watt Fixture (Screw-on) Wire Guard Only for 100 Watt Fixture (Clamp-on) Cast Guard Only for 200 Watt Fixture (Screw-on)			







STO-V131





STO-VK1GC STO-VGC100

#### THERMAL FLASHERS



For incandescent lamps.

Catalog Number	Description	Flashes/Min.	Lamp Watts	olts	Put p
EAG-471	Outlet Winker	14-20	15-100	110-125	25





#### **PLUG FUSES**



We offer a wide variety of plug fuses.

Catalog	Description	Rating	Put
Number		Amps.	p
EAG-690-10	Household Plug Fuse	10	5/100
EAG-690-15	Household Plug Fuse	10	5/100
EAG-690-20	Household Plug Fuse	10	5/100
EAG-690-25	Household Plug Fuse	10	5/100
EAG-690-30	Household Plug Fuse	10	5/100



GOOD





OVERLOAD nly part of K vanishes



#### **GLASS FUSES**



SLR glass fuses are used for fluorescent fixtures. Use with BUS-HLR-2A fuse holders. Other types also available.

Catalog	Rating	Mfg.	Put
Number	Amps.		p
GOU-SLR-2 GOU-SLR-3 GOU-SLR-4 GOU-SLR-5 GOU-SLR-10	2 3 4 5	Gould Gould Gould Gould Gould	5 5 5 5
BUS-HLR-2A	Inline Fuse Holder for SLR/GLR Fuses Rated 300V Max. Universal Inline Fuse Holder for Fuses 1/4"x1-1/4"32V Max.	Buss	10
BUS-HRK		Buss	10







**SLR Glass Fuse** 



SLR Glass Fuse and HLR-2A Holder



#### OSRAM/SYLVANIA FLUORESCENT LAMP QUICK REFERENCE

OSRAM SYLVANIA

Interstate Electric Co. is among the very largest lamp suppliers, with a stock of lamps unsurpassed in depth and variety. Please request the Sylvania large lamp ordering guide for a complete listing and specification/application information for the entire Sylvania large lamp line.



#### **High Output 800MA**

might output of	OUMA	
Catalog Number	Description (1)	Per Case
3168-10204	F18T12/CW/H0	24
25303	F18T12/DSGN50/HO	30
25313	F24T12/CW/H0	30
25314	F24T12/D/HO	30
25312	F24T12/DSGN50/H0	30
25322	F30T12/CW/H0	30
F30T12DHO	F30T12/D/H0	12
25333	F36T12/CW/H0	30
25332	F36T12/D/H0	30
25334	F36T12/DSGN50/H0	30
25342	F42T12/CW/H0	30
25343	F42T12/D/HO	30
25344	F42T12/DSGN50/H0	30
25146	F48T12/CW/H0	30
25150	F48T12/D/HO	30
25153	F48T12/DSGN50/H0	30
25147	F48T12/WW/H0	30
25120	F60T12/D/H0	30
25126	F60T12/CW/H0	30
25119	F60T12/DSGN50/H0	30
25352	F64T12/CW/H0	30
25353	F64T12/D/H0	30
25355	F64T12/DSGN50/H0	30
25176	F72T12/CW/H0	15
25189	F72T12/D/H0	15
25190	F72T12/DSGN50/H0	15
25384	F84T12/CW/H0	15
25385	F84T12/D/H0	15
25386	F84T12/DSGN50/H0	15
25134	F96T12/CW/H0/CT	15
25135	F96T12/D/H0/CT	15 15
25010	F96T12/CW/HO/SS F96T12/DSGN5O/HO	15
25164 25008	F96T12/D830/H0/SS	15
25024	F96T12/D35/H0/SS (D735)	15
25023	F96T12/D41/H0/SS (D741)	15
25011	F96T12/WW/H0/SS	15
25166	F96T12/D835/H0	15
25185	F96T12/D865/H0	15
25184	F96T12′/D41/HO	15
25162	F96T12/N/HO	15

NOTE: (1) Nominal length is stated in the description; i.e. prefix "F96" is actually 96". (Actual length of lamps, excluding contacts, is 3 1/4" less)

#### Very High Output 1500MA

	italog imber	Description (1)	Per Case	
25	248	F48T12/CW/VHO	30	
25	262	F60T12/CW/VH0	30	
25	272	F72T12 <sup>′</sup> /CW <sup>′</sup> /VH0	15	
25	209	F96T12/CW/VHO	15	
25	296	F96T12/CW/VHO/SS	15	
NOTE: (1) Nominal length is stated in the description: i.e. prefix "F96" is actually 96"				

(Actual length of lamps, excluding contacts, is 3 1/4" less)

#### Slimline 430MA

Catalog Number	Description (1)	Per Case
22403	F24T12/CW	30
23618	F36T12/CW	30
24218	F42T12/CW	30
24266	F42T6/CW	24
24830	F48T12/CW	30
26001	F60T12/CW	30
26403	F64T12/CW	30
26466	F64T6/CW	24
27256	F72T12/CW	15
27266	F72T8/CW	24
28417	F84T12/CW	15
29815	F96T12/CW/SS	15
29807	F96T12/D41	15
29666	F96T8/CW	24

NOTE:  $^{(I)}$  Nominal length is stated in the description; i.e. prefix "F96" is actually 96". (Actual length of lamps, excluding contacts, is  $3\ 1/4$ " less)



#### **Rapid Start**

Catalog Number	Description (2)	Per Case
23451 23485 23472 23473 23474 23139 23484 23488 23476 23482 23478	F30T12/D30/RS/SS F30T12/D35/RS/SS F30T12/CW/RS/SS F30T12/WW/RS/SS F30T12/D830/RS F30T12/D835/RS F30T12/D35/RS F30T12/D41/RS F30T12/UW/RS F30T12/WW/RS F30T12/WW/RS	30 30 30 30 30 30 30 30 30 30 30 30
24589 24581 24586 24706 24580 24585 24593 24594 24590 24591 24595 24322 24673 24660 24671 24438 24441 24570 24476 24577 24578	F40/D830/SS F40/D835/SS F40/D841/SS F40/D805/SS F40/D35/SS F40/D41/SS F40CW/SS F40CW/SS F40W/SS F40W/SS F40W/SS F40W/SS F40W/SS F40W/SS F40W/SS F40GO F40/GO F40GO/AQ/RP F40GRO/AQ/RP F40GRO/AQ/RP F40GRO/AQ/RP F40GRO/AQ/RP F40CWX F40/D865 F40/D830 F40/D830 F40/D835 F40/D841	30 30 30 30 30 30 30 30 30 30 10 10 6 6 6 30 30 30 30 30 30 30 30 30 30 30 30 30
NOTE: (2) Nominal ler	$^{\circ}$ 10 mgth of "F30" is 36", "F40" is 48" to back of 1	ampholders.

#### OSRAM/SYLVANIA FLUORESCENT LAMP QUICK REFERENCE cont.





#### **Preheat**

Catalog Number	Description	Nominal Length (Inches) (1)	Per Case
20416	F4T5/CW	6	24
20616	F6T5/CW	9	24
20816	F8T5/CW	12	24
21316 21766	F13T5/CW F13T8/CW	21 21	24 24
21486 21488	F14T8/CW F14T8/D	15 15	24 24
21409 21411 21435	F14T12/CW F14T12/D F14T12/WW	15 15 15	30 30 30
21610 21616 21600 21642 21657 21701 21532 21534 21542	F15T8/D830 F15T8/CW F15T8/D F15T8/DSGN50 F15T8/GRO/AQ/RP F15T8/WW F15T12/CW F15T12/D F15T12/WW	18 18 18 18 18 18 18 18	24 24 24 24 6 24 30 30 30
23014 23027 23028 23030	F18T8/CW/K/24 F18T8/CW/K/26 F18T8/CW/K/28 F18T8/CW/K/30	24 26 28 30	24 24 24 24
22075 22251 22255 22078 22082 22083 22029 22013 22131	F20T12/D830 F20T12/D35 (D735) F20T12/D41 (D741) F20T12/CW F20T12/CWX F20T12/D F20T12/GRO/AQ/RP F20T12/GRO/AQ/WS/RP F20T12/WW	24 24 24 24 24 24 24 24 24	30 30 30 30 30 30 6 6
22527 22528 22333 22529	F25T12/CW/28 F25T12/CW/30 F25T12/WW/30 F25T12/CW/33	28 30 30 33	30 30 30 30
23116 23127 23100 23160 23182 23701	F30T8/CW F30T8/CWX F30T8/D F30T8/GR0/AQ/RP F30T8/N F30T8/WW	36 36 36 36 36 36	24 24 24 6 24 24
NOTE: (1) Measured	to back of lampholders.		

Octron T8 Straight Rapid Start 700 Series • 75 CRI



Catalog	Description	Nominal Length	Per
Number		(Inches)	Case
21849	F017/730	24	30
21832	F017/735	24	30
21831	F017/741	24	30
21851	F025/730	36	30
21817	F025/735	36	30
21829	F025/741	36	30
21852 21997 21823 21998 21824 21999 21809 21993 21961	F032/730 F032/730/EC0 F032/735 F032/735/EC0 F032/741/EC0 F032/740 F032/765 F032/66LD	48 24 48 24 48 24 48 24 24 24	30 30 30 30 30 30 30 30
21853	F040/730	60	30
21820	F040/735	60	30
21827	F040/741	60	30
21854	F096/730	96	24
21839	F096/735	96	24
21840	F096/741	96	24

#### 800 Series • 82 CRI

000 Jelles 9 02 CK	d .		
Catalog Number	Description	Nominal Length (Inches)	Per Case
21978	F017/827	24	30
21882	F017/830	24	30
21883	F017/835	24	30
21884	F017/841	24	30
21979	F025/827	36	30
21886	F025/830	36	30
21887	F025/835	36	30
21888	F025/841	36	30
21955	F032/827	48	30
21890	F032/830	48	30
21891	F032/835	48	30
21892	F032/841	48	30
21980	F032/850	48	30
21759	F032/830/XP/EC0	48	30
21763	F032/835/XP/EC0	48	30
21767	F032/841/XP/EC0	48	30
21893	F040/830	60	30
21894	F040/835	60	30
21895	F040/841	60	30
21897	F096/830	96	24
21898	F096/835	96	24
21899	F096/841	96	24
21795	F096/850	96	15

#### 900 Series • 90 CRI

700 001100 70 011	•		
Catalog	Description	Nominal Length	Per
Number		(Inches)	Case
21868	F014/950/20"	20	30
21871	F017/950/24"	24	30
21869	F021/950/30"	30	30
21872	F025/950/36"	36	30
21870	F028/950/40"	40	30
21880	F032/950/48"	48	30
21873	F040/950/60"	60	30



#### OSRAM/SYLVANIA FLUORESCENT LAMP QUICK REFERENCE cont.

#### OSRAM SYLVANIA

## Octron Curvalume Rapid Start



6"	Spacing •	700	Series •	• 75	CRI	
	Catalan					

Catalog Number	Description	Per Case
21967	FB032/730/6	16
21968	FB032/735/6	16
21969	FB032/741/6	16
21973	FB032/750/6	16

#### Circline



Catalog Number	Description	utside Dia. (Inches)	Per Case
20156	FC6T9/CW/RS	6.5	12
20155	FC6T9/WW/RS	6.5	12
20148	FC8T9/CW/RS	8	12
20080	FC8T9/D/RS	8	12
20088	FC8T9/WW/RS	8	12
20085	FC8T9/350BL/RS	8	12
20142	FC12T9/CW/ŔS	12	12
20030	FC12T9/D/RS	12	12
20037	FC12T9/WW/RS	12	12
20132	FC16T9/CW/RS	16	12
20057	FC16T9/WW/RS	16	12
20072	FC16T9/D/RS	16	12

# Octron Curvalume Rapid Start 6" Spacing • 800 Series • 82 CRI

Catalog Number	Description	Per Case
21970	FB032/830/6	16
21971	FB032/835/6	16
21972	FB032/841/6	16
21986	FB032/830/6/XP	16
21984	FB032/835/6/XP	16
21985	FB032/841/6/XP	16

## Octron Curvalume Rapid Start



1-5/8" Spacing • 82 CRI

Catalog Number	Description	Per Case
21834	FB016/830	15
21835	FB016/835	15
21836	FB016/841	15
21874	FB024/830	15
21875	FB024/835	15
21876	FB024/841	15
21877	FB031/830	15
21878	FB031/835	15
21879	FB031/841	15
21819	FB031/750 (1)	15
21917	FB031/830/XP	15
21919	FB031/835/XP	15
21926	FB031/841/XP	15
<b>NOTE</b> : (1) 75 CRI		

#### **Curvalume Rapid Start** U-Shaped • 6" Spacing



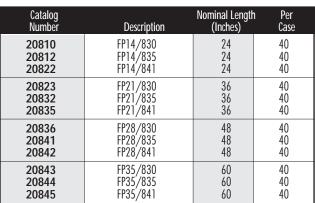
Catalog Number Per Description Case FB40/D830/6 12 24017 FB40/D30/6 24080 12 FB40/D35/6 FB40/D41/6 12 24081 24082 FB40/CWX/6 12 24004 FB40/CW/6/SS FB40/WW/6/SS 12 24046 12 24047

FB40/D30/6/SS

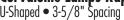
FB40/D35/6/SS FB40/D41/6/SS

FB40/WW/6/SS FB40-LW/6/SS

#### **Pentron T-5**



## **Curvalume Lamps Rapid Start** U-Shaped • 3-5/8" Spacing



24063

24065

24067

24047

24049



12

12

12

12

12

Catalog Number	Description	Per Case
29034	FB40/D30/3	12
29035	FB40/D41/3	12

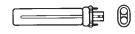
Commerce: 323.803.2000 / 800.225.5432 (CALL IEC) / Fax 323.803.2019

#### OSRAM/SYLVANIA COMPACT FLUORESCENT LAMP QUICK REFERENCE

OSRAM SYLVANIA

Please request the Sylvania large lamp ordering guide for a complete listing and specification/application information for the entire Sylvania large lamp line.

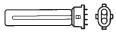
#### **Dulux S Single Preheat**



Catalog Number	Description	Per Case
20325	CF5DS/827	50
20303	CF5DS/841	50
20327	CF7DS/827	50
20310	CF7DS/835	50
20304	CF7DS/841	50
20307	CF7DS/850	50
20329 20333 20305 20308 20300 20301 20302	CF9DS/827 CF9DS/835 CF9DS/841 CF9DS/850 CF9DS/BLUE CF9DS/GREEN CF9DS/RED	50 50 50 50 10 10
20331	CF13DS/827	50
20283	CF13DS/830	50
20335	CF13DS/835	50
20306	CF13DS/841	50
20309	CF13DS/850	50

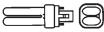
#### **Dulux S/E Single**

For dimming and electronic ballasts.



Catalog Number	Description	Per Case
20311	CF5DS/E/827	50
20315	CF5DS/E/841	50
20312	CF7DS/E/827	50
20316	CF7DS/E/841	50
20313	CF9DS/E/827	50
20317	CF9DS/E/841	50
20314	CF13DS/E/827	50
20284	CF13DS/E/830	50
20318	CF13DS/E/841	50

#### **Dulux D Double Preheat**



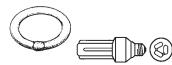
Catalog Number	Description	Per Case
20689	CF9DD/827	50
20783	CF9DD/830	50
20690	CF9DD/835	50
20691	CF13DD/827	50
20705	CF13DD/830	50
20692	CF13DD/835	50
20708	CF13DD/841	50
20676	CF18DD/827	50
20709	CF18DD/830	50
20677	CF18DD/835	50
20678	CF18DD/841	50
20679	CF26DD/827	50
20710	CF26DD/830	50
20680	CF26DD/835	50
20681	CF26DD/841	50

#### **Dulux D/E Double**

For dimming and electronic ballasts.



Catalog Number	Description	Per Case
20682	CF13DD/E/827	50
20721	CF13DD/E/830	50
20671	CF13DD/E/835	50
20667	CF13DD/E/841	50
20683	CF18DD/E/827	50
20724	CF18DD/E/830	50
20672	CF18DD/E/835	50
20668	CF18DD/E/841	50
20684	CF26DD/E/827	50
20722	CF26DD/E/830	50
20673	CF26DD/E/835	50
20669	CF26DD/E/841	50



## Dulux EL Soft White Triple Electronic Self-Ballasted

Compact fluorescent lamps with medium bases and built-in ballast.

Catalog Number	Description	Per Case
29275	CF9EL/CL/830 - 120V	6
29307	CF15EL/830/MED - 120V	6
29308 29236 29246	CF20EL/830/MED - 120V CF20EL/C/830 - 120V CF20EL/C/827 - 120V	6 6 6
29310	CF23EL/830/MED - 120V	6
29237 29244	CF30EL/C/830/MED - 120V CF30EL/C/827 - 120V	6
20210 20211	FC8T9/830/EL - 98V FC8T9/827/EL - 98V	6



#### Reflector Electronic Self-Ballasted

Compact fluorescent lamps with medium bases and built-in ballast.

Catalog Number	Description	Per Case
29298	CF15EL/R30/830/MED	6
29299	CF20EL/R40/830/MED	6



#### **Dulux EL Globe Shaped Electronic Self-Ballasted**

Compact fluorescent lamps with medium bases and built-in ballast.

Catalog Number	Description	Per Case
29262 29261	CF13EL/B/830 - 120V CF13EL/G/830 - 120V	6
29300	CF15EL/G30/830/MED - 120V	6
29301	CF20EL/G40/830/MED - 120V	6

**Dulux L** 

Compact Fluorescent Lamps

#### OSRAM/SYLVANIA FLUORESCENT LAMP QUICK REFERENCE cont.



Catalog Number	Description	Per Case
20587 20588 20589 20595 20594 20593	FT18DL/830 FT18DL/835 FT18DL/841 FT18DL/830/RS FT18DL/835/RS FT18DL/841/RS	10 10 10 10 10
20597	FT24DL/830	10
20580	FT24DL/835	10
20596	FT24DL/841	10
20581	FT36DL/830	10
20582	FT36DL/835	10
20583	FT36DL/841	10
20584	FT40DL/830/RS	10
20585	FT40DL/835/RS	10
20586	FT40DL/841/RS	10
20590	FT55DL/830	10
20591	FT55DL/835	10
20592	FT55DL/841	10



**Dulux F** Compact Fluorescent Lamps

Catalog Number	Description	Per Case
20551	CF18DF/830	10
20552	CF18DF/841	10
20553	CF24DF/830	10
20558	CF24DF/841	10
20559	CF36DF/830	10
20560	CF36DF/841	10

#### **Dulux T Triple Preheat Lamps**

Compact Flourescent Lamps

Catalog Number	Description	Per Case
20756	CF18DT/827	50
20752	CF26DT/827	50

#### **Dulux TE Triple Preheat Lamps**

For dimming and electronic ballasts.

Catalog Number	Description	Per Case
20891	CF13DT/E/827	50
20892	CF13DT/E/830	50
20893	CF13DT/E/835	50
20894	CF13DT/E/841	50

## Jacketed Lamps

For cold temperature applications.



#### **Blacklight Lamps**

Diackingini Lain	P 3		
Catalog Number	Description	Nominal Length (Inches) (1)	n Per Case
20633	F6T5/350BL	8	24
20833	F8T5/350BL	12	24
21623	F15T8/350BL	18	24
22113	F20T12/350BL	24	24
23113	F30T8/350BL	36	24
24922	F40/350BL	48	30
NOTE: (1) Measured	d to back of lampholders.		

#### **Blacklight Blue Lamps**

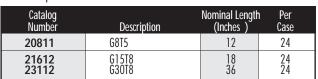
	•		
Catalog Number	Description	Nominal Length (Inches)	n Per Case
20425	F4T5/BLB	6	24
20825	F8T5/BLB	12	24
21625	F15T8/BLB	18	6
22114	F20T12/BLB	24	6
24024	F40BLB/RP	48	6

#### Super Diazo Blue Lamps

	p-		
Catalog Number	Description	Nominal Length (Inches)	n Per Case
24465	F40T12/SDB/65W	48	30

#### **Germicidal Lamps**

Starter Required



#### **OSRAM/SYLVANIA INCANDESCENT LAMP QUICK REFERENCE**

Please request the Sylvania large lamp ordering guide for a complete listing and specification/application information for the entire Sylvania large lamp line.



#### General Purpose • A-Line

General Purpos	se • A-Line	
Catalog Number	Description	Per Case
10037 10038 10018 10019	15A15 - 12OV 15A15 - 13OV 15A15/CL - 12OV 15A15/CL - 13OV	120 120 120 120 120
10644 10645 11285 11289 10693 10694 11092 10738	25A - 120V 25A - 130V 25A - 230V 25A - 277V 25A/CL - 120V 25A/CL - 130V 25A/RS - 125-130V 25A19/GR/CL - 130V 25A19/GR/IF - 130V	120 120 120 120 120 120 120 120 120
11036 10119 11058 11379 11383 11060 11059	40A/CL-130V 40A15-115-125V 40A/34/SS-120 40A/34/SS-130 40A/34/SSXL-120 40A/RP/4-120V 40A-130V	120 120 48 48 48 48 48
10441	54A19TS/8M/SS - 120-125V	120
11373 11180 11376 11384 11388 11380 10553 10555	60A-130 60A/RP/4-120 60A/52/SS-120 60A/52/SSXL-120 60A/52/SSXL-330 60A/52/SS - 130V 60A/CL - 120V 60A/CL - 130V 60A19TS/8M/SS-120-125V	48 48 48 48 48 48 120 120
12570	67A21/40/8M - 120V	120
12496 12497 12498	69A21/TS/8M - 120V 69A21/TS/8M - 125V 69A21/TS/8M - 130V	120 120 120
11374 12525 11377 11381 11385 11389	75A-130 75A/RP/4-120 75A/67/SS-120 75A/67/SS-130 75A/67/SSXL-120 75A/67/SSXL-130	48 48 48 48 48
11375 12750 12378 12382 12386 12390 12529 12531	100A-130 100A/RP/4-120 100A/90/SS-120 100A/90/SS-130 100A/90/SSXL-120 100A/90/SSXL-130 100A/CL-120V 100A/CL-130V	48 48 48 48 48 48 120
12833	116A21/TS-8M - 120V	120
12843	135A21/TS-6M/SS - 120-125V	120
12820 12863 13141 13153	150A/135/SS - 120V 150A/135/SS - 130V 150A - 120V 150A - 130V	48 48 48 48
15505 15476	200A - 120V 200A/CL/RP - 120V	48 12





#### Capsylite Midbreak • MB

Catalog Number	Description	Per Case
18907	42MB/CAP - 120V	12
18908	42MB/CAP - 130V	12
18921	52MB/CAP - 120V	12
18922	52MB/CAP - 130V	12
18937	72MB/CAP - 120V	12
18938	72MB/CAP - 130V	12
18968	50A/HAL/CRYSTAL - 120V	12
18960	60A/HAL - 120V	12
18965	75A/HAL - 120V	12
18969	75A/HAL/CRYSTAL - 120V	12
18970	100A/HAL - 120V	12



#### 3-Way

Catalog Number	Description	Per Case
19385	30/100/W/RP-120V	60
18048	45/140A/W/ES/RP - 120V	12
18060 18726	50/150A/W/RP - 120V 50/150A/SPK - 120V	12 12
19404	150/250A/W/RP-120V	12
14374	100/300/RP - 120V	60



#### Pear-Straight Neck • PS

Catalog Number	Description	Per Case
15282	150 - 120V	60
15207	150/CL - 120V	60
15647	200 - 130V	60
15725	200/99/XL - 130V	60
15691	200/99IF/XL - 125-130V	60
15917	300 - 130V	24
15920	300/IF - 130V	24
15739	300M/IF - 130V	60
16034	500/CL - 130V	24
16040	500/IF - 130V	24
16346	750 - 120V	12
16348	750 - 130V	12
16428	1000/IF - 120V	12
16425	1000 - 130V	12
16547	1500 - 130V	12



#### OSRAM/SYLVANIA INCANDESCENT LAMP QUICK REFERENCE cont.

OSRAM SYLVANIA

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Catalog		Per
Number	Description	Case
16757 16759	3S6/5 - 120V 3S6/5 - 130V	120 120
16960 16927 16929 16930 16938 16942 16943 16960	6S6/CL - 120V 6S6/CL - 12V 6S6/CL - 24V 6S6/CL - 30V 6S6/CL - 130V 6S6/CL - 145V 6S6/CL - 125V 6S6/CL - 120V	120 120 120 120 120 120 120 120
17314	6S14 - 115-125V	120
16782 16784 16790	6S6DC - 120V 6S6DC - 130V 6S6DC - 145V	120 120 120
19355 19426 19429 19432 19423 19420	7-1/2 S - 130V 7-1/2 S/CB - 115-125V 7-1/2 S/CG - 115-125V 7-1/2 S/CO - 115-125V 7-1/2 S/CR - 115-125V 7-1/2 S/CW - 120V	120 120 120 120 120 120
16919	10S11N/CL - 130V	120
17406	10S14 - 120V	120
17450 17458 17453 17489 17490 17487 17488	11S14 - 130V 11S14/CR - 115-125V 11S14/IF - 130V 11S14/TB - 125-130V 11S14/TG - 125-130V 11S14/TR - 125-130V 11S14/TY - 125-130V	120 120 120 120 120 120 120
13595	40S11N - 120V	120

#### Cone • C

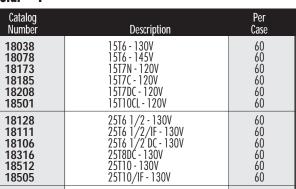


Catalog Number	Description	Per Case
13609 13629 13626 13623	7C7 - 130V 7C7/0 - 120V 7C7/R - 120V 7C7/W - 120V	120 120 120 120
13636	10C7/CL - 120V	240

#### Tubular • T

18316 18512 18505

18096 18652 18669



40T6.5 - 120V 40T10 - 130V 40T10/IF - 130V



60

60

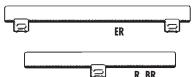
60

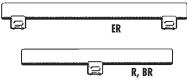
#### Par Reflector Lamps

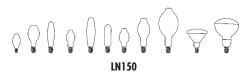
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Catalog Number	Description	Per Case
13802 13805 13804 13808	65PAR/FL-120V 65PAR/FL-130V 65PAR/SP-120V 65PAR/SP-130V	15 15 15 15
13850	75PAR/3FL - 120V	12
13934 13948 13949 13933 13932	100PAR/FL/A/RP - 120V 100PAR/FL/B/RP - 120V 100PAR/FL/G/RP - 120V 100PAR/FL/R/RP - 120V 100PAR/FL/Y/RP - 120V	6 6 6
13922 13921	150PAR38/FL - 130V 150PAR38/SP - 130V	15 15
13848 13854	150PAR/3SP - 125-130V 150PAR/3FL - 125-130V	12 12
14572	150/120PAR/3FL/SS - 120V	15
15196 15193	200PAR46/3MFL - 125-130V 200PAR46/3NSP - 125-130V	12 12
14946 14944 14945	300PAR56/MFL - 125-130V 300PAR56/NSP - 125-130V 300PAR56/WFL - 125-130V	12 12 12
14934 14937	500PAR64/MFL - 120V 500PAR64/WFL - 125-130V	6

#### OSRAM/SYLVANIA INCANDESCENT LAMP QUICK REFERENCE cont.









#### Reflector Lamns

Reflector Lamp	)S	
Catalog Number	Description	Per Case
14794	30R20 - 120V	60
14802	30R20 - 130V	60
10471	40K19/DR - 120V	6
14819	40R14/RP - 120V	6
15102	50ER30 - 120V	24
15107	50ER30 - 130V	24
14831	50R20 - 120V	60
14832	50R20 - 125-130V	60
15165	65BR30/FL - 120V	24
15160	65BR30/FL/RP - 120V	6
15149	65BR30/SP/RP - 120V	6
13129	65BR30/FL - 130V	24
15167	65BR30/FL/SL/RP - 130V	6
15100	75ER30 - 120V	24
15101	75ER30 - 130V	24
14840	75R20/RP - 120V	24
15126	75BR/FL - 120V	24
15125	75BR/FL - 130V	24
12583	75K19/DR - 120V	24
14851	100BR/FL–120V	24
14847	100BR/FL–130V	24
12298	100K19/DR–120V	24
14896	120BR/FL/RP - 120V	6
14899	120BR/FL - 130V	24
14911	120BR/SP - 120V	24
14909	120BR/SP - 130V	24
14898	120BR/GRO - 120V	6
15166	120ER40 - 120V	24
15168	120ER40 - 130V	24
14744	125R40 - 115-125V	24
14745	250R40/4 - 115-125V	24
14665	250R40/1 - 115-125V	12
14663	250R40/10 - 115-125V	12
14661	250KR38/FL - 120-130V	12
14781	300R/FL - 125-130V	24
14796	300R/3FL - 120V	24
14798	300R/3FL - 125-130V	24
14746	375BR40 - 120V	24
14747	375R40/1 - 120V	24
14837	500R/3FL - 125-130V	24
14980	500R52 - 125-130V	12
14992	750R52 - 125-130V	12

#### Linestra

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Catalog Number	Description	Per Case
19675	LN60 - 125-130V	25
19690	LN150 - 125-130V	16



#### OSRAM/SYLVANIA INCANDESCENT DECOR LAMP QUICK REFERENCE

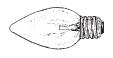
OSRAM SYLVANIA

Please request the Sylvania large lamp ordering guide for a complete listing and specification/application information for the entire Sylvania large lamp line.



#### Decor • B10

Catalog Number	Description	Per Case
13433	15B10/BL/2PK - 120V	12
13448	15B10C/BL/2PK - 120V	12
13715	15B10/T/BL/2PK - 120V	12
13438	25B10/BL/2PK - 120V	12
13570	25B10C/BAGPK - 120V	200
13452	25B10C/BL/2PK - 120V	12
13316	25B10C/DL/BL - 120V	12
13737	32B10C/CRYSTAL/RP - 120V	12
13719	40B10/T/BL/2PK - 120-125V	12
13441	40B10/W/BL/2PK - 120-125V	12
13720	40B10/W/T/BL/2PK - 120-125V	12
13571	40B10C/BAGPK - 120-125V	200
13456	40B10C/BL/2PK - 120-125V	12
13457	40B10C/W/BL/2PK - 120-125V	12
13682	40B10C/W/T/BL/2PK - 120-125V	12
13442	60B10/BL/2PK - 120V	12
13460	60B10C/BL/2PK - 120V	12
13464	60B10C/F/BL/2PK - 120V	12
13572	60B10C/BAGPK - 120-125V	200



#### **Decor • Flame**

Catalog Number	Description	Per Case
13435	15FC/AIC/BL/2PK - 120-125V	12
13806 13823 13821	25F - 120-125V 25F/AIC/BL/2PK - 120-125V 25F/IC/BL/2PK - 120-125V	24 12 12
13974 13986 13985	40F - 120-125V 40F/AIC/BL/2PK - 120-125V 40F/IC/BL/2PK - 120-125V	24 12 12
13993	60F - 120-125V	24



#### **Decor • Globe**

Catalog Number	Description	Per Case
13616 13617 13709	15616.5C - 120-125V 15616.5C/W - 120-125V 15616.5C/4M - 120V	24 24 24
13704 13703 13618 14264 14276 14265 14277 14404	25G16.5C/4M - 120V 25G16.5C/W/4M - 120V 25G16.5C - 120-125V 25G25 -120-125V 25G25/4M - 120V 25G25/W - 120-125V 25G25/W/4M - 120V 25G30/W/RP - 120-130V 25G40/W - 120-130V	24 24 24 24 24 24 24 24
14901 13700 13699 13702 14266 14287 14267 14405 14619	40G16-1/2C/4M - 120V 40G16-1/2C/W/4M - 120V 40G16-1/2C - 120-125V 40G25 - 120-125V 40G25/W/RP - 120-125V 40G25/W - 120-125V 40G30/W/RP - 120V 40G40/RP - 120V	24 24 24 24 24 24 24 26 6
14620 14280 14261 14406 14621 14622	40G40/W/RP - 120V 60G25 - 120-130V 60G25/RP - 120-130V 60G30/W/RP - 120-130V 60G40/RP - 120V 60G40/W/RP - 120V	6 24 24 6 6 6
14623 14624 14913	100G40/RP - 120-130V 100G40/W/RP - 120V 150G40/W - 120-130V	6 6



#### **Decor • Flicker**

Catalog Number	Description	Per Case
13496	2CA10/CL/FL/BL - 120V	24
13497	2CA8C/CL/FL/BL - 120V	24

### **OSRAM/SYLVANIA CAPSYLITE HALOGEN LAMP QUICK REFERENCE**

OSRAM SYLVANIA

Please request the Sylvania large lamp ordering guide for a complete listing and specification/application information for the entire Sylvania large lamp line.



### Capsylite • Par 16

Catalog Number	Description	Per Case
59030	60PAR16/CAP/NFL - 120V	15
59038	60PAR16/CAP/NFL - 130V	15
59032	60PAR16/CAP/NSP - 120V	15
59040	60PAR16/CAP/NSP - 130V	15
59034	75PAR16/CAP/NFL - 120V	15
59042	75PAR16/CAP/NFL - 130V	15
59036	75PAR16/CAP/NSP - 120V	15
59044	75PAR16/CAP/NSP - 130V	15



#### Capsylite • Par 36

Catalog Number	Description	Per Case
55090	36PAR36CAP/NSP - 12V	12
55100	36PAR36CAP/VNSP - 12V	12
55091	36PAR36CAP/WFL - 12V	12



### Capsylite • Par 20

Catalog Number	Description	Per Case
14464 14459 14467 14460 14506 14461	35PAR20/CAP/NFL - 120V 35PAR20/CAP/NFL - 130V 35PAR20/CAP/NSP - 120V 35PAR20/CAP/NSP - 130V 35PAR20/CAP/WFL - 120V 35PAR20/CAP/WFL - 130V	15 15 15 15 15
14529 14528	50PAR20/CAP/NFL - 130V 50PAR20/CAP/NSP - 130V	15 15



### Capsylite • Par 38

Catalog Number	Description	Per Case
14588 14591 14590 14593 14589 14592 14010 15537 15538	45PAR/CAP/SPL/FL-120V 45PAR/CAP/SPL/FL-130V 45PAR/CAP/SPL/NSP-120V 45PAR/CAP/SPL/NSP-130V 45PAR/CAP/SPL/SP-120V 45PAR/CAP/SPL/SP-130V 45PAR/CAP/WFL-130V 45PAR/HAL/SPL/FL/RP-120V 45PAR/HAL/SPL/SP/RP-120V	15 15 15 15 15 15 6 6
14468	60PAR/CAP/SPL/FL-120V	15
14448	60PAR/CAP/SPL/FL-130V	15
14469	60PAR/CAP/SPL/SP-120V	15
14449	60PAR/CAP/SPL/SP-130V	15
14513	75PAR/CAP/SPL/FL-120V	15
14515	75PAR/CAP/SPL/FL-130V	15
14516	75PAR/CAP/SPL/SP-130V	15
14514	75PAR/CAP/SPL/SP-120V	15
14510	75PAR/CAP/SPL/WSP-120V	15
14971 14973 14972 14632 14630 14579 14577 14601 14586 14587 14580 14578 14602	90PAR/CAP/SPL/2FL - 120V 90PAR/CAP/SPL/2FL - 130V 90PAR/CAP/SPL-3FL - 120V 90PAR/CAP/SPL/3FL - 120V 90PAR/CAP/SPL/3F - 120V 90PAR/CAP/SPL/FL - 130V 90PAR/CAP/SPL/NSP - 130V 90PAR/CAP/SPL/NSP - 120V 90PAR/CAP/SPL/NSP - 130V 90PAR/CAP/SPL/SP - 130V 90PAR/CAP/SPL/SP - 130V 90PAR/CAP/SPL/SP - 130V 90PAR/CAP/SPL/SP - 130V	15 15 15 15 15 15 15 15 15 15
14855	120PAR/CAP/SPL/FL/30-120V	15
14861	120PAR/CAP/SPL/FL/30-130V	15
14856	120PAR/CAP/SPL/NSP/10-120V	15
14874	120PAR/CAP/SPL/NSP/10-130V	15
14594	120PAR/CAP/WFL-120V	15

## Capsylite • Par 30

. /		
Catalog Number	Description	Per Case
14533 14527 14531 14530 14530 14478 14822 14482 14537 14486 14520 14509 14536	50PAR30/CAP/FL - 130V 50PAR30/CAP/NFL - 120V 50PAR30/CAP/NFL - 130V 50PAR30/CAP/NSP - 120V 50PAR30/CAP/NSP - 130V 50PAR30LN/CAP/NSP - 130V 50PAR30LN/CAP/NSP - 130V 50PAR30LN/CAP/NSP - 130V 50PAR30LN/CAP/WFL - 120V 50PAR30LN/CAP/WFL - 120V 50PAR30LN/HAL/NFL - 120V 50PAR30LN/HAL/NFL - 120V 50PAR30LN/HAL/NSP - 120V 50PAR30LN/HAL/WFL - 120V	15 15 15 15 15 15 6 15 15 15
14606 14629 14603 14627 14604 14628 14769 14778 14777 14768 14785	75PAR30/CAP/FL - 120V 75PAR30/CAP/FL - 130V 75PAR30/CAP/NFL - 120V 75PAR30/CAP/NFL - 130V 75PAR30/CAP/NSP - 120V 75PAR30/CAP/NSP - 130V 75PAR30(LAP/NSP - 130V 75PAR30LN/CAP/NFL - 130V 75PAR30LN/CAP/NFL - 130V 75PAR30LN/CAP/NSP - 130V 75PAR30LN/CAP/WFL - 120V 75PAR30LN/CAP/WFL - 120V	15 15 15 15 15 15 15 15 15



### OSRAM/SYLVANIA TUNGSTEN HALOGEN LAMP QUICK REFERENCE

OSRAM SYLVANIA

Please request the Sylvania large lamp ordering guide for a complete listing and specification/application information for the entire Sylvania large lamp line.



### **Super Q • Single Ended**

Catalog Number	Description	Per Case
58876	75Q/CL - 28V	12
58761 58755	100Q/CL (ESN) - 120V 100Q/CL/DC (ESR) - 120V	12 12
58736 58738 58733 58735 58731 58748 58737	150Q (ETH) - 120V 150Q/CL (ESL) - 120V 150Q/CL - 130V 150Q/CL/2 (ETG) - 120V 150Q/CL/2/RP (ETG) - 120V 150Q/CL/DC - 130V 150Q/DC (ETF) - 120V	12 12 12 12 6 12
58763 58765 58762 58764 58720 58753 58754	250Q (ESM) - 120V 250Q - 130V 250Q/CL (EHT) - 120V 250Q/CL - 130V 250Q/CL/DC (ESS) - 120V 250Q/DC (ETB) - 120V 250Q/DC - 130V	12 12 12 12 12 12 12
58767 58766 58756	500Q (EYX) - 120V 500Q/CL (EVR) - 120V 500Q/CL (EYW) - 130V	12 12 12
	500Q/CL (EYK) - 120V 500Q/CL (EYT) - 130V 750Q/CL (EYT) - 120V	



#### **Quartz Infrared**

Catalog Number	Description	Per Case
59850 59822	500T3 - 115-125V 500T3 - 120V	12 12
59860	1000T3 - 230-250V	12
59934	1200T3/CL/HT - 144V	12
59864 59936	1600T3 - 240V 1600T3 - 277V	12 12
59867	2500T3 - 480V	12



#### Tru Aim • MR11

Catalog Number	Description	Per Case
55107	20MR11/38/FL (FTD) - 12V	10
55113 55111	35MR11/10/SP (FTR) - 12V 35MR11/38/FL (FTH) - 12V	10 10

#### Double End • RSC Base



DOODIG FIIG A VOC DOSC		
Catalog Number	Description	Per Case
58909 58887	100T3Q/CL - 120V 100T3Q/S/CL/RP - 120V	12 6
58915	150T3Q/CL - 120V	12
58917 58923 58919 58942	200T3Q/CL - 120V 300T3.15Q/CL (EHM) - 120V 300T3Q/CL/RP (EHM) - 125V 300T4Q/CL (EHP) - 120V	12 12 12 12
58936	400T4Q/CL (EHR) - 120V	12
58883 58856 58902	500T3Q (FCZ) - 120V 500T3Q/CL (FCL) - 120V 500T3Q/CL - 130V	12 12 12
58948	1000T3Q/CL - 240V	12
58859 58857 58858	1500T3Q/CL - 208V 1500T3Q/CL - 240V 1500T3Q/C - 277V	12 12 12

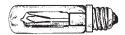


#### Tru Aim • MR16

Catalog Number	Description	Per Case
54201	20MR16/12/NSP (ESX) - 12V	20
54200	20MR16/36/FL (BAB) - 12V	20
54204	35MR16/8/NSP (FRB) - 12V	20
54203	35MR16Q/40/FL (FMW) - 12V	20
54208	50MR16/12/NSP (EXT) - 12V	20
54207	50MR16Q/40/FL (EXN) - 12V	20
54205	50MR16Q/25/NFL (EXZ) - 12V	20
58564	65MR16/FL (FPB) - 12V	10
58565	65MR16/FL (FPC/EYJ) - 12V	10
58563	65MR16/NSP (FPA) - 12V	10

#### OSRAM/SYLVANIA TUNGSTEN HALOGEN LAMP QUICK REFERENCE cont.

OSRAM SYLVANIA



### Halogen • T10

Catalog Number	Description	Per Case
18890	75T10/HAL - 120V	15
18891	75T10/HAL/CF - 120V	15
18892	100T10/HAL - 120V	15
18893	100T10/HAL/CF - 120V	15
18894	150T10/HAL - 120V	15
18895	150T10/HAL/CF - 120V	15
18896	250T10/HAL - 120V	15
18897	250T10/HAL/CF - 120V	15

### **Aluminum Reflector • AR70**

2.75" diameter.

Catalog Number	Description	Per Case
59012	20AR70/25/FL - 12V	10
59013	20AR70/8/SP - 12V	10
59016	50AR70/25/SP - 12V	10
59017	50AR70/8/SP - 12V	10



### Large Par

Catalog Number	Description	Per Case
56211	500PAR56Q/MFL - 120V	12
56210	500PAR56Q/NSP - 120V	12
56212	500PAR56Q/WFL - 120V	12
56207	1000PAR64Q/MFL - 120V	6
56206	1000PAR64Q/NSP - 120V	6
56208	1000PAR64Q/WFL - 120V	6

### Aluminum Reflector • AR111

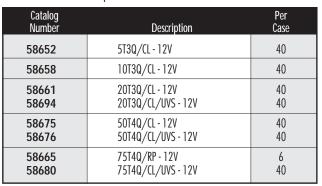
4.4" diameter.



Number	Description	Case
55114	35AR111/25/FL-12V	6
55102	35AR111/4/SSP-12V	6
55103	50AR111/25/FL-12V	6
55104	50AR111/8/SP-12V	6
55105	50AR111/4/SSP-12V	6
55123	75AR111/25/FL-12V	6
55125	75AR111/8/SP-12V	6
55128 55129	100AR111/45/WFL-12V 100AR111/8/SP-12V	6

#### Bi-Pin • Standard Clear

Not suitable for use in open fixtures.





### OSRAM/SYLVANIA METAL HALIDE & LOW PRESSURE SODIUM LAMP QUICK REFERENCE

Please request the Sylvania large lamp ordering guide for a complete listing and specification/application information for the entire Sylvania large lamp line.





BT-28





BT-37



PAR



Standard Metalarc

Color rendition better than HPS or MV

Catalog	Description	Bulb	Per
Number		Type	Case
64473 64472 64471 64480 64479	M175/3K/BU-ONLY M175/C/U M175/U M175/C/U/MED M175/U/MED	BT-28 BT-28 BT-28 BT-28 BT-28	6 6 20 20
64475	M250/3K/BU-ONLY	BT-28	6
64458	M250/C/U	BT-28	6
64457	M250/U	BT-28	6
64474	M250/U/ET-18	ET-18	10
64490 64492 64489 64488	M400/U M400/C/U M400/C/U/BT-28 M400/U/BT-28	BT-37 BT-37 BT-28 BT-28	6 6 6
64470	M1000/C/U	BT-56	6
64468	M1000/U	BT-56	6
64469	M1000/U/BT-37	BT-37	6
64431	M1500/BU-HOR	BT-56	6

#### **Metalarc Pro-Tech**

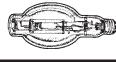
For use in open or enclosed fixtures.



Catalog	Description	Bulb	Per
Number		Type	Case
64588	MP50/C/U/MED	ED-17	20
64587	MP50/U/MED	ED-17	20
64546	MP70/C/U/MED	ED-17	20
64547	MP70/U/MED	ED-17	20
64426	MPD100/U/MED/840	ED-17	20
64418	MP100/C/U/MED	ED-17	20
64417	MP100/U/MED	ED-17	20
64582	MP100PAR38/U/FL35	PAR-38	6
64580	MP100PAR38/U/SP20	PAR-38	6
64406	MP150/C/U/MED	ED-17	20
64402	MP150/U/MED	ED-17	20
64774	MP175/C/BU-ONLY	BT-28	6
64405	MP250/C/BU-ONLY	BT-28	6
64717 64705 64706	MP400/BD-ONLY MP400/BU-ONLY MP400/C/BU-ONLY	BT-37 BT-37 BT-37	6 6
64714	MP1000/BU-ONLY	BT-56	6
64716	MP1000/C/BU-ONLY	BT-56	6

### **Super Metalarc**

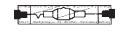
For higher lumen output in horizontal position.



Catalog	Description	Bulb	Per
Number		Type	Case
64439	MS175/HOR	BT-28	6
64440	MS175/C/HOR	BT-28	6
64449	MS250/C/HOR	BT-28	6
64448	MS250/HOR	BT-28	6
64496	MS250/3K/HOR	BT-28	6
64454 64498 64450 64451 64452 64446 64445	MS400/3K/BU-ONLY MS400/3K/HOR MS400/BU-ONLY MS400/BD-ONLY MS400/C/BU-ONLY MS400/C/HOR MS400/HOR MS400/C/HOR/BT28	BT-37 BT-37 BT-37 BT-37 BT-37 BT-37 BT-28	6 6 6 6 6
64436	MS1000/BD-ONLY	BT-56	6
64435	MS1000/BU-ONLY	BT-56	6
64460	MS1000/C/BU-ONLY	BT-56	6

#### Metal Halide HQI • Double Ended

For superior color rendition.



Catalog Number	Description	Per Case
64362	HQI-DE7O/NDX	12
64360	HQI-DE7O/WDX	12
64364	HQI-DE7O/WDX-E	12
64368	HQI-DE150/NDX	12
64366	HQI-DE150/WDX	12
64378	HQI-DE250/DX	12
64374	HQI-DE250/NDX	12

## Metal Halide HQI • Single Ended

For superior color rendition.



Catalog Number	Description	Per Case
64354	HQI-SE70/WDX	12
64356	HQI-SE150/WDX	12

Self-extinguishing if outer jacket is broken.

**Metalarc Safeline** 



#### **Low Pressure Sodium Lamps • SOX**



Catalog Number	Description	Per Case
69510	SOX18W	25
69511	SOX35W	25
69512	SOX55W	25
69513	SOX90W	12
69514	SOX135W	12
69515	SOX180W	9

## **OSRAM/SYLVANIA**

### **HIGH PRESSURE SODIUM & MERCURY LAMP QUICK REFERENCE**

Please request the Sylvania large lamp ordering guide for a complete listing and specification/application information for the entire Sylvania large lamp line.



### **Standard Lumalux**

High efficiency, low color rendering.



Catalog Number	Description	Bulb Type	Per Case
67500 67501	LU35/MED LU35/D/MED	ED-17 ED-17	20 20
67510 67511 67503 67502	LU50 LU50/D LU50/D/MED LU50/MED	ET-23.5 ET-23.5 ED-17 ED-17	20 20 20 20 20
67512 67513 67505 67504	LU70 LU70/D LU70/D/MED LU70/MED	ET-23.5 ET-23.5 ED-17 ED-17	20 20 20 20 20
67514 67515 67507 67506	LU100 LU100/D LU100/D/MED LU100/MED	ET-23.5 ET-23.5 ED-17 ED-17	20 20 20 20 20
67518 67516 67517 67509 67508	LU150/100 LU150/55 LU150/55/D LU150/55/D/MED LU150/55/MED	BT-28 ET-23.5 ET-23.5 ED-17 ED-17	10 20 20 20 20 20
67576	LU200	ET-18	20
67578 67521	LU250 LU250/D	ET-18 ET-18	20 10
67580	LU310	ET-18	20
67533 67524	LU400 LU400/D	ET-18 BT-37	20 10
67614	LU600 SUPER	T-16	10
67547	LU750	BT-37	6
67307	LU1000	E-25	6

#### **Lumalux** • Standby Instant restart capability



Catalog Number	Description	Bulb Type	Per Case
67540	LU70/SBY	ET-23.5	20
67542	LU100/SBY	ET-23.5	20
67544	LU150/55/SBY	ET-23.5	20
67584	LU400/SBY	ET-18	20
67543	LU1000/SBY	ET-25	6

67531

67318

Must be operated on mercury vapor lag

ULX360

**ULX880** 

or reactor ballasts	s only.	destination of the second	
Catalog Number	Description	Bulb Type	Per Case
67528	ULX150	BT-28	10
67530	ULX215	BT-28	10

BT-37

E-25

10

6

### **Standard Mercury**

Good efficiency, moderate color rendering.

Catalog	Description	Bulb	Per	
Number		Type	Case	
69400	H45/46DL-40/50/DX	ED-17	20	
69428	H43AV-75/DX	ED-17	12	
69403	H38AV-100/DX	ED-17	20	
69405	H38BP-100/DX	R-40	10	
69407	H38HT-100	ET-23.5	20	
69429	H38JA-100/DX	ET-23.5	12	
68843	H44GS-100/DX	PAR-38	12	
68846	H44GS-100/MDSK	PAR-38	12	
68844	H44JM-100	PAR-38	12	
69406	H39BP-175/DX	R-40	10	
69430	H39KB-175	BT-28	12	
69431	H39KC-175/DX	BT-28	12	
69447	H37KB-250	BT/ED-28	6	
69448	H37KC-250/DX	BT/ED-28	6	
68893 69449 69450 69451	H33AR-400 H33CD-400 H33GL-400/DX H33GL-T400/DX (Safeline) (1)	T-16 BT/ED-37 BT/ED-37 BT-37	6 6 6	
69332	H34GW-1000/DX	BT-56	6	
69307	H36GV-1000	BT-56	6	
69331	H36GW-1000/DX	BT-56	6	
NOTE: (1) Self extinguishing.				

INTERSTATE ELECTRIC CO., INC.



### **LAMP COMPARISON DATA**

OSRAM SYLVANIA

### **Fluorescent Lamp Colors**

Color	Color	Correlated	Color Rendering
	Abbreviation	Color Temp. <sup>(1)</sup>	Index (2)
Compact Fluorescent 2700K	827	2,700	82
Incandescent Fluorescent	IF	2,750	89
Soft White	Soft White	2,900	82
Deluxe Warm White	WWX	2,950	74
Designer "800" 3000K Designer 3000K Interior Design Warm White Octron "700" 3000K Octron "800" 3000K	D830	3,000	80
	D30	3,000	70
	D30	3,000	70
	WW	3,000	52
	730	3,000	75
	830	3,000	82
Gro-Lux Wide Spectrum	GRO/WS	3,400	89
White	W	3,450	57
Octron "700" 3500K	735	3,500	75
Octron "800" 3500K	835	3,500	82
Designer "800" 3500K	D835	3,500	80
Designer 3500K	D35	3,500	70
Natural White	N	3,600	86
Octron "700" 4100K	741	4,100	75
Octron "800" 4100K	841	4,100	82
Designer "800" 4100K	0841	4,100	80
Designer 4100K	041	4,100	70
Deluxe Cool White	CWX	4,100	89
Lite White	LW	4,150	48
Cool White	CW	4,200	62
Design 50	DSGN50	5,000	90
Octron "700" 5000K	750	5,000	75
Octron "900" 5000K	950	5,000	90
Daylight	D	6,500	76
Designer "800" 6500K	D865	6,500	80
Daylight Deluxe	DX	6,500	88

**NOTE:** (1) COLOR TEMPERATURE; The color temperature of a light source, expressed in Kelvins (K), describes the apparent whiteness of the lamp. Low color temperatures are "warm" in color and high color temperatures are "cool" in color. The color temperature of the light source contributes greatly to the visual appearance of the lighted space.

**NOTE:** <sup>(2)</sup> COLOR RENDERING INDEX (CRI); CRI, from 0-100, expresses the degree to which colors will appear " natural" under the light source being selected. The higher the CRI number, the better the color rendering properties of the light source. The color rendering index of any two sources should only be compared if those sources have the same color temperature.

### **Fluorescent Lamp Color Cross Reference**

SRAM S L ANIA INC.	E	PHILIPS
D30 D35 D41 D830 D835 D841 DSGN50 827 WWX DSGN50	SP30 SP35 SP41 SPX30 SPX35 SPX41 C50 SPX27 SW SGN	Spec 30 Spec 35 Spec 41 30U 35U 41U C50 27 WWX C50

#### **Fixture Comparison Data**

4-Lamp fixtures with plastic lens.

Lamp Type	Ballast	Ballast Factor <sup>(1)</sup>	Watts	Relative Light utput (RL ) (2	
F40CW F40/CW/SS F40/D841/SS F40/D841/SSP	Std. Magnetic Std. Magnetic Std. Magnetic Std. Magnetic	.95 .90 .90 .90	174 155 155 144	100 90 95 93	100 101 107 113
F40CW F40/CW/SS F40/D841/SS F40/D841/SSP	E.S. Magnetic E.S. Magnetic E.S. Magnetic E.S. Magnetic	.95 .88 .88	162 139 139 131	101 89 93 91	108 110 116 122
F40/CW/SS F40/D841/SS	Electronic Electronic	.75 .75	119 119	86 93	125 136
F032 Octron	T8 Magnetic	.95	132	104	137
F032 Octron	T8 Electronic	.92	106	101	166

**NOTE:** (1) Data normalized to ballast factors shown in this column for magnetic ballasts.

NOTE: (2) Relative light output (RLO) based on initial (100 hour) rated lamp lumen output.

#### Fluorescent Brand Name Guide

These tables are intended only as a guide and may represent another lamp company's closest equivalent rather than an identical match.

SRAM S L ANIA INC.	E	PHILIPS
Curvalume Design 50 Designer Series Designer "800" Series Dulux EL Gro-Lux Interior Design (D30) Octron SuperSaver SuperSaver Plus Dulux S Dulux D Dulux T VHO VHO/LT	MOD-U-LINE Chroma 50 Specification Series SPX Compax™ "Gro and Sho" SP 30 Trimline Watt-Miser Watt-Miser Plus Biax™ Double Biax™ Triple Biax™ 1500/Power Groove T10/1500MA	U-Bent Colortone 50 SPEC Series Ultralume SL-18 Earth Light Agro-Lite Softone Pastel FL (SPEC 30) TL70/TL80 Econ-o-Watt — PL PL-C PL-T HO —

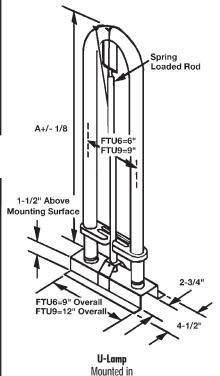
#### **HID Brand Name Guide**

SRAM S L Ania Inc.	E	PHILIPS
Lumalux Lumalux Standby Metalarc Metalarc Pro-Tech Metalarc Safeline Super Metalarc Unalux Brite-Line HQI	Lucalux Standby Lucalux Multi-Vapor MPR Saf-T-Guard Multi-Vapor High Output Multi-Vapor E-Z Lux MQI MQI	Ceramalux Instant Restrike Ceramalux Metal Halide — Safety Lifeguard Metal Halide Metal Halide "Econolux" MHN-TD MHN-TD

### **VOLTARC TUFBEND U-LAMPS • 6" LEG SPACING**

U-lamps offer several advantages for illuminating electric signs such as less raceway work, versatility in lighting corners and curves, shorter wire lengths and often, fewer lamps.

Catalog Number	Height "A"	Lamp Watts	Lumens	Per Case	Weight Per Case
FTU6-24CWHO FTU6-24DHO	10.5 10.5	36 36	1,600 1,328	6	4
FTU6-36CWHO FTU6-36DHO	16.5 16.5	48 48	2,750 2,300	6	5 5
FTU6-48CWHO FTU6-48DHO	22.5 22.5	60 60	4,000 3,300	6	7 7
FTU6-60CWHO FTU6-60DHO	28.5 28.5	75 75	5,125 4,250	6	9
FTU6-72CWHO FTU6-72DHO	34.5 34.5	87 87	6,125 5,100	6	11
FTU6-84CWHO FTU6-84DHO FTU6-96CWHO	40.5 40.5 46.5	100 100 112	7,400 6,150 8,750	6	12 12 14
FTU6-96DHO FTU6-120CWHO	46.5 57.0	112 112 132	7,250 10,650	6	14
FTU6-120DHO	57.0	132	8,800	6	16



FT 6-H or FT 9-H Base

#### **VOLTARC TUFBEND U-LAMPS • 9" LEG SPACING**

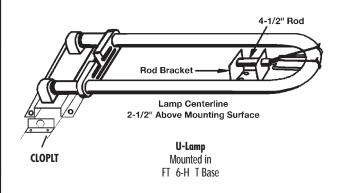
Catalog Number	Height "A"	Lamp Watts	Lumens	Per Case	Weight Per Case
FTU9-36CWHO FTU9-36DHO FTU9-48CWHO FTU9-48DHO FTU9-60CWHO FTU9-60DHO FTU9-72CWHO FTU9-72DHO FTU9-84CWHO FTU9-84DHO FTU9-96CWHO FTU9-96CWHO FTU9-96DHO	15.8 15.8 21.8 21.8 27.8 27.8 33.8 39.8 39.8 39.8 45.8	48 48 60 60 75 75 87 100 100 112 112	2,750 2,300 4,000 3,300 5,100 4,250 6,125 5,100 7,400 6,150 8,750 7,250	6 6 6 6 6 6 6 6 6 6	6 8 8 10 12 12 13 13 15
FTU9-60DHO FTU9-72CWHO FTU9-72DHO FTU9-84CWHO FTU9-84DHO FTU9-96CWHO	27.8 33.8 33.8 39.8 39.8 45.8	75 87 87 100 100 112	5,100 4,250 6,125 5,100 7,400 6,150 8,750	6 6 6 6 6 6 6	10 12 12 13 13

### **MOUNTING HARDWARE FOR TUFBEND U-LAMPS**

Dimensions are the same as the standard base.

Rod bracket location varies with lamp size and a locating chart is packed with the rod brackets.

	Description	р
FTU6-HO FTU9-HO FTU6-120HO FTU9-120HO FTU6-HOT FTU-CLOPLT	Base for U6HO lamps Base for U9HO lamps Base for U6HO 120" lamps Base for U9HO 120" lamps Horizontal base for U6HO lamps (1) Closure for ends of bases	12 12 12 12 12 12 48
FTU4.5 FTU24 FTU36 FTU48 FTU60 FTU72 FTU84 FTU96 FTU120 FTU-RODBRK	4.5" rod 24" rod 36" rod 48" rod 60" rod 72" rod 84" rod 96" rod 120" rod Bracket for U4.5 rod	12 12 12 12 12 12 12 12 12 12 24





### **VOLTARC XTRALONG FLUORESCENT SIGN LAMPS**

High Output 800mA



Catalog	Nominal Length	Actual Length	Lamp	Lumens	Per	Weight/Case
Number	Including Sockets	Between Sockets Faces	Watts		Case	(Lbs.)
VOL-F108CWHO	108"	105-13/16"	124	10,200	12	12
VOL-F108DHO	108"	105-13/16"	124	8,500	12	12
VOL-F117CWHO	117"	114-13/16"	132	11,200	12	13.5
VOL-F117DHO	117"	114-13/16"	132	9,300	12	13.5
VOL-F120CWHO	120"	117-13/16"	135	11,500	12	13.5
VOL-F120DHO	120"	117-13/16"	135	9,500	12	13.5

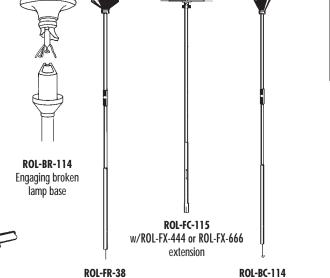
#### **RITE-O-LITE LAMP CHANGERS**

Catalog Number	Description	Length
ROL-BC-114	Changer for Most Incandescent Lamps	4'
ROL-FR-38	Changer for Beaded Face PAR38 Lamps	4'
ROL-BR-114 (2)	Incandescent Lamp Base Remover	-
ROL-BX-114	Extension pole for BC-114, FR-38, BX-114	4'
ROL-FC-115 (1)	Changer for Spring Held T12 Fluorescent Lamps	6'
ROL-FX-444	Extension Pole for FC-115	4'
ROL-FX-666	Extension Pole for FC-115	6'

**NOTE:** (1) Not for bi-pin lamps in twist-in or turn-lock lampholders.

(2) Can be used by itself or mounted to BX-114 extension pole.

May be used with BC-114 and FR-38 with rubber bulb holder removed.





ROL-BC-114 **Engaging small bulb** 



ROL-BC-114 **Engaging large bulb** 



**ROL-FR-38** Engaging rim of beaded PAR3 lamp

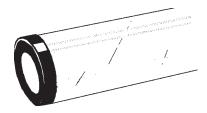


w/ROL-BX-114 extensions

#### **LAMP SLEEVES**

These transparent polycarbonate plastic lamp sleeves fit over the lamp to prevent flying glass if breakage occurs. Sleeves are also an economical way to effect colored lighting. Each sleeve is 96" long and may be cut to size complete with two end caps. May be used on T12 HO or VHO lamps when fitted with ALP-PALHST12 heat sink screens at each end.

Catalog Number	Description	Put p
ALP-PAL96C	8' T12 Colorless Lamp Sleeve w/Caps	24
ALP-PAL96B	8' T12 Blue Lamp Sleeve w/Caps	24
ALP-PAL96GR	8' T12 Green Lamp Sleeve w/Caps	24
ALP-PAL96G	8' T12 Gold Lamp Sleeve w/Caps	24
ALP-PAL96R	8' T12 Red Lamp Sleeve w/Caps	24
ALP-PALT12C ALP-PALHST12	Extra T12 End Cap T12 Heat Sink Screen	1
ALP-PAL96CT8	8' T8 Colorless Lamp Sleeve w/Caps	48
ALP-PALT8C	Extra T8 End Cap	60



### FLUORESCENT SIGN HO/VHO LAMPHOLDERS

Transco //



Rated 1000V/660W except where noted. White in color with 9", 18AWG/AWM 1000V leads. "HM" pattern tooling for "D" panel cut-out is shown in hardware section under A&N Punch Tooling.

Catalog	Description	asket/	Stationary/	Put
Number		Pitch	Telescopic	p
KUL-530-1K	Tombstone, "D" Snap-In, Vert. Contact	G/P	Ţ	25/200
KUL-530-2K	Tombstone, "D" Snap-In, Vert. Contact	G/P		25/200
KUL-530-5K			T	25/200
KUL-530-6K			S	25/200
TRA-782 (1) Tombstone, "D" Snap-In, Vert. Contact Tra-783 (1) Tombstone, "D" Snap-In, Vert. Contact Tombstone, "D" Snap-In, Vert. Contact Tombstone, "D" Snap-In, Vert. Contact Tra-783 (1)		G/P G/P	Ţ	25/200 25/200
LIG-235	Tombstone, "D" Snap-In, Vert. Contact	G/P	Ţ	200
LIG-135	Tombstone, "D" Snap-In, Vert. Contact	G/P		200
KUL-582GDF	Butt-On, "D" Snap-In	G/P	S	25/250
KUL-583GDF	Butt-On, "D" Snap-In	G/P		25/250
TRA-730-2 (1)	Butt-On, "D" Snap-In	G/P	S	25/250
TRA-730-1 (1)	Butt-On, "D" Snap-In	G/P	T	25/250
LIG-582F	Butt-On, "D" Snap-In	G/P	S	200
LIG-583M	Butt-On, "D" Snap-In	G/P	T	200
KUL-1548-1L	Tombstone, Bolt-On, Horz. Contact		T	25/250
KUL-1548-2L	Tombstone, Bolt-On, Horz. Contact		S	25/250
KUL-1547-1L (2) KUL-1547-2L (2)			Ţ	25/250 25/250
KUL-540B Butt-On, Booted, Screw-On Butt-On, Booted, Screw-On		-	Ţ S	25/250 25/250
NOTE: (1) Metal cli	p. <sup>(2)</sup> High profile for T17 lamps.			







KUL-530-2K **TRA-783** LIG-135





KUL-530-6K







KUL-583GDF TRA-730-1 LIG-583M





KUL-1548-2L





KUL-1547-2L







KUL-541B

#### FLUORESCENT SIGN SLIMLINE LAMPHOLDERS

Rated 1000V/660W. White in color with 9", 18AWG, AWM 1000V leads. "HM" pattern tooling for "D" panel cutout is shown in hardware section under A&N Punch Tooling.

Catalog	Description	asket/	Stationary/	Put
Number		Pitch	Telescopic	p
KUL-532-1	Tombstone, "D" Snap-In	G/P	T	25/200
KUL-532-2	Tombstone, "D" Snap-In	G/P	S	25/200
KUL-584GDF	Butt-On, "D" Snap-In	G/P	S	25/250
KUL-585GDF	Butt-On, "D" Snap-In	G/P	T	25/250
KUL-1575L	Tombstone, Butt-On	G/P	T	25/250
KUL-1576L	Tombstone, Butt-On	G/P	S	25/250

KUL-532-1



KUL-532-2







KUL-585GDF

KUL-1575L



KUL-1576L

### **LAMPHOLDER SHIELD • SOCKET SENTRY**

Shields the lamp base and lampholder from water spray, condensation, leakage and dust when installed at the bottom of a vertical T-12 lamp used in conjunction with Kulka 582/583 lampholders. Intended to cover not seal and should be replaced when relamping.

Catalog Number	Description	Temperature Range	Put p
KUL-582BB	Black Neoprene Boot	-65°F — +225°F	25/250





### **KULKA FLUORESCENT FIXTURE BI-PIN LAMPHOLDERS**

Colored white except where noted • Rated 600V/660W except where noted.



Catalog Number	Description	Mounting	verall Height (Inches) (3)	Lamp Retention	Termination	Hardware	Put p
KUL-1550-20P	Tombstone	20 Gauge Slide-On	2.14	Turn-Lock	Quickwire	6-32 Palnut	100/1,000
KUL-1551P	Tombstone	Screw-On	2.14	Turn-Lock	Quickwire	6-32 Palnut	100/1,000
KUL-1600-20D	Tombstone, Disconnect	20 Gauge Slide-On	1.67	Turn-Lock	Quickwire	-	100/1,250
KUL-1605 KUL-1605BR8	Butt-On Butt-On	Bracket #8 Bracket	-	Twist-In Twist-In	Quickwire Quickwire	-	100/1,250 100/1,250
KUL-1615-20	Tombstone, for "U" lamps	20 Gauge Slide-On	1.61	Straight Insert	Quickwire	-	100/1,250
KUL-1670B-L (1, 2) KUL-1670WBR1 (1)	Butt-On, Miniature T5 Butt-On, Miniature T5	Screw-On #1 Bracket	.72 .72	Turn-Lock Turn-Lock	6" Leads Quickwire		100/1,000 100/1,000
KUL-1710-20P	Tombstone	20 Gauge Slide-On	1.98	Turn-Lock	Quickwire	6-32 Palnut	100/1,000
KUL-1717CT	Tombstone, Low-Profile	18/20 Gauge Slide-On	1.61	Straight Insert	Quickwire	-	100/1,250
KUL-1800C	Tombstone, Low-Profile	18/20 Gauge Slide-On	1.67	Straight Insert	Quickwire	-	100/1,250
KUL-1801P	Tombstone, Low-Profile	Bolt-On	1.67	Turn-Lock	Quickwire	6-32 Palnut	100/1,250
KUL-542 KUL-543	Butt-On, Telescopic Butt-On, Stationary	Screws Screws	-	Spring Spring	9" Leads <sup>(4)</sup> 9" Leads <sup>(4)</sup>	6-32 x 1/4 Screws 6-32 x 1/4 Screws	100/1,000 100/1,000
KUL-590W KUL-590WSC	Butt-On Butt-On	Screws Screws	-	Twist-In Twist-In	9" Leads <sup>(4)</sup> 9" Leads <sup>(4)</sup>	4-36 x 3/8 Screws Spring Clip	100/1,000 100/1,000
KUL-591-LT12 KUL-591-RT12	Butt-On, Right End, T12 Butt-On, Left End, T12	Bracket Bracket	-	Side Entry Side Entry	9" Leads <sup>(4)</sup> 9" Leads <sup>(4)</sup>	-	100/1,000 100/1,000
KUL-594 KUL-594BR3	Butt-On Butt-On	Screw-On #3 Bracket	-	Twist-In Twist-In	9" Leads <sup>(4)</sup> 9" Leads <sup>(4)</sup>	-	25/700 100/500
KUL-596B (2)	Starter Socket	Screw-On	-	-	9" Leads (4)	6-32 x 1/4 Screws	100/1,000
KUL-597W KUL-597B <sup>(2)</sup> KUL-597BSC <sup>(2)</sup>	Starter Socket Starter Socket Starter Socket	Screw-On Screw-On BSC Bracket		-	9" Leads <sup>(4)</sup> 9" Leads <sup>(4)</sup> 9" Leads <sup>(4)</sup>	4-36 x 3/8 Screws 4-36 x 3/8 Screws 6-32 x 1/4 Screws	100/500 100/500 100/500















KUL-1551

KUL-1600

KUL-1605

KUL-1605BR8

KUL-1615

KUL-1670B-L













KUL-1670WBRI

KUL-1710

KUL-1717

KUL-1800

KUL-1801

KUL-542 KUL-543













**KUL-590** 

KUL-591RT12/KUL-591LT12

KUL-594

KUL-594BR3

**KUL-596** 

**KUL-597** 

### **KULKA FLUORESCENT FIXTURE HO LAMPHOLDERS**

 $\left( \overline{U_{L}}\right)$ 

White lampholders rated 600V/660W.

Catalog Number	Description	Lamp Type	Stationary/ Telescopic	Mounting	Termination	Put Up
KUL-1640-1	Tombstone	H0/VH0	Telescopic	20 Gauge Slide-On	Quickwire	25/400
KUL-1640-2	Tombstone	H0/VH0	Stationary	20 Gauge Slide-On	Quickwire	25/400





### **LEVITON FLUORESCENT FIXTURE BI-PIN LAMPHOLDERS**

White lampholders rated 600V/660W. Other types also available.



Catalog Number	Description	Mounting	Overall Height (Inches) $^{(I)}$	Lamp Retention	Termination	Hardware	Put Up	
LEV-390-1W LEV-391-1W	Tombstone Tombstone	Bolt-On Bolt-On	2.44 2.44 <sup>(2)</sup>	Twist-In Twist-In	Screw Terminals Screw Terminals	6 - 32x7/8 Screw 6 - 32x7/8 Screw	10/50 10/50	
LEV-395 (3)	Butt-On	Screw-On	-	Twist-In	9" Leads (4)	-	10/50	
LEV-431-W	Thin Butt-On	Screw-On	-	Twist-In	Quickwire	-	10/50	
LEV-518 LEV-519	Butt-On Butt-On	Screw-In Screw-In	-	Telescopic Stationary	Quickwire Quickwire	-	25/100 25/100	
LEV-13054-U	Tombstone	20 Gauge Slide-On	2.05	Turnlock	Quickwire	-	25/500	
LEV-13080-W	"U" Lamp Butt-On	Screw-On	-	Contact Tension	9" Leads (4)	-	25/500	
LEV-13357-N	Tombstone	18 Gauge Slide-On/Bolt-On	2.05	Turnlock	Quickwire	Palnut	10/100	
LEV-13359-N	Tombstone	Bolt-On	2.05	Turnlock	Quickwire	Palnut	10/100	
LEV-13570 LEV-13571	Tombstone Tombstone	20 Gauge Slide-On 20 Gauge Slide-On	1.90 1.90	Telescopic Stationary	Quickwire Quickwire	-	200 200	
NOTE: (1) Applies to to								







LEV-395





LEV-518



LEV-519







LEV-13080-W



LEV-13357-N



LEV-13359-N

LEV-13570 LEV-13571

LEVITON FLUORESCENT FIXTURE SL & HO LAMPHOLDERS

White lampholders rated 600V/660W. Other types also available.

LEV-523	Butt-On	ш				
LEV-524 LEV-2536 (2) LEV-2537 LEV-516 (2) LEV-517	Butt-On Tombstone Tombstone Butt-On Butt-On	HO HO SL SL SL SL	Telescopic Stationary Telescopic Stationary Telescopic Stationary	Snap-In Snap-In 20 Gauge Slide-On 20 Gauge Slide-On Snap-In Snap-In	Quickwire Quickwire Quickwire Quickwire Quickwire Quickwire	25/100 25/100 100 100 25/100 25/100



LEV-2536 LEV-2537





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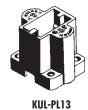
### MISCELLANEOUS FLUORESCENT LAMPHOLDERS



Catalog Number	Lamp Type	Mounting	Termination	Put p
KUL-9595	Circline	On Lamp Mounted, 4 Pins	6" Leads	100/1,000
KUL-PL7-9 KUL-PL7-9SF2 KUL-PL13 KUL-PL13SF2	PL (G23) Single PL (G23) Single PL (GX23) Dual PL (GX23) Dual	Surface Mount, Screw-On Bottom/Side Surface Mount, Snap-In Surface Mount, Screw-On Bottom/Side Surface Mount, Snap-In	Quickwire Quickwire Quickwire Quickwire	50/500 50/500 50/500 50/500











KUL-PL7-9SF2 KUL-PL13SF2

### **HID LAMPHOLDERS • MOGUL LAMPHOLDERS**





							INGLINIX	
Catalog Number	Body Description	Application	Base	Mounting	Termination	Rating	Put p	
LEV-8678	Porcelain	All Except HPS and Super Metalarc	Mogul	1/4 IPS Cap	Screw Terminals	1,500W/660V	50	
.EV-8680 Porcelain		All Except HPS and Super Metalarc	Mogul	1/2 IPS Cap	Screw Terminals	1,500W/660V	50	
LEV-8694	8694 Porcelain with Wireways		Mogul	2 Screws	Screw Terminals	1,500W/660V	50	
LEV-8694-4	EV-8694-4 Porcelain with Wireways		Mogul	2 Screws	Screw Terminals	1,500W/660V	50	
LEV-8746	Porcelain without Wireways (3)	HPS to 1,000W	Mogul	2 Screws	16" Leads (1)	1,500W/660V	25/50	
LEV-8750	Porcelain Position Oriented	Super Metalarc	Mogul	2 Screws	12" Leads (1)	1,500W/250V	25/75	
LEV-8756	Porcelain (4)	HPS to 400W	Mogul	2 Screws	12" Leads (1)	1,500W/600V	25/75	
LEV-8765	Porcelain 2-Piece	All Except HPS and Super Metalarc	Mogul	2 Screws	Screw Terminals	750W/250V	50	
KUL-5110B	Black Thermoplastic	Low Pressure Sodium	2 Pin	Screw-On	9" Leads (2)	1,000W/660V	25/100	



LEV-9882

#### **LEVITON INCANDESCENT MEDIUM BASE LAMPHOLDERS**



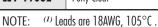
LEV-8871

LEV-19062

Other types also available.

Catalog Number	Description	Body Material	Rating	Termination	Mounting	Put p
LEV-8052-1 LEV-8875 LEV-8101 LEV-3152-8 LEV-9350 LEV-8871 LEV-9880 LEV-9882 LEV-9875 LEV-29816-C	With Removable bracket Front Mounted Two-Piece Fixture Pan Type Two-Piece With Removable Strap Low Profile High Profile Box Mount Top Wired Box Mount Pull Chain	Porcelain Porcelain Porcelain Porcelain Porcelain Porcelain Porcelain Porcelain Porcelain	660W/250V 660W/250V 660W/250V 660W/250V 660W/250V 660W/250V 660W/250V 660W/250V 660W/250V	9" Leads Screw Terminals 9" Leads Screw Terminals	#1 Bracket Snap-In Screw Ring 1/8 IPS Hickey Screw Ring Strap Surface Surface 3-0 or 4-0 Box 3-0 or 4-0 Box	10/100 200 10/100 10/100 10/100 10/100 10/100 50 10/50
LEV-10045 LEV-10085 LEV-19062	Straight Body with Cap Straight Body with no Cap Pony Cleat	Porcelain Porcelain Porcelain	660W/250V 660W/250V 660W/250V	Screw Terminals 9" Leads Open Terminals	2 Screws 2 Screws Surface	10/100 10/100 10/200

LEV-29816-C



LEV-9875



LEV-8052-1



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LEV-8101



LEV-8875



LEV-9350



LEV-9880



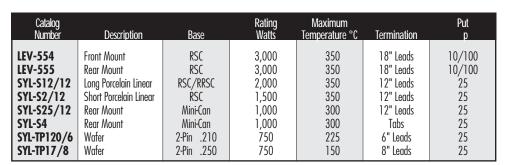


LEV-10045

LEVITON



### TUNGSTEN HALOGEN & QUARTZ LIGHT LAMPHOLDERS (9)





LEV-554



**LEV-555** 



SYL-S12/12

SYL-S2/12







SYL-TP120/6

INTERSTATE ELECTRIC CO., INC.



#### MISCELLANEOUS INCANDESCENT LAMPHOLDERS





Catalog Number	Description	Body Material	Base	Mounting	Termination	Rating	Put p
LEV-368-1	PAR38, PAR46	Porcelain	Medium Side Prong	On Lamp	18" Leads <sup>(1)</sup>	660W/125V	25/200
LEV-357-9	PAR56, PAR64	Porcelain	Mogul End Prong	On Lamp	18" Leads <sup>(1)</sup>	1000W/125V	25/200
KUL-130-AHT	Marine Type 180°C	Phenolic	Medium	Surface 4-Hole	2 Screws	660W/600V	25/200
KUL-130-BHT	Marine Type 180°C	Phenolic	Medium	Surface 4-Hole	4 Screws	660W/600V	25/200
KUL-130-CHT	Marine Type 180°C	Phenolic	Medium	Surface 3-Hole	2 Screws	660W/600V	25/200
KUL-130-DHT	Marine Type 180°C	Phenolic	Medium	Surface 3-Hole	4 Screws	660W/600V	25/200
NOTE: <sup>(2)</sup> Leads are 14AWG, SEW-2, 200°C.							









KUL-130-AHT KUL-130-BHT KUL-130-DHT

### **INCANDESCENT PIN-TYPE SIGN LAMPHOLDERS**



Designed for quick panel mounting and fast wiring of multiple lampholders. Bodies made of black phenolic. Tooling is shown in hardware section under A&N Punch Tooling.

		U			U	
Catalog Number	Base	Mounting	Rating	Manufacturer	Wire Range	Put p
EAG-4734-2 EAG-732-3BU CHA-22258.9	Medium Medium Medium	Snap-In Snap-In One-Man Screw-Ring	600W/250V 600W/250V 600W/250V	Eagle Eagle State Tool	18-12 Stranded 18-12 Stranded 14-12 Stranded	250 250 250
<b>EAG-731-2BU</b> EAG-731-3	Intermediate Intermediate	Spring Washer Snap-In	75W/250V 75W/250V	Eagle Eagle	18-16 Stranded 18-16 Stranded	600 600
EAG-974-2BU	Candelabra	Spring Washer	75W/125V	Eagle	20-18 Stranded	500



EAG-4734-2





EAG-731-2BU







EAG-974-2BU

#### **Panel Cutouts**

Refer to A&N Punch Tooling in hardware section.



EAG-4734-2 S2-C tooling



EAG-732-3BU



CHA-22258.9 211 tooling

 $\left( U_{\underline{l}}\right)$ 



EAG-731



EAG-974-2BU

ITW/Fastex

### **ITW FASTEX SIGN SOCKET SYSTEM**

section under A&N Punch Tooling.



Catalog	Description	AW	Put
Number		Wire Range	p
ITW-7017	Med. Base Socket 660W/250V	12-18 Stranded	450
ITW-M-TOOL	Manual Hand Installation Tool		1
ITW-P-TOOL	Pneumatic Installation Tool		1

manual or pneumatic versions. "S2-C" pattern tooling for panel cut-out is shown in hardware





ITW-7017

### **INCANDESCENT ADAPTERS, EXTENSIONS & REDUCERS**







Catalog Number	Description	Extends	Body Material	Rating	Put p	
<b>LEV-2005</b> <b>LEV-2006</b> EAG-1054	Medium/Medium Medium/Medium Medium/Medium	1-1/4" 1-1/4" 1-3/8"	Porcelain Phenolic Phenolic	660W/250V 660W/250V 660W/250V	10/100 10/100 25/250	
LEV-8647 Mogul/Mogul (1)		2-3/8"	Porcelain	1,500W/600V	1	
EAG-362 Medium to Mogul Adapter		-	Phenolic	660W/250V	10	
EAG-332 Mogul to Medium Reducer		-	Porcelain	660W/250V	25	
NOTE: (1) 4KV Pulse Rated.						







LEV-2006

LEV-2005



LEV-8647

EAG-362

EAG-1054

### **PRECISION MULTIPLE PHOTO CONTROLS**



Circuit normally closed at night.

Catalog Number	Mounting	Remarks	olts	Load olt/Amps	Put p
PRE-A-105	3/8-18 Threaded Flush Mount	-	120	1,000	12
PRE-T15 PRE-T30 PRE-T168 PRE-T368	1/2-14 Threaded Stem 1/2-14 Threaded Stem 1/2-14 Threaded Stem 1/2-14 Threaded Stem		120 120 208-277 208-277	1,800 3,000 1,800 3,000	12 12 12 12
PRE-ST15 PRE-ST19	1/2-14 Threaded Stem w/Swivel 1/2-14 Threaded Stem w/Swivel	-	120 480	1,800 1,800	12 12
PRE-P2275 PRE-P7275 PRE-8690 PRE-M2A PRE-JP-275	Twist-Lock Twist-Lock Twist-Lock Twist-Lock Twist-Lock	Thermal Delayed Response Thermal Delayed Response Economy Quick Response Receptacle w/Bracket Shorting Cap	120 480 105-285 -	1,800 1,800 1,800 - -	12 12 1 1 1





Threaded Stem w/swivel









Threaded Stem



Twist Lock



## **INTERMATIC PHOTO CONTROLS**

Circuit normally closed at night.

Catalog Number	Mounting		s Watts Ballast		s Amps Ballast	olts	Put p
INT-K4021	3/8-18 Threaded Flush Mount	1,800	1,000	15	8.3	120	]
INT-K4022	3/8-18 Threaded Flush Mount	3,600	2,000	15	8.3	240	]
INT-K4033	3/8-18 Threaded Flush Mount	4,100	2,300	15	8.3	277	]
INT-K4121	1/2-14 Threaded Stem	1,800	1,000	15	8.3	120	]
INT-K4122	1/2-14 Threaded Stem	3,600	2,000	15	8.3	240	]
INT-K4133	1/2-14 Threaded Stem	4,100	2,300	15	8.3	277	]
INT-K4221	1/2-14 Threaded Stem w/Swivel	1,800	1,000	15	8.3	120	]
INT-K4321	1 Gang Weather Proof Wall Plate	1,800	1,000	15	8.3	120	]





INT-K4021/INT-K4022 INT-K4033





INT-K4321

OSRAM

*Mulberry* 

#### **FLUORESCENT LAMP STARTERS**

Used in preheat lamp circuits.

Catalog	Description	rdering	Put
Number		Description	p
42812 44812 45812 43812 42512 46810 46316	14, 15, 20 Watts 30, 40 Watts 4, 6, 8 Watts 32 Watts Circline 25 Watts, 22 Watts Circline 90 Watts (2 Terminals) 90 Watts (4 Terminals)	FS2 FS4 FS5 FS12 FS25 FS85 FS850	100 100 100 100 100 50



@Iransco

#### **OUTDOOR SWITCHES** (9)

For individual sign power cutoff. TRA-L-FACE is a heavy duty face plate with cotter pin/padlock hole. Especially useful if birds are "pecking" at and turning off the switch.

MUL-30480A/30482/30486 are lever switch covers pre-assembled with appropriate switch.

	Catalog Number	Description	Poles/Throw	Rating	Put p	
	TRA-WPSW (1) TRA-BOOT TRA-L-FACE	Rubber Booted Toggle Replacement Boot for TRA-WPSW Large locking face plate	SPST - -	20A/120-277V - -	10/100 100 100	
MUL-30480A         Switch Mounted on 1 Gang WP Cover         SPST         10A/125V           MUL-30482         Switch Mounted on 1 Gang WP Cover         SPST         20A/120-277V           MUL-30486         Switch Mounted on 1 Gang WP Cover         DPST         20A/120-277V						
	NOTE: (1) Complete with boot, standard face plate and retaining ring.					



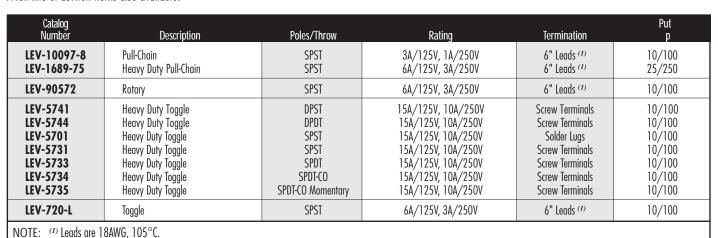




MUL-30480A, MUL-30482, MUL-30486

#### **APPLIANCE SWITCHES**

A full line of Leviton items also available.









LEV-90572



**Heavy Duty Toggle** 



LEV-720-L

### **WALL TOGGLE SWITCHES**

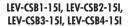
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LEVITON.

Other types and colors also available.

Catalog Number	Description	Color	Poles	Rating	Termination	Put p
LEV-CSB1-15I	Spec-Grade, Quiet	lvory	SP	15A-120/277V	Back/Side Clamps	10
LEV-CSB2-15I	Spec-Grade, Quiet	lvory	DP	15A-120/277V	Back/Side Clamps	10
LEV-CSB3-15I	Spec-Grade, Quiet	lvory	3-Way	15A-120/277V	Back/Side Clamps	10
LEV-CSB4-15I	Spec-Grade, Quiet	lvory	4-Way	15A-120/277V	Back/Side Clamps	10
LEV-CS120-2	Spec-Grade, Quiet	Brown	SP	20A-120/277V	Side Wired, Ground Screw	10
LEV-CS220-21	Spec-Grade, Quiet	Ivory	DP	20A-120/277V	Side Wired, Ground Screw	10
LEV-CS120-1	Spec-Grade, Quiet	Ivory	SP	20A-120/277V	Side Wired	10
LEV-5226-I	Quiet Switch/Neon Pilot	lvory	SP	15A-120V	Screw Terminals	10
LEV-5336-I	Quiet Switch/Neon Pilot	lvory	SP	20A-120V	Screw Terminals	10
LEV-1101-2L	Locking	Brown	SP	15A-120/277V	Side Wired	10
LEV-55500	Extra Key for LEV-1101-2L	-	-	-	-	10
LEV-1451-ICP	Residential-Grade, Quiet	Ivory	SP	15A-120V	Quickwire, Side Wired	10







LEV-CS120-2, LEV-CS220-21, LEV-CS120-I



LEV-5336-I



LEV-1101-2L



LEV-55500



LEV-1451-ICP

#### **ELECTRICAL TAPE**

(U)

Catalog Number	Description	Width	Length	Put p
MMM-16720	Black Vinyl Electrical Tape	3/4"	66 Feet	10/100





### **CRIMP WIRE TERMINALS**



Minimum order is put-up amount. Other sizes and styles also available.

Catalog Number	Description	AW Wire Range	Stud Size	Insulated Barrel es/No	Put p
MMM-B25-002K WES-SN-I (2) WES-SN-C (2) STA-C71 MMM-D25-002K	Ring Terminal Ring Terminal Ring Terminal Ring Terminal Ring Terminal	22-18 16-14 16-14 12-10 12-10	8-10 8-10 .250 .250 8-10	N N N N	100 250 200 100 100
STA-B115 MMM-D06-203K	Spade Terminal Spade Terminal	16-14 12-10	8-10 8-10	N N	100 100
MMM-B42-201K MMM-B42-401K MMM-C42-201K MMM-D42-401K	Splice Terminal Splice Terminal Splice Terminal Splice Terminal	22-18 22-18 16-14 12-10	- - -	N Y N	100 100 100 100
NOTE: (1) Normally used	on GTO-15 cable for connect	ions on neon tran	sformers.		







**Ring Terminal** 

**Spade Terminal** 





**Splice Terminal** 

**Insulated Splice Terminal** 

### **CRIMP CAP WIRE CONNECTORS**



Put up quantities are also minimum order quantities.

Catalog Number	Туре	Color	Permitted Wire Combinations	Put p
STA-RC6	Insulated Crimp	Clear	Minimum 3- #14, Maximum 4- #12	100/500
STA-WT2000	Crimping Pliers fo	or STA-RC6		1

Sta-Kon





### **ELECTRICAL TESTERS**

SPE-TD-2608 features a tear-drop shaped jaw to aid work in crowded boxes, pointer lock, one-handed operation and safety wrist strap. Includes test leads, battery and carrying case.

SPE-SP-140 features an easy to read 2 and 3 colored scale in a jeweled 2% accuracy diode protected meter. Convenient compact shirt pocket size. Includes test leads and battery. C7 carrying case sold separately.

Other models also available.

Catalog Number	Description	Amps	Range olts	hms
SPE-TD-2608	Slim-Snap / Volt-Ohm-Ammeter	6, 15, 60, 150, 300 AC	150, 300, 600 AC, 60 DC	1K, 10K
SPE-SP-140	Pocket Size Multimeter	5, 25, 250 mA	10, 50, 250, 500, 1000 AC 2.5, 10, 50, 250, 1000 DC	4K, 40K
SQD-6610VT-1	Voltage Tester, "Wiggi"	-	120-600 AC/DC	-
THO-19-081	Pocket Glow Voltage Tester	-	90-250 AC/DC	-





SPERRY T&B

**SPE-TD-2608** 

SQD-6610VT-1



THO-19-081



SPE-SP-140

### LIGHT METERS (4)

The SYL-DS2050 and DS2000 features a 1/2" digital displays and proprietary Sylvania Cell/Filter combination that ensures accurate response and stability without requiring exterior filters. The excellent color response of this feature assures precise light measurement regardless of the light's color, making it ideal for solar energy, plant growth and similar lighting applications.

The SYL-DS2050 differs from the SYL-DS2000 in that it will read in increments of 0.1 footcandles below 50 footcandles.

Catalog Number	Description	Features	Range Foot Candle	Accuracy
<b>SYL-DS2000</b>	Digital Light Meter w/Pouch	Reading Hold, Cosine Corrected	0-1999	5
<b>SYL-DS2050</b>	Digital Light Meter w/Pouch	Reading Hold, Cosine Corrected	0-1999	5
GEN-217	Analog Light Meter	Pocket Size, Cosine Corrected	50/250/1000	10-15



SYL-DS2000 SYL-DS2050



OSRAM

SYLVANIA

**GEN-217** 

Type of Activity	Ranges of Illuminances
Public spaces with dark surroundings	2-3-5 FC
Simple orientation for short temporary visits	5-7.5-10 FC
Working spaces where visual tasks are only occasionally performed	10-15-20 FC
Performance of visual tasks of:	
High contrast or large size	20-30-50 FC
Medium contrast or small size	50-75-100 FC
Low contrast or very small size	100-150-200 FC
Low contrast and very small size over a prolonged period	200-300-500 FC
Performance of very pro- longed and exacting visual tasks	500-750-1000 FC
Performance of very special visual tasks of extremely low con- trast and small size	1000-1500-2000 FC

Handy illumination chart on back of S L-DS2050 and DS2000 meters.

### **INTERMATIC TIME SWITCHES**



### NTERMATIC

These heavy duty units are designed for industrial, commercial and residential applications. Supplied with 1/2" and 3/4" concentric knockouts; 1 on back, 1 on each side and 2 on bottom. Skipper models can skip operation on selected days. 7 day model allows different operations on different days. All other Intermatic items also available.

Catalog	Туре	Poles/	Rating	Clock Motor	Max peration	Min N	Min FF
Number		Throws	Amps/Pole	olts	Per Day	period/hours	period/hours
INT-T101 INT-T102 INT-T103 INT-T104 INT-T105	24 hour in steel case	SPST SPST DPST SPST INO/INC (1)	40 40 40 40 40	125 208/277 125 208/277 125	12 12 12 12 12	1 1 1 1	1 1 1 1
INT-T101M	24 hour mechanism only	SPST	40	125	12	1	1
INT-T103M	24 hour mechanism only	DPST	40	125	12	1	1
INT-T104M	24 hour mechanism only	DPST	40	208/277	12	1	1
INT-T101R INT-T103R	24 hour in rain-tight case 24 hour in rain-tight case	SPST DPST	40 40	125 125	12 12	1	1
INT-T173	24 hour with skipper, in steel case	DPST	40	125	10	1	1
INT-T175	24 hour with skipper, in steel case	INO/INC (1)	40	125	10	1	1
INT-T1471BR	24 hour with skipper, in steel case	4PST	40	125	10	1	1
INT-T7401B	7 day, in steel case	4PST	40	125	3	3.5	3.5

NOTE: (1) Can be wired as SPDT.



INT-T101



INT-T101R INT-T103R



INT-T175



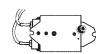
NTERMATIC

### INTERMATIC TIME SWITCH PARTS 571

Catalog Number	Description	olts			
INT-WG157010 INT-WG157310	Motor for T100, T170 Series Motor for T100, T170 Series	125 208/277			
INT-WG43020D INT-WG43320D	Motor for old T100, T170 Series Motor for old T100, T170 Series	125 208/277			
INT-156T1978A (1) INT-156T1952A (1)	Tripper Set for T100, T170 Series Skipper Screw Set for T170 Series	-			
NOTE: (1) Not UL Recognized (UR).					



Switch Motor Top iew



INT-WG1570-10 / INT-WG1573-10 nderside iew, Note Pinion Location



INT-WG430-20 / INT-WG433-10 nderside iew, Note Pinion Location



### **STEPDOWN TRANSFORMERS • SINGLE PHASE** (4)

Electrostatic shielded transformers have a grounded conductor placed between the primary and secondary winding to greatly reduce or eliminate line-to-line or line-to-ground noise. Buck-boost transformers are single-phase isolated transformers having four windings. Can be used as step-down transformers or can be connected to buck (reduce) or boost (raise) line voltages from 5-20%. Isolated transformers have primary and secondary windings insulated from each other.





	, ,							,		
Catalog Number	Туре	Capacity K A	Primary olts	Secondary olts	Secondary Taps	Dim Height -A	ensions (Incl Width-B	nes) Depth-C	Wiring Diagram	Weight (Lbs.)
211-041-277 211-051-277 211-071-277 211-091-277 211-101-277 211-111-277	Shielded, Isolated Shielded, Isolated Shielded, Isolated Shielded, Isolated Shielded, Isolated Shielded, Isolated	.25 .50 1.00 2.00 3.00 5.00	277 277 277 277 277 277	120/240 120/240 120/240 120/240 120/240 120/240	2 @ 2.5% 2 @ 2.5% 2 @ 2.5% 2 @ 2.5% 2 @ 2.5% 2 @ 2.5%	9-3/8 9-3/8 11-1/2 13 15-3/8 15-3/8	4-3/8 4-3/8 5-7/8 5-7/8 7-1/2 7-1/2	4-1/16 4-1/16 4-3/4 5-5/16 6-3/4 6-3/4	10C 10C 10C 10C 10C 10C	11.0 13.0 24.0 39.0 62.0 86.0
211-011-000 211-041-055 211-051-055 211-061-055 211-071-055 211-081-055 211-091-055	Isolated Shielded, Isolated	.075 .25 .50 .75 1.00 1.50 2.00	240/480 240/480 240/480 240/480 240/480 240/480 240/480	120/240 120/240 120/240 120/240 120/240 120/240 120/240	None None None None None None	8-1/4 9-3/8 9-3/8 11-1/2 11-1/2 13 13	3-5/8 4-3/8 4-3/8 5-1/16 5-1/16 5-7/8 5-7/8	3-1/2 4-1/16 4-1/16 4-3/4 4-3/4 5-5/16 5-5/16	9A 9B 9B 9B 9B 9B 9B	5.7 11.0 13.0 18.0 24.0 28.0 39.0
211-051-208 211-071-208	Shielded, Isolated Shielded, Isolated	.50 1.00	208 208	120/240 120/240	None None	9-3/8 11-1/2	4-3/8 5-7/8	4-1/16 4-3/16	10B 10B	13.0 24.0
216-1101 216-1111 216-1121 216-1131 216-1141 216-1151 216-1171	Buck-Boost, Isolated Buck-Boost, Isolated Buck-Boost, Isolated Buck-Boost, Isolated Buck-Boost, Isolated Buck-Boost, Isolated Buck-Boost, Isolated	.10 .15 .25 .50 .75 1.00 2.00	120/240 120/240 120/240 120/240 120/240 120/240 120/240	12/24 12/24 12/24 12/24 12/24 12/24 12/24	None None None None None None	8-1/4 8-1/4 9-3/8 9-3/8 11-1/2 11-1/2	3-5/8 3-5/8 4-3/8 4-3/8 5-1/8 5-1/8 5-7/8	3-1/2 3-1/2 4-1/16 4-1/16 4-3/4 4-3/4 5-5/16	60A 60A 60A 60A 60A 60A	6.1 7.3 11.0 14.0 19.0 26.0 41.0
UET-105 (1) UET-150 (1) UET-175 (1) UET-100R (1)	Control Control (2) Control (3) Control (4)	.040 .050 .075 .100	120/208/240 120/208/240 120/208/240 120/208/240	24 24 24 24	None None None None	3-1/2 3-1/2 3 3	2-1/4 2-1/2 3 4-1/4	2 3 3-1/2 2-1/2	- - - -	1.5 2.3 3.1 4.5

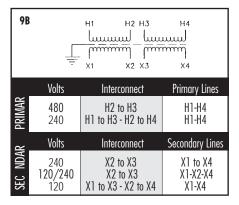
**NOTE:** <sup>(1)</sup> UL Recognized (UR), closed core and coil with mounting foot. Dimensions are approximate. <sup>(2)</sup> Primary fuse protected 2.5A/250V slow-blow. <sup>(3)</sup> Primary fuse protected 3.15A/250V slow-blow. <sup>(4)</sup> Circuit breaker protected.

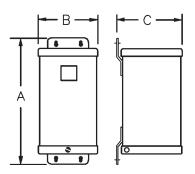
10		<u></u> <u>                              </u>	
	Volts		Primary Lines
PRIMAR	277 270 263	Insulate unused taps individually.	H1-H4 H1-H3 H1-H4
یے	Volts	Interconnect	Secondary Lines
SEC NDAR	240 120/240 120	X2 to X3 X2 to X3 X2 to X3 - X2 to X3	X1 to X4 X1-X2-X4 X1-X4

10	В	H1 H2			
	1		mmmn X4		
_ حـ	Volts		Primary Lines		
PRIMAR	208		H1-H2		
	Volts	Interconnect	Secondary Lines		
SEC NDAR	240 120/240 120	X2 to X3 X2 to X3 X1 to X3 - X2 to X4	X1-X4 X1-X2-X4 X1-X4		

9A	l X	H2 H3	H4 www mm X4
	Volts	Interconnect	Primary Lines
PRIMAR	480 240	H2 to H3 H1 to H3 - H2 to H4	H1-H4 H1-H4
_ يدا	Volts	Interconnect	Secondary Lines
SEC NDAR	240 120/240 120	X2 to X3 X2 to X3 X1 to X3 - X2 to X4	X1 to X4 X1-X2-X4 X1-X4

60A		H1 H2 H3 Luuuuu luuu MTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTT	H4 ww mm X4
_ پے	Volts	Interconnect	Primary Lines
PRIMAR	240 120	H2 to H3 H1 to H3 - H2 to H4	H1-H4 H1-H4
JAR	Volts	Interconnect	Secondary Lines
SEC NDAR	24 12	X2 to X3 X1 to X3 - X2 to X4	X1-X4 X1-X4





#### **THHN BUILDING WIRE**



Catalog I Number Prefix	Number Color Code Suffix	Wire auge AW	Conductor	Put p
14THHNSOL-	<b>01</b> - Black <b>02</b> - White	14	Solid	500' Spool
12THHNSOL-	<b>03</b> - Red	12	Solid	500' Spool
10THHNSOL-	<b>04</b> - Orange <b>05</b> - Yellow	10	Solid	500' Spool
14THHNSTR-	<b>05</b> - Yellow <b>06</b> - Green	14	Stranded	500' Spool
12THHNSTR-	<b>07</b> - Blue	12	Stranded	500' Spool
10THHNSTR-	<b>08</b> - Brown <b>19</b> - Purple	10	Stranded	500' Spool





THHN is 90°, 600V nylon jacketed building wire.

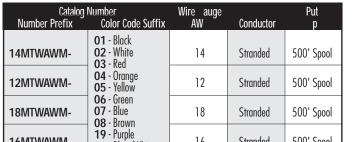
#### **Ordering Information**

Add color code suffix to number prefix to complete catalog number. i.e. 14THHNS L-05 14 THHN solid yellow wire. Minimum order one 500 spool.

# MTW/AWM DUAL RATED BALLAST WIRE

91 - Blue/White

93 - Orange/Black



16

Stranded

500' Spool



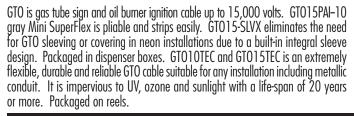
MTW is 105°, 600V machine tool wire. AWM is 90°, 1000V appliance wiring material.

#### **Ordering Information**

Add color code suffix to number prefix to complete catalog number. i.e. 14MTWAWM-07 14MTW/AWM blue wire. Minimum order one 500 spool.

#### GTO CABLE (9)

16MTWAWM-









Catalog Number	Trade Name	Max Temp °C	Color	Wire auge AW	Rating olts	Mfgr.	.D. Inches	Put p	Min. rder
GTO15PAI-OP	Tuf-Hide Noodle Flex	105	Black	14	15,000	Paige	.243	250'	50'
GTO15PAI-10	Mini SuperFlex	105	Gray	14	15,000	Paige	.250	250'	50'
GTO15TECW250	Silitherm Silicone	150	White <sup>(1)</sup>	14	15,000	Tecnolux	.350	250'	250' Roll <sup>(2)</sup>
GTO10PAI-01	Tuf-Hide	105	Black	18	10,000	Paige	.180	250'	250'
GTO10TECW250	Silitherm Silicone	150	White <sup>(1)</sup>	18	10,000	Tecnolux	.290	250'	250' Roll <sup>(2)</sup>
GTO15WES-01	Hi-Flex	105	Black	14	15,000	Westrim	.245	250'	50'
GTO15WES-02	Hi-Flex	105	White	14	15,000	Westrim	.245	250'	50'
GTO15WES-10	Hi-Flex	105	Gray	14	15,000	Westrim	.245	250'	50'
GTO15SLVX-01	Sleeve-X	105	Black	14	15,000	Paige	.230	150'	150' Roll
GTO15SLVX-02	Sleeve-X	105	White	14	15,000	Paige	.230	150'	150' Roll
GTO15SLVX-10	Sleeve-X	105	Gray	14	15,000	Paige	.230	150'	150' Roll

**NOTE:** (1) Also available in Black and Gray. Custom colors available with quantity orders. (2) Also available in 100' reels.

#### **BARE COPPER WIRE • TIE WIRE**

22BARE-1/22BARE-9 sold by the pound, 12BARE-500 by the foot. 1 spool min.

Catalog	Description	Wire auge	Put
Number		AW	p
22BARE-1	Soft Bare Solid Copper Wire	22	1 Lb. Spool
22BARE-9	Soft Bare Solid Copper Wire	22	9 Lb. Spool
12BARE-500	Solid Copper Bond Wire	12	500' Spool



# Since 1946 Interstate Electric Co.

### **WIRENUT WIRE CONNECTORS**

Put up quantities are also minimum order quantities.

Catalog	Trade	Color	Wire	Minimum	Maximum	Put
Number	Reference		Range	Wire Combinations	Wire Combinations	p
THO-10-103H	Hi-3	Orange	22-16	1 #20 & 1 #22	2 #16	100
THO-10-113	Hi-3	Orange	22-16	1 #20 & 1 #22	2 #16	1000
THO-10-153	Hi-3	Orange	22-16	1 #20 & 1 #22	2 #16	500
THO-10-104	Hi-4	Yellow	18-10	1 #14 & 1 #18	1 #10 & 1 #14	100
THO-10-114	Hi-4	Yellow	18-10	1 #14 & 1 #18	1 #10 & 1 #14	1000
THO-10-106H	Hi-6	Red	14-12	2 #14	4 #12	100
IDE-30-071	71B	Gray	22-14	1 #20 & 1 #22	2 #16	100
IDE-30-072	72B	Blue	22-14	3 #20	3 #16	100
IDE-30-172	72B	Blue	22-14	3 #20	3 #16	1000
IDE-30-073	73B	Orange	22-14	3 #20	3 #16 & 1 #18	100
IDE-30-173	73B	Orange	22-14	3 #20	3 #16 & 1 #18	1000
IDE-30-273	73B	Orange	22-14	3 #20	3 #16 & 1 #18	500
IDE-30-074	74B	Yellow	18-10	1 #14 & 1 #18	4#14 & 1#18	1000







Hi-4, 74B





### **WINGNUT WIRE CONNECTORS**

Put up quantities are also minimum order quantities.

Catalog Number	Trade Reference	Color	Wire Range	Minimum Wire Combinations	Maximum Wire Combinations	Put p
THO-10-602H	Hi-Y	Yellow	22-10	2 #18	3 #12 Solid	100
THO-10-652	Hi-Y	Yellow	22-10	2 #18	3 #12 Solid	500
THO-10-604H	Hi-R	Red	18-8	2 #16	5 #12 Solid	100
THO-10-614	Hi-R	Red	18-8	2 #16	5 #12 Solid	1000



Hi-Y



Hi-R

## **SCOTCHLOK WIRE CONNECTORS**

Put up quantities are also minimum order quantities.

Catalog Number	Color	Permitted Wire Combinations	Put p
MMM-Y MMM-Y-BULK	Yellow Yellow	5-8 #22, 4-6 #20, 2-5 #18, 2-3 #16, 1-3 #14, 1-2 #12, 1 #10 5-8 #22, 4-6 #20, 2-5 #18, 2-3 #16, 1-3 #14, 1-2 #12, 1 #10	100 500
MMM-R MMM-R-BULK	Red Red	9 #18, 4-6 #16, 2-5 #14, 2-5 #12, 1-3 #10 9 #18, 4-6 #16, 2-5 #14, 2-5 #12, 1-3 #10	100 500
MMM-G	Gray	4-7 #14, 2-6 #12, 2-4 #10, 2 #8	100
MMM-B	Blue	3-6 #12, 2-6 #10, 2-3 #8, 1-2 #6 Stranded	50
MMM-O/B	Orange/Blue	2 #22 up to 2 #12	100
MMM-R/Y	Red/Yellow	2 #18 up to 2 #8	100



MMM-Y









MMM-G

MMM-B

MMM-O/B

MMM-R/Y

**WIRING TOOLS** 

Catalog Number	Description	Manufacturer
VAC-1963	Multi-Purpose Wiring Tool, Cuts, Strips and Crimps	Vaco
KMI-101S	Wire Stripper, with Spring Return	K. Miller
THO-18-340	Automatic Wire Stripper	T & B
CHA-337WG	Diagonal Pliers, Cuts, Strips #12-14 AWG	Channellock
THO-14-250	50' Fishtape	T & B
THO-14-258	100' Fishtape	T & B
IDE-31-148	Spring Fishtape Leader	Ideal



KMI-101S

**VAC-1963** 



THO-14-250

THO-18-340 CHA-337WG

THO-14-258

### **SUPERVISION Fiber Optic Lighting Systems**



SuperVision's fiber optic lighting systems and components are used around the world to light signs, billboards, channel and backlit letters, star ceilings, cove lighting, building outlines, fine art, landscapes, swimming pools, fountains, fiber optic curtains and decorative waterfalls. SuperVision uses acrylic (plastic) optical fibers that are virtually unbreakable and make the product very appealing as a neon alternative. It is an excellent choice for use in or around water or anywhere that heat, ultraviolet rays or electricity is a concern.

SuperVision's manufacturing facility and headquarters are in Orlando, Florida, USA where it produces its patented SideGlow cable and EndGlow cable for use in theme parks, private residences, corporate offices, gas stations, bridges, cars, trains and airplanes. SuperVision manufactures a wide variety of light sources to meet every need. SuperVision has also produced some of the most spectacular fiber optic displays in the world, including the fiber optically lit Coco-Cola bottle and AT&T signs both located in New York City's Times Square. Illuminators carry a 1 year warranty excluding lamp.

### **SUPERVISION SV750 LIGHT SOURCES** (4)

SuperVision's SV750 illuminator is designed for star field ceilings and end point displays. Features include: universal power inlet with on/off switch, AC power cord and an on/off color wheel switch (when necessary). For interior dry locations only.

- Lamp: 75 watt quartz halogen (MR16, EYC)
  Lamp Life: 4000 hours average (BCS) life.
  UL, CE & CUL listed dry location
  Fiber Capacity: 2500 fibers
  Silver powder coated casing

120V • 60Hz • 7 lbs.

Light Source	Color Wheel ptions	Effect	Fiberhead
SV-750ESTDCE SV-750ESTDSE SV-750EWSE SV-750ESGE SV-750E4CE SV-750E8CE SV-750ECE	Red, Green, Blue, Yellow Sparkle - Red, Green, Blue, Yellow Sparkle - White Soft Sparkle Custom 4 Colors in Vinyl Custom 8 Colors in Vinyl White Light Only, No Color	Color Changing Color Sparkle Sparkle Shimmer Color Changing Color Changing White Light	Fixed Epoxy
SV-7504SS SV-7508SS SV-7504CS SV-7508CS	Standard 4 Colors for SideGlow <sup>(1)</sup> Standard 8 Colors for SideGlow <sup>(2)</sup> Custom 4 Colors for SideGlow <sup>(3)</sup> Custom 8 Colors for SideGlow <sup>(3)</sup>	Color Changing Color Changing Color Changing Color Changing	Compression Tight Compression Tight Compression Tight Compression Tight



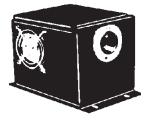
SuperVision's StarPro 70 illuminator uses Vision 2™ technology with improved reflector design and heat control for maximum lamp performance, secure and true lamp and fiber port alignment assuring the best acceptance angle for fiber, and fiber port cooling for fiber protection. StarPro 70 is designed for most EndGlow applications and star field ceilings where maximum brightness is necessary due to high ambient light levels.

Standard features include: On/off color wheel switch (when necessary) and a 1/2" flexible conduit connector for hard wiring. For interior dry locations only.

- Lamp: 70 watt metal halide
- Fiber Capacity: 2500 fibers
- Lamp Life: 9000 hours average (BCS) life.
   Aluminum powder coated casing
   UL, CE & CUL listed dry location

120V • 60Hz • 21 lbs.

Light Source	Color Wheel ptions	Effect	Fiberhead
SV-SP-ESTDCE	Red, Green, Blue, Yellow	Color Changing	Fixed Epoxy
SV-SP-ESTDSE	Sparkle - Red, Green, Blue, Yellow	Color Sparkle	
SV-SP-EWSE	Sparkle - White	Sparkle	
SV-SP-ESGE	Soft Sparkle	Shimmer	
SV-SP-E4CE	Custom 4 Colors in Vinyl	Color Changing	
SV-SP-E8CE	Custom 8 Colors in Vinyl	Color Changing	
SV-SP-ECE	White Light Only, No Color (4)	White Light	
SV-SP-4SS	Standard 4 Colors for SideGlow <sup>(1)</sup>	Color Changing	Compression Tight
SV-SP-8SS	Standard 8 Colors for SideGlow <sup>(2)</sup>	Color Changing	Compression Tight
SV-SP-4CS	Custom 4 Colors for SideGlow <sup>(3)</sup>	Color Changing	Compression Tight
SV-SP-8CS	Custom 8 Colors for SideGlow <sup>(3)</sup>	Color Changing	Compression Tight





#### Color Wheel Data

NOTE: (1) 4 Standard colors consist of:

White (#0), Hot Pink (#3), Lime Green (#12), Cyan (#8).

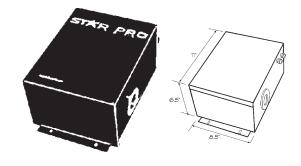
(2) 8 Standard colors consist of:

White (#0), Cyan (#8), Yellow (#13), Turquoise (#9), Orange (#15). Dark Blue (#5). Hot Pink (#3). Lime Green (#12).

(3) Glass color wheel, 4 or 8 custom colors.

See color chip listing elsewhere in this section.

(4) No color wheel or motor included. Single fixed color chip available.





### **SUPERVISION** Fiber Optic Lighting Systems cont.



#### **SUPERVISION FIBERPRO 150 LIGHT SOURCES**

SuperVision's FiberPro 150 illuminator is ideal for most SideGlow applications with color changing requirements, architectural lighting, highlighting, glass block lighting and all other signage including amusement park rides.

FiberPro 150 uses Vision 2<sup>™</sup> technology with improved reflector design and heat control for maximum lamp performance, secure and true lamp and fiber port alignment assuring the best acceptance angle for fiber, and fiber port cooling for fiber protection. Standard features include: on/off power micro switch at service door, on/off color wheel switch and a 1/2" flexible conduit connector for hard wiring.

FiberPro 150 is also available in other primary voltages. When two or more light sources will be seen simultaneously and require synchronized color changing effects, a synchronous master controller and internal circuitry must be ordered prior to installation. Synchronous controllers can be found elsewhere in the section. Can also be DMX512 controlled or dimmed, call for more info.

120v • 60Hz • 26 lbs.

Light	Color Wheel
Source	ptions
SV-FP401204S	4 Standard Colors <sup>(1)</sup>
SV-FP401208S	8 Standard Colors <sup>(2)</sup>
SV-FP401204C	4 Custom Colors <sup>(3)</sup>
SV-FP401208C	8 Custom Colors <sup>(3)</sup>
SV-FP40120N	White Light Only, No Color (4)

### SUPERVISION ECLIPSE LIGHT SOURCES

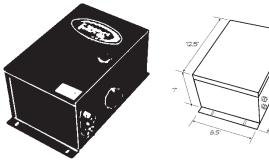
SuperVision's Eclipse illuminator was designed for maximum brightness utilizing Vision 2™ technology. Recommended for signage and architectural lighting that requires maximum brightness from SideGlow cable. Standard features include: on/off power micro switch at service door, on/off color wheel switch and a 1/2" flexible conduit connector for hard wiring.

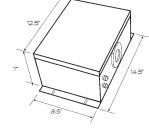
Eclipse is also available in other primary voltages. When two or more light sources will be seen simultaneously and require synchronized color changing effects, a synchronous master controller and internal circuitry must be ordered prior to installation. Synchronous controllers can be found elsewhere in the section. Can also be DMX512 controlled or dimmed, call for more info.

120v ● 60Hz ● 16 lbs.

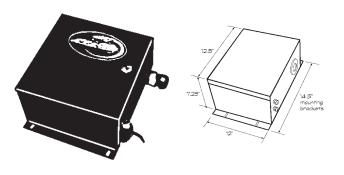
Light	Color Wheel
Source	ptions
SV-E-521204S	4 Standard Colors <sup>(5)</sup>
SV-E-521208S	8 Standard Colors <sup>(2)</sup>
SV-E-521204C	4 Custom Colors <sup>(3)</sup>
SV-E-521208C	8 Custom Colors <sup>(3)</sup>
SV-E-52120N	White Light Only, No Color (4)

- Lamp: 150 watt metal halide
- Lamp Life: 6000 hours average (BCS) life
- UL. CE & CUL listed interior / exterior
- Fiber Capacity: 500
- Galvanel powder coated casing





- Lamp: 270 watt metal halide
- Lamp Life: 2000 hours average (BCS) life
- UL, ČE & CUL listed interior / exterior
- Fiber Capacity: 500
- Galvanel powder coated casing



#### Color Wheel Data

**NOTE:** (1) 4 Standard colors consist of: White (#0), Hot Pink (#3), Lime Green (#12), Cyan (#8).

- (2) 8 Standard colors consist of: White (#0), Cyan (#8), Yellow (#13), Turquoise (#9), Orange (#15), Dark Blue (#5), Hot Pink (#3), Lime Green (#12).
- (3) Glass color wheel, 4 or 8 custom colors. See color chip listing elsewhere in this section.
- (4) No color wheel or motor included. Single fixed color chip available.
- (5) 4 Standard colors consist of: White (#0), Primary Green (#11), Medium Blue (#7), Orange (#15),

# SUPERVISION Fiber Optic Cable & Fiber



#### **SUPERVISION ENDGLOW CABLE**

SuperVision EndGlow cable consists of multi-strand .030" PMMA 75 acrylic optical fibers protected in a flexible PVC jacket for ease of handling and fiber protection. Ideal for use in channel letter applications and other signage, SuperVision's architectural lighting and landscape fixtures as well as with water tight lenses. SV-8EG consists of 8 un-braided fibers protected by a white PVC jacket. It is the most commonly used size for EndGlow signage applications. Sold by the foot.

Catalog Number	Diameter (Inches)	Description
SV-4EG SV-8EG SV-12EG SV-25EG SV-50EG SV-75EG SV-150EG SV-225EG	1/8 3/16 1/4 5/16 3/8 7/16 5/8 3/4	Black Jacket w/4 Unbraided .030" Fiber Optic Strands White Jacket w/8 Unbraided .030" Fiber Optic Strands Black Jacket w/12 Unbraided .030" Fiber Optic Strands Black Jacket w/25 Unbraided .030" Fiber Optic Strands Black Jacket w/50 Unbraided .030" Fiber Optic Strands Black Jacket w/75 Unbraided .030" Fiber Optic Strands Black Jacket w/150 Unbraided .030" Fiber Optic Strands Black Jacket w/225 Unbraided .030" Fiber Optic Strands Black Jacket w/225 Unbraided .030" Fiber Optic Strands

#### **SUPERVISION SIDEGLOW CABLE**

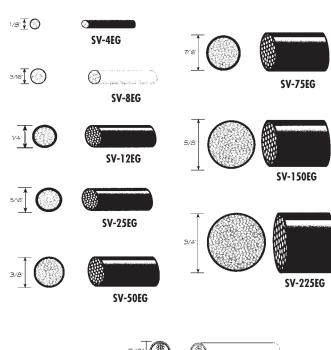
SideGlow cable is a safe alternative to neon that changes color, is energy efficient and is virtually unbreakable. SideGlow cable is suitable for interior as well as exterior applications. The exterior jacket is UV protected, algaecide and fungicide treated for maximum protection against the elements. It can also be used under water and in extreme cold weather conditions. With no heat or electricity in the cable, typical lighting design restrictions are eliminated. Sold by the foot.

Catalog Number	Diameter (Inches)	Recommended ses
SV-42SG	3/8	Projects that define or delineate fine lines; aisles, dimly lit interior environment, furniture, track type applications, sign lettering.
SV-84SG	1/2	Interior and exterior applications; boats, windows, signage, exhibits.
SV-126SG	5/8	Bold lines that will be viewed from a distance; i.e. architectural building highlights, amusement park rides, signage.
SV-42ULTRA	1/2	Brighter Interior and exterior applications or where ambient light is a factor.
SV-84ULTRA	5/8	The brightest bold lines that will be viewed from a distance or where ambient light is a factor.

#### **SUPERVISION ENDGLOW FIBER**

SuperVision EndGlow fibers are single strand un-jacketed fiber, available in a wide range of diameters for various applications. Ideal for starfield ceilings, point-of-purchase displays, floor tiles, wall scapes and spectacular displays. Sold by the roll.

Catalog	Diameter	Spool Length
Number	(Inches)	(Meters)
SV-PAF20 SV-PAF30 SV-PAF40 SV-PAF60 SV-PAF80 SV-PAF120	.020 .030 .040 .060 .080	6000 2700 1500 700 350 150









SV-PAF20	SV-PAF60
SV-PAF30	SV-PAF80
SV-PAF40	SV-PAF120



#### **SUPERVISION**



### Custom Color Wheels & Control Options for Fiber Optic Lighting Systems

#### **CUSTOM COLOR SELECTION GUIDE FOR CONSTRUCTING GLASS COLOR WHEELS**

High quality, dichroic glass chips which yield rich and superb color. Available colors shown below. Especially helpful in the selection of a custom 4-color or 8-color wheel.

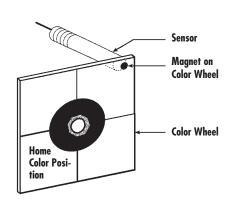
On synchronous units, chip "C" is the home color position on 4-color wheel models and chip "G" is the home color position on 8-color wheel models. The home color position is where the magnet on the color wheel is aligned with the sensor.

Super ision Number	Color Name
0	Clear (White)
1	Blue Magenta
2	Magenta
3	Hot Pink
4	Red Magenta
5	Dark Blue
6	Primary Blue
7	Medium Blue
8	Cyan
9	Turquoise
10	Dark Green
11	Primary Green
12	Lime Green
13	Yellow
14	Amber
15	Orange
16	Red



4 Color Wheel





### SUPERVISON SYNCHRONOUS CONTROL SYSTEMS & OPTIONS (9)

A master control system unit is designed to synchronize the color wheel rotation between two or more light sources.

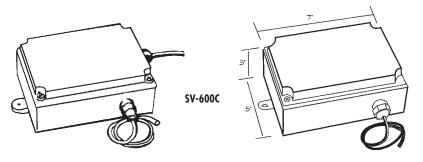
The SV-300C module is designed to synchronize up to 10 light sources simultaneously. This module is added internally to the light source making this source the "master" source for all other connected units which contain internal "slave" control and sensors.

The SV-600C is an external unit separate from the light source. Designed to synchronize up to 35 light sources simultaneously. It can only be used with light sources that have an internal "slave" control and sensor. Both the SV-300C and SV-600C must be installed at the factory, prior to shipping.

SV-CC10 data cable is used to transfer orientation information of color wheel amonast synchronous units. Sold by the foot.

n
Control Control





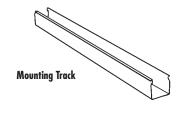
### **SUPERVISION Track & Accessories**



### **SUPERVISON FIBER OPTIC TRACK & ACCESSORIES**

SuperVision clear mounting track is useful in mounting SideGlow cable. White mounting track creates a clean defined "edge" on SideGlow cable. Sold in 6' pieces. Clear P-clips can be spaced out and used as an alternative to mounting track. A snub connector can be used to hold and secure SV-8EG EndGlow cable in backlit "Halo" signs and in channel letters.

Catalog Number	Description	Put p
SV-TRK42	Clear Mounting Track for SV-42SG, 6' Piece	1
SV-TRK126	Clear Mounting Track for SV84, SV126 & SV168SG Cable, 6' Piece	1
SV-TRK126WHT	White Mounting Track for SV84, SV126 & SV168SG Cable, 6' Piece	1
SV-PC42	Clear P-Clip for SV-42SG Cable	100
SV-PC84	Clear P-Clip for SV-84SG Cable	100
SV-PC126	Clear P-Clip for SV-126 & SV168SG Cable	100
SV-SC	Black Snub Connector	1







#### **SUPERVISON TOOLS**

SuperVision hot knifes are equipped with a special angled "blade" which is important for proper fiber head processing and maximum light output.

Catalog Number	Description
SV-E30 SV-C30	Electric Hot Knife, 120V Cordless Butane Hot Knife
SV-E30-BLADE	Replacement Blade for E30 & C30 Hot Knifes

#### **SUPERVISON REPLACEMENT LAMPS**

Catalog Number	For se n	Wattage	Туре	Color Temp
SV-EG75MR16	SV-750 w/EndGlow cable	75	Quartz Halogen	-
SV-SG75MR16	SV-750 w/SideGlow cable	75	Quartz Halogen	-
SV-SP-LAMP	StarPro 70	70	Metal Halide	3100°K
SV-40-GA (1)	SV-15000, SV-2000 Fiber Pro 150	150	Metal Halide	4000°K
SV-E-LAMP	Eclipse	270	Metal Halide	5600°K
NOTE: (1) Substitute	e catalog number SV-30-GA for	a 3000° K lamp.		



SECTION D: SUBSTRATES

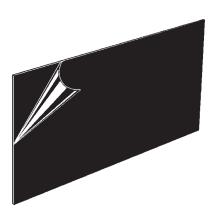




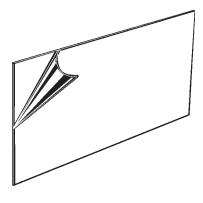
### PRE-FINISHED ALUMINUM SHEETS

Used by sign builders for faces, cabinets, returns, etc. Second surface of enameled sheets are finished white which enhances reflectiveness inside sign cabinets. Sheets are 3105 aluminum alloy with a high quality baked enamel or anodized finish. Sheets are protected with poly-film on the first surface. Other colors and sizes also available.

Catalog	Color	Dime	nsions	Thickness	Color			
Number	1st Surface	Width	Length	(Inches)	2nd Surface			
48040PW 48050PW 48063PW 48080PW 410032PW 410040PW 410050PW 410063PW 410080PW 58040PW 510040PW	Polar White	48" 48" 48" 48" 48" 48" 48" 48" 60" 60"	96" 96" 96" 120" 120" 120" 120" 120" 96" 120"	.040 .050 .063 .080 .032 .040 .050 .063 .080 .040	White			
48040RB	Raven Black	48"	96"	.040	White			
410040RB	Raven Black	48"	120"	.040	White			
410050RB	Raven Black	48"	120"	.050	White			
410063RB	Raven Black	48"	120"	.063	White			
48040MB	Matte Black	48"	96"	.040	White			
410040MB	Matte Black	48"	120"	.040	White			
48032BGA	Brite Gold Anodized	48"	96"	.032	Clear Anod.			
410032BGA	Brite Gold Anodized	48"	120"	.032	Clear Anod.			
410040BGA	Brite Gold Anodized	48"	120"	.040	Clear Anod.			
48032GSA	Gold Satin Anodized	48"	96"	.032	Clear Anod.			
410032GSA	Gold Satin Anodized	48"	120"	.032	Clear Anod.			
48032BBGA	Brite Brushed Gold Anodized	48"	96"	.032	Clear Anod.			
410032BBGA	Brite Brushed Gold Anodized	48"	120"	.032	Clear Anod.			
410040BBGA	Brite Brushed Gold Anodized	48"	120"	.040	Clear Anod.			
48032BCA	Brite Clear Anodized	48"	96"	.032	Clear Anod.			
48040BCA	Brite Clear Anodized	48"	96"	.040	Clear Anod.			
410032BCA	Brite Clear Anodized	48"	120"	.032	Clear Anod.			
410040BCA	Brite Clear Anodized	48"	120"	.040	Clear Anod.			
48032CSA	Clear Satin Anodized	48"	96"	.032	Clear Anod.			
410040CSA	Clear Satin Anodized	48"	120"	.040	Clear Anod.			
48032BBCA	Brite Brushed Clear Anodized	48"	96"	.032	Clear Anod.			
48040BBCA	Brite Brushed Clear Anodized	48"	96"	.040	Clear Anod.			
410032BBCA	Brite Brushed Clear Anodized	48"	120"	.032	Clear Anod.			
410040BBCA	Brite Brushed Clear Anodized	48"	120"	.040	Clear Anod.			
410040ADB	Alliance Dark Bronze	48"	120"	.040	White			
410063ADB	Alliance Dark Bronze	48"	120"	.063	White			
48040HR	Hunter Red	48"	96"	.040	White			
410040HR	Hunter Red	48"	120"	.040	White			
48040HB	Heron Blue	48"	96"	.040	White			
48040PB	Pepsi Blue	48"	96"	.040	White			
410040IG	Ivy Green	48"	120"	.040	White			
48040AY	Alliance Yellow	48"	96"	.040	White			
410040AY	Alliance Yellow	48"	120"	.040	White			
48040ACY (1)	Caution Yellow	48"	96"	.040	Caution Yellow			
48040AI	Alliance Ivory	48"	96"	.040	White			
410040AI	Alliance Ivory	48"	120"	.040	White			
48040MT	Mocha Tan	48"	96"	.040	White			
NOTE: (1) Masked	NOTE: (1) Masked on both sides.							



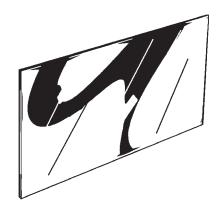




#### **MILL FINISHED ALUMINUM SHEETS**

Used for cabinet, face and back construction on signs. 5052H32 is an anodizing quality alloy with a smoother surface than general purpose sheet (GPS) aluminum.

Catalog Number	Dimen Width	sions Length	Thickness (Inches)	Weight (Lbs.)
410063MF 412063MF 410090MF 412090MF 410125MF	48" 48" 48" 48" 48"	120" 144" 120" 144" 120"	.063 .063 .090 .090	38 42 50 60 75
412125MF	48"	144"	.125	84

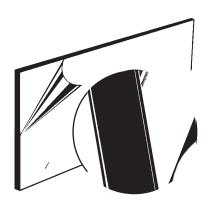




#### **ALUCOBOND** (4)

Alucobond® is a composite consisting of two sheets of .020" aluminum with a polyethylene core. It can be fabricated by methods and equipment traditionally used with metal, plastic or wood. It is virtually flat yet bends and forms easily. It has a high strength-to-weight ratio and high weather resistance. The white polyester resin finish is a suitable primer coat for other field applied colors. 1st surface is protected with a polymask film. Available in almost any size. Custom colors available with auantity order.

Catalog	Color	Dime	nsions	Thickness	Color	Put	Weight
Number	1st Surface	Width	Length	(mm)	2nd Surface	Up	(Lbs.)
CO202-418	White	50"	98"	3 3 4	White	10	29
CO202-444	White	62"	122"		White	10	55
CO202-618	White	50"	98"		White	10	36
CO202-620	White	50"	122"		White	10	45
CO202-620	White	62"	144"	4	White	10	67



CUTTING: Alucobond® can be cut with circular, band or sabre saws, or by shearing. It can also be drilled and routed.

BENDING: Minimum bending radius is 15 times the panel thickness. Springback is similar to that experienced with sheet metal. Curve with pyramid roller, press break or stationary pipe die.

JOINING AND ATTACHING: Butt joints are usually made by hot-airwelding, attachment made by screws, rivets or VHB double face tape. Materials that can be joined to Alucobond® include aluminum, plastic, stainless steel, coated steel (with cadmium, zinc, chrome or aluminum coating) and organic materials. Copper, bronze, brass and iron should not be joined because electrolysis will cause corrosion.

SILK-SCREENING: Alucobond® is suitable for silk-screening. For outdoor exposure it is recommended to overpaint with a colorless protective coating.

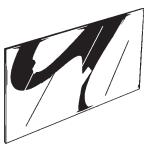






Dibond® is a composite consisting of two sheets of .010" aluminum with a polyethylene core. It has the same characteristics as Alucobond® but is more economical. Dibond® is intended for such applications as signage, screen printing, exhibit/display, digital mounting as well as OEM industrial applications. Surfaces have a high quality polyester resin finish. First surface is protected with a polymask film. Fabrication information is the same as when working with Alucobond®.

Catalog Number	Color 1st Surface <sup>(1)</sup>	Dimen Width	sions Lenath	Thickness (mm)	Approx. Weight (Lbs.)			
Montpol	131 3011uco	Widili	Longin	(11111)	(LD3.)			
D0202-318	White	48"	96"	2	18			
D0202-320	White	48"	120"	2	23			
D0202-418	White	48"	96"	3	24			
D0202-618	White	48"	96"	4	23			
D0201-420	Black	48"	120"	3	30			
<b>NOTE:</b> (1) 2nd surfa	NOTE: (1) 2nd surface color is white.							

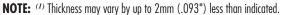


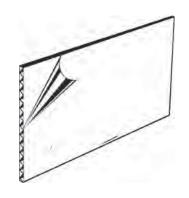


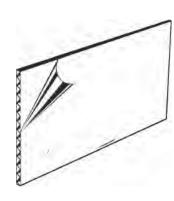
### ALUMALITE ... 91

Alumalite® is a two-sided aluminum surfaced, corrugated polyethylene core panel. Alumalite® can be used as a letterback in place of wood core letterback products or as a routed face without changes to UL procedures. Alumalite® cuts and routs easily using standard woodcutting tools. A V-groove can be routed in a panel and bent to make a 90° return or lettering can be routed out and backed up with a push through, translucent plexiglas panel for a backlit sign face. Smooth surfaces require little or no preparation and are suitable for paints, screen print inks and pressure sensitive vinyls. The high strength-to-weight ratio and weather resistance make it unnecessary to use edge sealing when used outdoors, although edge capping is available if desired. Alumalite® is UV and temerature resistant with a "Class A" flame-spread rating and is a recognized component of electrical signs, file number E60612. Both surfaces are protected with a polymask film.

Catalog	Color	Color	Dime	nsions	Thickness <sup>(1)</sup> (mm)	Weight
Number	1st Surface	2nd Surface	Width	Length		(Lbs.)
LAM-AL01-718 LAM-AL02-718 LAM-AL02-720 LAM-AL02-740 LAM-AL02-744 LAM-AL03-718 LAM-AL05-718 LAM-AL06-718 LAM-AL07-718 LAM-AL11-718 LAM-AL11-718 LAM-AL12-718	Black White White White Red Yellow Ivy Green Blue Bronze Ivory Silver	Black White White White White Red Yellow Ivy Green Blue Bronze Ivory Silver	48" 48" 48" 60" 60" 48" 48" 48" 48" 48" 48"	96" 96" 120" 96" 120" 96" 96" 96" 96" 96"	6 6 6 6 6 6 6 6 6 6 6	18 18 23 23 29 18 18 18 18 18







#### ECONOLITE \$71

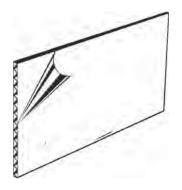
Econolite™ is a corrugated polyethylene core panel with a white aluminum smooth surface on one side and a mill finish backer. An economical alternative for one-sided applications.

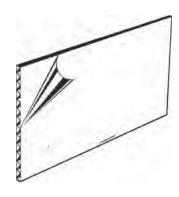
Catalog	Color	Color	Dime	nsions	Thickness <sup>(1)</sup> (mm)	Weight
Number	1st Surface	2nd Surface	Width	Length		(Lbs.)
LAM-EL02-718	White	Mill	48"	96"	6 10	18
LAM-EL02-818	White	Mill	48"	96"		29
<b>NOTE:</b> (1) Thickness may vary by up to 2mm (.093") less than indicated.						

#### D-LITE %9%

D-Lite™ incorporates the same qualities as Alumalite® and Econolite™ in an econmical 3mm thickness. Available in 1 or 2 sided finished material.

Catalog	Color	Color	Dime	nsions	Thickness <sup>(I)</sup> (mm)	Weight		
Number	1st Surface	2nd Surface	Width	Length		(Lbs.)		
LAM-D2-1-418	White	Mill	48"	96"	3 3 3	15		
LAM-D2-1-420	White	Mill	48"	120"		19		
LAM-D2-2-418	White	White	48"	96"		17		
LAM-D2-2-420	White	White	48"	120"		21		
NOTE: (1) Thickness mo	<b>NOTE:</b> (1) Thickness may vary by up to 2mm (.093") less than indicated.							





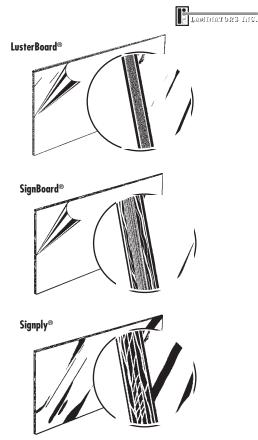
#### **LAMINATED PLYWOOD PANELS**

Omega SignBoard® is a high quality laminated panelboard constructed of premium grade exterior plywood, fully sanded and covered with a brilliant .015" white vinyl surface. It gives a ready-to-letter surface ideal for outdoor or indoor use. Edge finishing is recommended. SignBoard® has a 1 year limited manufacturers warranty if edges are sealed with paint or sealant and a 2 year limited warranty if edges are capped with Laminators brand edge cap. Both sides are film masked

Omega LusterBoard® has a mahogany plywood core with white high gloss painted .015 aluminum laminated to both sides. It provides a quality, ready-to-letter surface, as rigid and workable as MDO, that is ideal for indoor or outdoor use. It can be cut without chipping and will accept most standard bulletin enamel paints. Edge finishing is recommended. LusterBoard® has a 1 year limited manufacturers warranty if edges are sealed with paint or sealant and a 2 year limited warranty if edges are capped with Laminators edge cap. Both sides are film masked for protection.

Signply® panels are .015" smooth aluminum sheets, white on one side with a mill finish on the other, laminated to a plywood core. Can be used as backing for illuminated channel letters. Edge cap is shown in the sign supplies section under Omega Edge Cap.

Catalog Number	Description	Dime Width	nsions Length	Thickness (Inches)	Weight/Sheet (Lbs.)
LAM-LB02-718 LAM-LB02-918	Omega Lusterboard Omega Lusterboard	48" 48"	96" 96"	.25 .50	34 58
LAM-SB1-918	-SB1-918 Omega Signboard with Vinyl on 1 Side		96"	.50	53
LAM-SB2-918 Omega Signboard with Vinyl on 2 Sides		48"	96"	.50	56
LAM-SP-918	Signply	48"	96"	.50	52



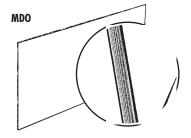
#### PREMIUM GRADE MDO

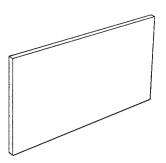
Premium grade Medium Density Overlay (MDO) panels are resin-impregnated fiber product surfaces laminated to an exterior grade plywood core. Painted MDO has a high quality semi-gloss white surface. MDO-EPS-918 is painted white on one side and primed on the other. Pre-primed white surfaces readily accept most decorative paints such as poster acrylics, latexes and enamels. Other variations may also be available.

Catalog Number	Description	Width	Length	Thickness (Inches)	Weight/Sheet (Lbs.)
MDO-G1S-918	Good 1 Side, Premium Grade	48"	96"	.50	49
MDO-G2S-918	Good 2 Sides, Premium Grade	48"	96"	.50	49
MDO-G2S-1118	Good 2 Sides, Premium Grade	48"	96"	.75	68
MDO-EPS-918			96"	.50	49
MDO-EPS-920			120"	.50	55
MDO-P1S-918	Primed 1 Side, Premium Grade	48"	96"	.50	49
MDO-P2S-918	Primed 2 Sides, Premium Grade	48"	96"	.50	49
MDO-P2S-1120	Primed 2 Sides, Premium Grade	48"	120"	.75	62

#### MDF • MEDEX

Industrial grade Medium Density Fiberboard (MDF) is manufactured with a formaldehyde-free binder which meets requirements of ANSI A208.2-1994, product class MD-exterior. MDF is available in many variations such as Medex, Medex NC, Medite II, etc. Differentiated by fiber origin such as softwood or hardwood, these products share common characteristics and are well known for their smooth surface, ease of workmanship and ability to take a precise machined edge or panel route. Medex and Medex NC are recommended for use in exterior signage, schools, museums, day care centers, libraries, medical and dental facilities, retirement homes and laboratories. Call for availability.







#### **CYRO ACRYLITE GP • CELL CAST ACRYLIC SHEET**

Actulite GP GETTO

Acrylite GP is the highest quality cell-cast acrylic sheet made to exacting standards. It offers excellent optical characteristics, thickness tolerances, light stability and low internal stress levels for consistant performance.

Acrylite GP is a lightweight, rigid thermoplastic material that has many times the breakage resistance of standard window-pane glass. It is highly resistant to weather conditions. Can be easily sawed, machined, thermoformed, and cemented. Suitable for most commercial applications and is ultraviolet light absorbing up to approximately 360 nanometers. It's unique properties are ideal for a wide range of applications such as signs, merchandising displays, lighting fixture diffusers, decorative paneling, security glazing, aquariums, hockey rinks, industrial and school glazing, shower enclosures and skylights.

Clear/colorless Acrylite GP acrylic sheet carries an exclusive 10-year limited warranty on light transmission.

Acrylite GP sheet is available in thicknesses from .060" to 2" (1.5mm to 50mm) and in more than 40 standard sizes from 36" x 48" to 72" x 120". All sheets are papermasked on both sides. Custom colors also available.

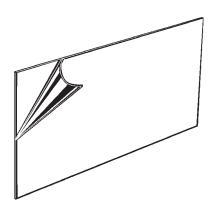
Catalog Number	Color Reference Number	Color	Dimen Width	sions Length	Thickness (Inches)
-GP-418 GP-618 GP-718 GP-818 GP-918 GP-1118 GP-1318 GP-1518 GP-1718		Clear Clear Clear Clear Clear Clear Clear Clear	51" 51" 51" 49.75" 49.75" 48.50" 48.50" 48.50" 48.50"	100" 100" 100" 99" 97" 97" 97" 97"	.118 .177 .236 .354 .472 .708 .944 1.50 2.00
GP015-2-418 GP015-2-420 GP015-2-444 GP015-2-458 GP015-2-614 GP015-2-618 GP015-2-640 GP015-2-640 GP015-2-644 GP015-2-656 GP015-2-658 GP015-2-658 GP015-2-718 GP015-2-918	7328 7328 7328 7328 7328 7328 7328 7328	White	51" 50" 63" 75" 51" 51" 63" 63" 75" 75" 49.75"	100" 126" 126" 102" 126" 75" 126" 102" 126" 100" 126" 100" 99"	.118 .118 .118 .118 .117 .177 .177 .177
GP076-0-418	7508	White	51"	100"	.118
GP020-4-418 GP020-4-656	2447 2447	White White	51" 75"	100" 100"	.118 .177
GP199-0-418 GP199-0-618 GP199-0-656 GP199-0-718 GP199-0-918	2025 2025 2025 2025 2025 2025	Black Black Black Black Black	51" 51" 75" 51" 49.75"	100" 100" 100" 100" 99"	.118 .177 .177 .236 .472
GP605-0-418 GP605-0-456 GP605-0-618 GP605-0-656	2114 2114 2114 2114 2114	Blue Blue Blue Blue	51" 75" 51" 75"	100" 100" 100" 100"	.118 .118 .177 .177
GP606-0-418 GP606-0-618 GP606-0-656	2050 2050 2050	Blue Blue Blue	51" 51" 75"	100" 100" 100"	.118 .177 .177
GP607-1-418 GP607-1-618 GP607-1-656	2051 2051 2051	Blue Blue Blue	51" 51" 75"	100" 100" 100"	.118 .177 .177
GP693-0-418	2648	Blue	51"	100"	.118
GP311-1-656	2370	Bronze	75"	100"	.177
GP131-2-656	2412	Bronze	51"	100"	.177

Catalog	Color Reference	Color	Dimen	sions	Thickness
Number	Number		Width	Length	(Inches)
GP324-0-418	2418	Brown	51"	100"	.118
GP324-0-618	2418	Brown	75"	100"	.177
GP506-0-418	2030	Green	51"	100"	.118
GP506-0-618	2030	Green	51"	100"	.177
GP506-0-656	2030	Green	75"	100"	.177
GP507-0-418	2108	Green	51"	100"	.118
GP507-0-618	2108	Green	51"	100"	.177
GP507-0-656	2108	Green	75"	100"	.177
GP047-2-418 GP047-2-618 GP047-2-620 GP047-2-640 GP047-2-656 GP047-2-658	2146 2146 2146 2146 2146 2146 2146	lvory lvory lvory lvory lvory lvory	51" 51" 51" 63" 75" 75"	100" 100" 126" 100" 100" 126"	.118 .177 .177 .177 .177
GP303-0-418	2119	Orange	51"	100"	.118
GP303-0-618	2119	Orange	51"	100"	.177
GP303-0-656	2119	Orange	75"	100"	.177
GP303-0-658	2119	Orange	75"	126"	.177
GP205-0-418	2157	Red	51"	100"	.118
GP211-1-418	2283	Red	51"	100"	.118
GP211-1-456	2283	Red	75"	100"	.118
GP211-1-618	2283	Red	51"	100"	.177
GP211-1-656	2283	Red	75"	100"	.177
GP209-0-418	2415	Red	51"	100"	.118
GP209-0-618	2415	Red	51"	100"	.177
GP209-0-656	2415	Red	75"	100"	.177
GP278-0-418	2793	Red	51"	100"	.118
GP278-0-456	2793	Red	75"	100"	.118
GP278-0-618	2793	Red	51"	100"	.177
GP278-0-656	2793	Red	75"	100"	.177
GP278-0-658	2793	Red	75"	126"	.177
GP702-0-418	2287	Violet	51"	100"	.118
GP407-2-418 GP407-2-456 GP407-2-618 GP407-2-640 GP407-2-656 GP407-2-658	2037 2037 2037 2037 2037 2037 2037	Yellow Yellow Yellow Yellow Yellow	51" 75" 51" 63" 75" 75"	126" 126" 126" 126" 126" 126"	.118 .118 .177 .177 .177
GP432-2-418	2465	Yellow	51"	100"	.118
GP432-2-456	2465	Yellow	75"	100"	.118
GP432-2-618	2465	Yellow	51"	100"	.177
GP432-2-656	2465	Yellow	75"	100"	.177
GP406-1-418	2016	Yellow	51"	100"	.118
GP406-1-618	2016	Yellow	51"	100"	.177
GP406-1-656	2016	Yellow	75"	100"	.177
GP121-0-456	2349	Gray	75"	100"	.118

### **CYRO ACRYLITE FF ACRYLIC SHEET**

Acrylite FF acrylic sheet is a continuously manufactured acrylic sheet. It is produced by an innovative process, resulting in a sheet offering the easy handling and processing of extruded sheet along with the high optical characteristics and low stress levels expected of cast products. Acrylite FF is a lightweight, rigid and weather-resistant thermoplastic. It is dimensionally stable and resistant to breakage and can easily be sawed, machined, heat-formed and cemented.

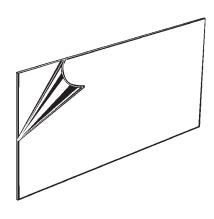
Clear and white sheets have clear film mask on both sides, all other colors are paper masked on both sides. Other sizes and colors also available.



#### **CYRO ACRYLITE SG • IMPACT MODIFIED SHEET**

Acrylite SG is an impact modified acrylic sheet developed specifically for use in the sign industry. It offers excellent weatherability, additional impact strength and can easily be fabricated by cutting, routing, drilling, cementing, thermoforming and is paintable. Also resists chipping and melting while providing excellent color consistency and thickness tolerance. A Sign Fabrication Manual for Acrylite SG is available upon request detailing simple fabrication & handling techniques.

All sheets are paper masked on both sides.



## Acrylite. cm

Catalog	Color		Dimens	sions	Thickness
Number	Reference	Color	Width	Length	(Inches)
FF-418 FF-456 FF-618 FF-718	- - -	Clear Clear Clear Clear	48" 72" 48" 48"	96" 96" 96" 96"	.118 .118 .177 .236
FF015-2-418 FF015-2-420 FF015-2-456 FF015-2-618 FF015-2-620 FF015-2-644 FF015-2-656 FF015-2-658	7328 7328 7328 7328 7328 7328 7328 7328	White White White White White White White White White	48" 48" 72" 48" 48" 60" 72" 72"	96" 120" 96" 96" 120" 120" 96" 120"	.118 .118 .118 .177 .177 .177 .177
FF020-4-418 FF020-4-718	2447 2447	White White	48" 48"	96" 96"	.118 .236
FF199HG-418 FF199HG-456 FF199HG-618 FF199HG-656	2025 2025 2025 2025 2025	Black Black Black Black	48" 72" 48" 72"	96" 96" 96" 96"	.118 .118 .177 .177
FF605-0-418 FF606-0-418	2114 2050	Blue Blue	48" 48"	96" 96"	.118 .118
FF311-1-418 FF311-1-618	2370 2370	Bronze Bronze	48" 48"	96" 96"	.118 .177
FF507-0-418	2108	Green	48"	96"	.118
FF047-2-418	2146	Ivory	48"	96"	.118
FF303-0-418	2119	Orange	48"	96"	.118
FF205HG-418 FF211-1-418 FF278-0-418 FF278-0-618 FF278-0-656	2157 2283 2793 2793 2793	Red Red Red Red Red	48" 48" 48" 48" 72"	96" 96" 96" 96" 96"	.118 .118 .118 .177 .177
FF407-2-418 FF407-2-618	2037 2037	Yellow Yellow	48" 48"	96" 96"	.118 .177

Catalog	Color	Color	Dimen:	sions	Thickness
Number	Reference		Width	Length	(Inches)
SG015-2-418	7328	White	51"	100"	.118
SG015-2-618	7328	White	51"	100"	.177
SG015-2-656	7328	White	75"	100"	.177
SG015-2-658	7328	White	75"	125"	.177
SG-418 SG-618 SG-656 SG-658 SG199-0-418 SG199-0-618	- - - - 2025 2025	Clear Clear Clear Clear Black Black	51" 51" 75" 75" 51" 51"	100" 100" 100" 125" 100"	.118 .177 .177 .177 .118
SG199-0-656 SG605-0-418 SG605-0-618 SG605-0-656 SG205-0-418	2025 2114 2114 2114 2117	Black Blue Blue Blue Red	75" 51" 51" 75"	100" 100" 100" 100" 100"	.177 .118 .177 .177
SG205-0-618 SG205-0-656 SG211-1-418 SG211-1-618 SG211-1-656	2157 2157 2157 2283 2283 2283	Red Red Red Red Red	51" 75" 51" 51" 75"	100" 100" 100" 100" 100"	.110 .177 .177 .118 .177
SG278-0-418	2793	Red	51"	100"	.118
SG278-0-618	2793	Red	51"	100"	.177
SG278-0-656	2793	Red	75"	100"	.177
SG407-2-418	2037	Yellow	51"	100"	.118
SG407-2-618	2037	Yellow	51"	100"	.177
SG407-2-656	2037	Yellow	75"	100"	.177



#### **SPECIALTY PLASTIC SHEET • P95 FINISH**

Cyro P95 finish is a matte, low-reflective surface on a GP cell-cast acrylic sheet which some designers feel lends a dignity to sign faces, especially when applied to earth tones. Financial institutions and hospitals sometimes find this finish appropriate for outdoor signage. Other colors , sizes and a two-sided version also available.

Catalog Number	Finish	Color	Dime: Width	nsions Length	Thickness (Inches)	Protection
GPP95-418	P95	Clear	51"	100"	.118	Paper, 2 Sides
GP199P95-418	P95	Black	51"	100"	.118	Paper, 2 Sides
GP0152P95418	P95	White	51"	100"	.118	Paper, 2 Sides
GP324P95-418	P95	Brown	51"	100"	.118	Paper, 2 Sides

#### **SPECIALTY PLASTIC SHEET • FRAMING GRADE TYPES**

Acrylite FF-3 Framing Grade sheet is the highest quality acrylic sheet available for the framing market. Continuously manufactured using a proprietary process, Acrylite FF3 sheet is guaranteed to be defect free. Other sizes and widths also available.

Acrylite OP-3 acrylic sheet is a continiusly manufactured acrylic sheet specifically formulated to offer excellent ultraviolet (UV) filtering characteristics. Its light weight, superior impact resistance and ease of fabrication make it an ideal choice for framing articles of value. Acrylite OP-3 sheet is also available with a matte P-99 finish to reduce glare. Acrylite AR OP-3 sheet combines the same UV protection with an abrasion and chemical resistant coating. Selected items stocked, others available upon request.

Catalog			nsions	Thickness	
<u>Number</u>	Color	Width	Length	(Inches)	Protection
FF3-018 FF3-318 FF3-318M FF3-418M	Clear Clear Clear Clear	48" 48" 48" 48"	96" 96" 96" 96"	.090 .098 .098 .118	Film, 2 Sides Film, 2 Sides Paper, 2 Sides Paper, 2 Sides
OP3-418M	Clear, UV Filtering	48"	96"	.118	Paper, 2 Sides

#### **SPECIALTY PLASTIC SHEET • NON-GLARE**

NGCA Non-Glare sheets have a fine matte surface for read-through architectural signage applications. It has only moderate impact resistance but is economical and of adequate strength for indoor signage.

Catalog Number	Finish	Color	Dime Width	nsions Length	Thickness (Inches)	Protection
NGCA-114	Non-Glare	Colorless	48"	72"	.060	Film, 2 Sides
NGCA-218	Non-Glare	Colorless	48"	96"	.080	Film, 2 Sides
NGCA-318	Non-Glare	Colorless	48"	96"	.100	Film, 2 Sides
NGCA-418	Non-Glare	Colorless	48"	96"	.125	Film, 2 Sides

#### **SPECIALTY BLACK & WHITE PLASTIC SHEET**

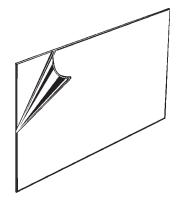
By using Black & White sheets, "secret sign effects" can be obtained. Copy is visible on the front sign face only when backlit. Sign face appears black when not illuminated. To achieve the "secret sign effect" the back of the sheet is covered with opaque black film out of which has been cut the copy. The opaque black film is spray-painted white before it is applied to the face to increase the reflectivity inside the sign can. This treatment will produce white copy when illuminated. Colored copy can be achieved by covering those areas cut out of the opaque black film with transparent colored film. All sheets paper masked 2 sides.

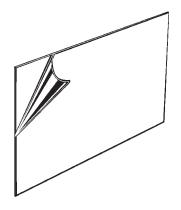
Catalog	Dimen	sions	Thickness	Mfgr
Number	Width	Length	(Inches)	
3063P95M-618	50"	99"	.177	Atofina
3063P95M-656	74"	99"	.177	Atofina
GP1124-1-618	51"	100"	.177	Cyro
GP1124-1-656	75"	100"	.177	Cyro

#### **GLASS GREEN & EDGE LIGHT PLASTIC SHEET**

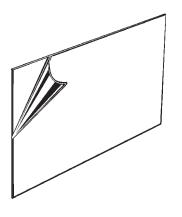
Glass Green acrylic sheet gives the impression of glass through its subtle tinting and green edge. Exotic Edge light colors "Glow" on all edges and is available in several colors. Useful in creating eye-catching interior POP displays, store fixtures and signs. Selected items stocked, others available upon request.











### CYRO vs. ATOHAAS/ARISTECH **Color Cross Reference Chart**

1				
	Color		Atohaas/Aristech	Cyro
	White White Ivory White White White White White White-antique White-off White Bone Shell White	TL TL TL TL TL O TL O O O O	7328 2447 2146 7420 2067 7138 2371/3015 7508 - 2670	015-2 020-4 047-2 048-2 051-6 054-3 064-0 0111-0 0115-6 0121-0 0123-0 0126-0 0129-0 0130-0
	Gray Gray Gray Gray-slate Bronze Bronze Gray Gray Gray Gray Bronze Black Black Gray-medium Black/White Gray Gray Gray Gray Gray Gray Gray Gray	T T T T T T T T T T T T T T T T T T T	2064 2074 - 2349 2404 2412 2537 2514 2538 2094 2515 2539 2540 2022 2025 2348 - 2650 2515 2515 2515 2514 2540 -	103-2 104-1 115-0 121-0 126-4 131-2 140-3 141-5 142-1 143-4 144-7 137-0 199-0 1107-0 1124-1 1142-1 1146-0 1170-7 1172-7 1174-5 1186-7 1209-0
	Orange Bronze Brown Orange	TL T O TL	2119 2370 2418 2564	303-0 311-1 324-0 338-1

Color		Atohaas/Aristech	Cyro
Red		2662 2157 2115 2415 2444 2283 2262 2363 2461 2423 2380 2793 2129	202-0 205-0 207-0 209-0 2110-0 211-1 217-0 218-0 248-0 257-0 262-0 278-0 282-1 284-0 2145-0 2157-0
Yellow Yellow Amber Yellow Yellow Amber	TL TL T TL T TL T	2016 2037 2451 2325 2208 2465 2422	406-1 407-2 408-5 424-3 430-7 432-2 436-4
Green		2030 2108 2047 2024 2215 2092 2082 3030 - 2111	506-0 507-0 518-0 519-0 534-0 545-2 546-7 5110-9 5121 5127-7 5138-0 5145-0
Blue Blue Blue Blue Turquoise Blue Blue Blue		2114 2050 2051 2329 2308 2069 2424 2648/2326 2454	605-0 606-0 607-1 613-0 614-0 625-5 668-0 693-0 6125-7

Color		Atohaas/Aristech	Cyro
Blue	TL	_	6167-0
Blue	0	_	6168-0
Blue	Ť	-	6170-9
Violet	TL	2287	702-0
Violet	T T	2207	713-0
	L.	orescents (GPI	
Red	rive   T	prescents (OP)	2130-2
Dark Red	Ϊ	_	2135-1
Orange	Ϊ	-	3105-5
	luar	escents (GPF)	
Red	T	escenis (OFF)	2163-4
Orange	Ϊ́τ	_	3141-5
Green	Τ̈́		564-9
Showcase Colors - Fluorescents (GPFL)			
Red	T		2149-4
Red/Orange	Ī	-	2150-5
Orange	Ī	-	3127-7
Yellow	T	-	4073-8
Green	T	-	5143-8
Blue	T	-	6157-9
Showcase Colors - Exotic Edge			
Black	TX		144-7
Red	TX	-	2143-7
Red/Orange	TX	-	2147-8
Red	TX	-	2148-8
Orange	TX	-	3124-9
Yellow	TX	-	4071-9
Green	TX	-	5141-9
Blue	TX	-	6143-7
Showcase Colors - Pastel Ice			
Red	TL	-	2149-4
Red/Orange	TL	-	2150-5
Órange	TL	-	3127-7
Yellow	TL		4073-8
Green	TL	-	5143-8
Blue	TL	-	6157-9
Showcase Colors - E-color			
Magenta	Ţ	-	2167-3
Amber	Ţ	-	3146-3
Green	Ţ	•	5171-5
Blue Violet	T	-	6180-4
Violet		-	7027-3

T: Transparent ColorTL: Translucent Color TX: Exotic Edge Color

The ACRYLITE Color Coding System uses 4-5 digit numbers for all colors, including white and black. The first digit identifies the color group:

0 White and Ivory 2 Red 4 Yellow and Amber

6 Blue 7 Violet 8 Not Assigned 9 Not Assigned

1 Gray and Black 3 Orange and Brown 5 Green The second, third and sometimes fourth digits are assigned to specific colors. These digits have no special significance and are not related to the code used for the first digit. They are used only to load and identify up to 999 different shades within each color group. The last digit indicates the approximate percentage range of light transmission. For example 131-2 is a Bronze transparent color with a 20% to 29% range of light transmission.

> This listing of competitive color numbers does not imply that these colors are identical with each other. Listings are approximately equivalent and can be used without appreciably changing the desired effect.



#### SHEFFIELD MAKROLON/HYZOD SL POLYCARBONATE ON REELS (9)





Makrolon/Hyzod polycarbonate sheet, produced with Makrolon polycarbonate resins from Bayer Corporation, is a versitile line of high performance polycarbonate sheet products that have been utilized in major signage programs in the field and demonstrated high performance levels in the most demanding environments. Makrolon polycarbonate sheet provides high impact strength and heat resistance and easy fabrication characteristics. For added convenience and economy, Makrolon polycarbonate sheet is available as flat sheet or on reels.

Sheffield Plastics, together with Makroform, their European affiliate, ranks as the second largest producer of polycarbonate sheet in the world. Sheffield's Makrolon Sign Products are produced exclusively with Makrolon polycarbonate resin from Bayer Corporation. With the full support from Bayer Corporation and new modern production facilities, Sheffield manufactures quality sign products that are second to none. In addition, the emphasis on technology, quality, and cost competitiveness that has made Sheffield a major polycarbonate supplier to the construction, electronics, aviation, and transportation markets is a part of every shipment of Makrolon polycarbonate sheet that is produced for the sign industry.

Makrolon SL offers the impact protection of Makrolon polycarbonate sheet coupled with enhanced UV protection. It also has the design and structural advantage of thermoformability. Using advanced extrusion technology, Sheffield Plastics has created a tough product designed to be made into the toughest sign faces under the sun.

Makrolon SL polycarbonate meets stringent UL Section 48 criteria for use in electric signs. This allows the use of less costly components during installation, making it a high performance yet economical choice for channel letters of all shapes and sizes.

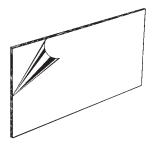
Makrolon is supplied on reels to provide almost any length in the widths and gauges listed. Can be cut to desired length within a day. Other widths, thicknesses, colors and types also available.

Catalog Number	Color	Width (Inches)	Thickness (Inches)	Reel Length (Feet)	Reel Weight (Lbs.)	Sq. Ft Per Reel
SL-30R SL-40R SL-42R SL-50R SL-52R SL-53R SL-60R SL-61R SL-62R	Clear Clear Clear Clear Clear Clear Clear	55 55 78 55 78 102 55 67 78	.093 .118 .118 .150 .150 .150 .177 .177	625 450 450 400 400 400 300 300 300	1664 1520 2155 1716 2434 3182 1519 1851 2155	2,864 2,062 2,925 1,833 2,600 3,400 1,375 1,675
SL-63R S7328SL-40R S7328SL-50R S7328SL-51R S7328SL-52R S7328SL-60R S7328SL-61R S7328SL-62R S7328SL-63R	Clear  White	102 55 55 67 78 42 55 67 78 102	.177 .118 .150 .150 .150 .150 .177 .177 .177	300 450 400 400 400 400 300 300 300 300 300	2812 1520 1716 2090 2434 1310 1519 1851 2155 2812	2,550 2,062 1,833 2,233 2,600 1,400 1,375 1,675 1,950 2,550

#### SHEFFIELD MAKROLON/HYZOD SL POLYCARBONATE SHEETS (9)

Makrolon SL flat sheet is also available as well as additional colors, Abrasion Resistant (AR) and General Purpose (GP) versions.





CUTTING and SAWING: Makrolon polycarbonate sheet can be cut with most common hand-held and table-mounted saws, including circular saws, routers and band saws using standard blade designs for polycarbonate. For end milling and routing, high rotating speeds or low feed rates are advisable.

BOND and CEMENTING: In solvent bonding using MDC (methylene dichloride), apply to surfaces to be bonded and hold parts under pressure until cured. Add 10% glacial acetic acid for the best joint appearance. IPS-55 two-part cement can also be used and is shown in the Sign Supplies Section under Cement for Plastics.

PAINTING and SILK SCREENING: Can be painted by silk screening or standard spray techniques using inks and paints commonly available for polycarbonate sheet.

STRIP HEATING: Strip heating is one way to achieve localized bending of Makrolon polycarbonate sheet for use in signs. Heating both sides at the bend area will help achieve optimum results. Drying is recommended unless the material is .118" or less in thickness. Brake bending can be done on gauges less than .118".

SHEARING, PUNCHING, and BLANKING: Unlike acrylic which will shatter, Makrolon polycarbonate sheet resists cracking or crazing when shearing, punching or blanking as long as the proper sharp tools are used.

THERMOFORMING: Makrolon polycarbonate sheet can be thermoformed with excellent results on standard equipment using conventional polycarbonate forming techniques. The sheet requires predrying to remove excess moisture. Drying guidelines are furnished in the following chart with other production recommendations which should be followed for optimum results.

PREDRYING 1 Thickness (Inches)	TEMP: 250 °F Drying Time
.093 .118 .150 .177 .236	4hrs. 6hrs. 8hrs. 14hrs. 24hrs.

FORMING GUIDELINES Sheet Temperature				
Typical	340 - 380 °F			
Mold Temperature	210 - 260 °F			

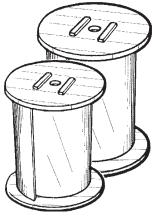
#### LEXAN POLYCARBONATE ON REELS (4)

Lexan® is supplied on reels to provide almost any length in the widths and gauges listed. Can be cut to desired length within a day. White Lexan® is supplied with one edge trimmed where as clear Lexan® has both edges trimmed. Trimmed side is smooth and even, other edge is webbed which is helpful when thermoforming.

Catalog Number	Color	Width (1)	Thickness (Inches)	Reel Length (Feet)	Reel Weight (Lbs.)	Sq. Ft Per Reel
SGC100-40R SGC100-50R SGC100-52R SGC100-60R SGC100-61R SGC100-62R SGC100-63R	Clear Clear Clear Clear Clear Clear	51 51 75 51 63 75	.118 .150 .150 .177 .177 .177	504 400 400 304 304 304 304	1,608 1,733 2,533 1,537 1,892 2,246 2,956	2,184 1,733 2,532 1,317 1,621 1,925 2,533
L7328SG-40R L7328SG-58R L7328SG-50R L7328SG-51R L7328SG-52R L7328SG-60R L7328SG-61R L7328SG-62R L7328SG-63R	White	52.5" 38" 52.5" 64.5" 76.5" 52.5" 64.5" 76.5"	.177 .118 .150 .150 .150 .150 .177 .177 .177	504 800 (2) 400 400 400 304 304 304 304	2,736 1,608 2,371 1,733 1,997 2,533 1,537 1,892 2,246 2,956	2,184 2,533 1,733 2,132 2,532 1,317 1,621 1,925 2,533

**NOTE:** (1) Widths listed vary by up to an extra .50". (2) Two 38" x 400' pieces side by side per reel.



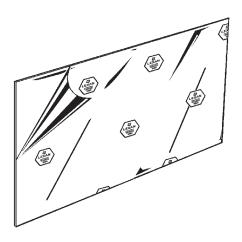




#### **LEXAN POLYCARBONATE SHEETS**

Lexan® is a polycarbonate sign face material with an impact strength of approximately 30 times that of regular acrylic plastic. Its very high strength makes it the most used sign face material for high breakage locations or for remote locations with potential expensive maintenance. Lexan® sheets are listed and sold by actual size. A Solar Guard layer is co-extruded to colorless sheets and bonded to pigmented sheets for excellent UV protection. Sheets are film masked on both sides; white film on the Solar Guard side and blue film on the second side.

Lexan® fabricates much like acrylic sheet except for cementing and thermoforming. IPS-55 two part cement is recommended and is shown in the Sign Supplies section under Cements for Plastics. Cycle times during thermoforming are longer than for acrylic so the manufacturers fabrication data should be consulted. Lexan® colored sheets also available.

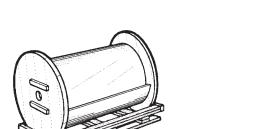




#### **TUF-GLAS IMPACT MODIFIED ACRYLIC ON REELS**

Tuf-Glas® is a continuously processed tough acrylic sheet that combines exceptional weatherability, ease of fabrication and impact strength to give it a high performance to cost factor. Tuf-Glas® provides 5 to 6 times the impact strength of standard acrylic sheet and has the highest stiffness of any impact sign material including polycarbonate. It can be cut, drilled and routed with standard equipment and procedures recommended for conventional acrylic sheet.

Catalog Number	Color	Width	Thickness (Inches)	Reel Length (Ft.)	Reel Weight (Lbs.)	Sq. Ft Per Reel
TUF-620-60R	White	52"	.177	535	2,493	2,318
TUF-620-62R	White	76"	.177	360	2,452	2,280
TUF-620-63R	White	100"	.177	330	2,957	2,750



Reel on shipping pallet

CUTTING: Tuf-Glas® can be cut with standard sawing equipment. Saw blades should have a 0 - 5 degree positive rake angle. There should be from 4 - 8 teeth per inch depending on sheet thickness. Saws should run at speeds of 8,000 to 12,000 linear feet per minute. Band saw blades should have 10 - 14 teeth per inch. Blade speeds should be between 4,000 and 5,000 feet per minute.

CEMENTING: Conventional solvent cements and polymerizable cements will readily join Tuf-Glas®. Polymerizable cements yield higher joint strengths than solvents.

PAINTING: Tuf-Glas® can be easily painted and silk-screened with standard sign paints for acrylic sheet. Spraylat and Akzo Nobel spray and screen paints have been thoroughly evaluated and field-tested for use on Tuf-Glas®.

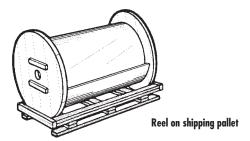
THERMOFORMING: Tuf-Glas® forms very easily on virtually all thermoforming equipment. Forming temperatures range from 275° - 350°F, with optimum sheet temperature at a uniform 325°F. Part removal temperature should be no greater than 190°F.

#### **ACRYSTEEL I-GP IMPACT MODIFIED ACRYLIC ON REELS**



d balance" of physical properties and performance. Acrysteel® I-GP g field installation and has 5 to 6 times greater impact strength than and easily fabricated.

FABRICATION: Acrysteel® I-GP can be fabricated with the same techniques used for regular acrylic check including agent at the control of the con Aristech Acrysteel® I-GP is continuous cast thermoplastic acrylic sheet designed to give a "preferred balance" of physical properties and performance. Acrysteel® I-GP has been engineered to have sufficient impact strength to reduce breakage during fabrication, during field installation and has 5 to 6 times greater impact strength than standard acrylic. Acrysteel® has excellent resistance to outdoor weathering, is solvent cementable and easily fabricated.



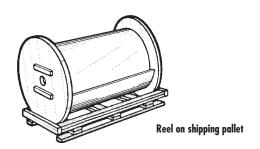
techniques used for regular acrylic sheet including gang cutting, hot or cold bending, flame polishing and can also be sheared and hole punched. Acrysteel® can be solvent cemented using the same cements used on regular acrylic.

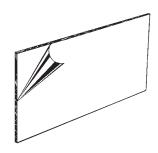
PAINTING: Acrysteel® I-GP can be painted with regular acrylic sign paints. Both Spraylat and Akzo Nobel paint products are approved for use on Acrysteel® I-GP.

#### **DURAPLEX IMPACT MODIFIED & HIGH IMPACT ACRYLIC SHEETS & REELS**

PLASKOLITE, INC.

Plaskolite Duraplex SG05 is a continuously processed tough acrylic sheet that combines exceptional weatherability, ease of fabrication and impact strength to give it a high performance to cost factor. Plaskolite Duraplex SGO5 provides 5 to 6 times the impact strength of standard acrylic sheet and has the highest stiffness of any impact sign material including polycarbonate. It can be cut, drilled and routed with standard equipment and procedures recommended for conventional acrylic sheet. Duraplex SG10 high impact acrylic provides 10 times the impact strength of standard acrylic sheet.





#### 

Sign-Foam® is an expanded cellular polyurethane that can be used to create signage simulating metal, wood, concrete, tile, rock, etc. Sign-Foam's versatility allows clients on a tight budget to afford distinctive and superior signage. Sign-Foam® will not corrode and is impervious to decay and water. 15lb. and 18lb. densities are used primarily for structural and free standing applications. 10lb. density is appropriate for mounted graphics. Other sizes and densities also available.

Catalog Number	Dime Width	nsions Length	Thickness (Inches)	Density Lb/Ft <sup>3</sup>
SF-10-918 SF-10-1118 SF-10-1318 SF-10-1518 SF-10-1718 SF-10-1918	48" 48" 48" 48" 48" 48"	96" 96" 96" 96" 96"	.50 .75 1.00 1.50 2.00 3.00	10 10 10 10 10
SF-15-918 SF-15-1118 SF-15-1318 SF-15-1518 SF-15-1718 SF-15-1918	48" 48" 48" 48" 48"	96" 96" 96" 96" 96"	.50 .75 1.00 1.50 2.00 3.00	15 15 15 15 15
SF-18-1118 SF-18-1318 SF-18-1518 SF-18-1718 SF-18-1918	48" 48" 48" 48" 48"	96" 96" 96" 96" 96"	.75 1.00 1.50 2.00 3.00	18 18 18 18

CUTTING: Sign-Foam® may be easily cut with conventional saws, routers, shapers, sanders and files. Like wood, it will retain fine detail.

BONDING: Use a heavy-bodied elastomeric epoxy such as IPS #56 cement to bond Sign-Foam® to itself or to metal. Use an exterior grade waterproof structural adhesive to bond Sign-Foam® to substructures using the same procedures as for plywood. Use a waterproof construction adhesive to bond Sign-Foam® letters or graphics to wood, metal or stucco backgrounds.

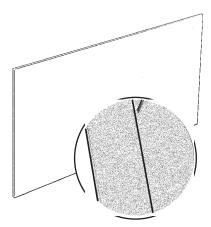
FASTENING: 15lb. and 18lb. Sign-Foam® will accept drywall screws driven slightly below the foam surface. Nails are not recommended. Other fasteners commonly used with wood can also be used.

SANDING: Sign-Foam® may be sanded easily with conventional power sanders or hand sanded. Surfaces and edges should be sanded with 150 - 120 grit sandpaper before priming and finishing. When textured finishes, such as Texcote, are applied, 40 grit sandpaper should be used.

PRIMING: Automotive epoxy or polyurethane filler/primer can be used before enamel or multipurpose wood primers are applied. Prime-All primer by Ronan and Jay Cooke's All Purpose Sign Primer work best. Dimensional graphics can be primed with a polyester sanding resin to reduce sanding time.

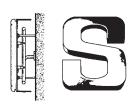
FINISHING: Polyurethane enamels are the best exterior finishes to apply, providing superior resistance to expansion and cracking and have excellent UV resistance. Sign-Foam® has excellent color retention and are easily sprayed. Economical automotive acrylic enamels are adequate for smaller Sign-Foam® projects and will make a good quality finish. In addition, quality heavy-bodied acrylic latex paints are the most economical finish for Sign-Foam® and are simple to apply by hand or spray.

SPECIAL EFFECTS: Sign-Foam's® easy shaping and finishing allows you to simulate metal graphics that rival actual metal. 18lb. Sign-Foam® can be sandblasted like wood. Linear strokes with a wire brush simulate a rough sawn wood texture. Sign-Foam® carves like soft stone yet finishes like wood or metal and can even reproduce a tile or masonry look with grout lines and stone texture.





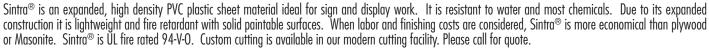






#### SINTRA (





				available iii eei iii	
Catalog Number	Color	Dimen Width	sions Length	Thickness	Weight/Sheet (Lbs.)
S-02-218 S-02-318 S-02-344 S-02-418 S-02-420 S-02-444 S-02-459 S-02-618 S-02-6.518 S-02-718 S-02-720 S-02-744 S-02-759 S-02-818 S-02-844 S-02-918 S-02-944 S-02-91118	White	48" 48" 60" 48" 60" 79.9" 48" 48" 48" 60" 79.9" 48" 60" 48"	96" 96" 120" 96" 120" 120" 120" 96" 120" 120" 120" 96" 120" 96"	1mm (.040") 2mm (.080") 2mm (.080") 3mm (.118") 3mm (.118") 3mm (.118") 3mm (.118") 4mm (.157") 5mm (.197") 6mm (.236") 6mm (.236") 6mm (.236") 10mm (.375") 10mm (.375") 13mm (.500") 19mm (.750")	5.6 9.2 14.4 13.7 17.2 21.5 28.6 18.4 23.1 27.5 34.3 42.9 57.1 33.0 55.0 42.9 71.5 62.4
S-01-318	Black	48"	96"	2mm (.080")	9.2
S-01-418	Black	48"	96"	3mm (.118")	13.7
S-01-444	Black	60"	120"	3mm (.118")	21.5
S-01-6.518	Black	48"	96"	5mm (.197")	23.1
S-01-718	Black	48"	96"	6mm (.236")	27.5
S-01-744	Black	60"	120"	6mm (.236")	42.9
S-01-918	Black	48"	96"	13mm (.500")	42.9
S-06-418	Green	48"	96"	3mm (.118")	13.7
S-06-718	Green	48"	96"	6mm (.236")	27.5
S-07-418	Blue	48"	96"	3mm (.118")	13.7
S-07-718	Blue	48"	96"	6mm (.236")	27.5
S-10-418	Gray	48"	96"	3mm (.118")	13.7
S-10-718	Gray	48"	96"	6mm (.236")	27.5
S-14-418	Teal	48"	96"	3mm (.118")	13.7
S-16-418	Beige	48"	96"	3mm (.118")	13.7
S-16-718	Beige	48"	96"	6mm (.236")	27.5
S-19-418	Purple	48"	96"	3mm (.118")	13.7
S-20-418	Light Gray	48"	96"	3mm (.118")	13.7
S-20-718	Light Gray	48"	96"	6mm (.236")	27.5
S-23-418	Dark Red	48"	96"	3mm (.118")	13.7
S-23-718	Dark Red	48"	96"	6mm (.236")	27.5
S-25-418	Bright Yellow	48"	96"	3mm (.118")	13.7
S-25-718	Bright Yellow	48"	96"	6mm (.236")	27.5
S-27-418	Dark Blue	48"	96"	3mm (.118")	13.7
S-27-718	Dark Blue	48"	96"	6mm (.236")	27.5

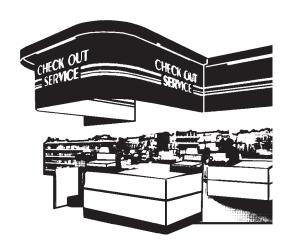
CUTTING: Sintra® up to 3mm thick can be cut with a knife. Guillotine cutting is not recommended as it will leave a compressed edge. Flat Sintra® can be die cut with a steel rule die. Smooth edges can be achieved by slight warming or with a sander, taking care not to over heat. Sintra® can be cut with plastic cutting blades at feed speeds of 100 ft/min. Circular and jig saws may also be used.

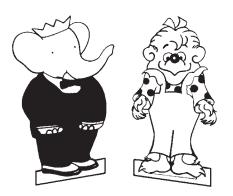
FASTENING: Sintra® may be nailed within 1/4" from its edge without splitting. Screws or blind rivets can also be used. Allow for temperature changes since it expands 0.05 mil/ft. per °F.

PAINTING: Sintra® can be painted with vinyl paints, acrylic lacquers or 2-part polyurethanes. Paint can be applied by brush, spray gun, roller or dipping. Finishes should not be forced dried in an oven. Primers are not required if surface is dry and clean. Silk screening has excellent results. Most printing inks suitable for PVC may also be used.

CEMENTING: Sintra® may be bonded to itself with IPS-1007, 1802 or 2007 found in the Sigh Supplies section under Cements for Plastics.

FORMING: Sintra® can be thermo-formed, vacuum-formed or heat bent faster than most conventional plastics depending on thickness and shape. Please inquire for fabrication data.





**Interstate** Electric Co.

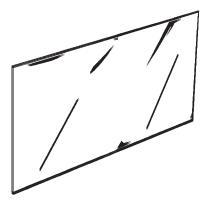
#### **SINTRA TOP**

**SINTRA** 



Sintra®top economically provides the gloss of acrylic at one-half the weight. Its smooth, durable surface is ideal for signage, displays, POP, vinyl graphics and other applications that require a high-gloss effect. It offers the same fabrication ease as original Sintra® material. In addition to its gloss finish, Sintra®top material offers a higher degree of UV resistance and greater moisture resistance than many other types of alternative substrates. Can be printed, painted, lacquered or surface coated and laminated.

Catalog Number	Color	Dimensions Width Length Thickness			Weight/Sheet (Lbs.)
S-T02-418 S-T02-420 S-T02-6.518	White White White	48" 48" 48"	96" 120" 96"	3mm (.118") 3mm (.118") 5mm (.147")	15.1 19 25
S-T01-418	Black	48"	96"	3mm (.118")	15.1
S-T07-418	Blue	48"	96"	3mm (.118")	15.1
S-T23-418	Dark Red	48"	96"	3mm (.118")	15.1
S-T25-418	Yellow	48"	96"	3mm (.118")	15.1





# The Most Complete Supplier in the West!

Sign, Lighting & Electrical Supplies • Computer Sign Making Equipment • Display & Exhibit Supplies

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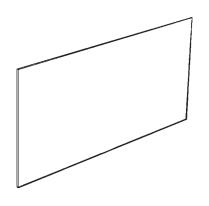


#### **LUMASITE SHATTER-PROOF PLASTIC SHEETS**

LUMA site\*

LUMAsite® plastic sheets are cast from pure acrylic monomer and reinforced with an almost invisible web of glass fibers. This combines the fade resistance and weatherability of acrylic with the high impact properties of fiberglass. LUMAsite® has glossy surfaces on both sides, except for dark brown which is satin-matte on one side. LUMAsite® sheets cost substantially less than polycarbonate sheets and due to Lumasite's superior stiffness, a 1/8" thick sheet can often take the place of a 3/16" acrylic or polycarbonate sheet. LUMAsite® is combustible so fire precautions similar to those for wood-based sheet products should be used. Other sizes and colors also available.

Catalog	6.1	Dime	Thickness	
Number	Color	Width	Length	(Inches)
A1020C-418 A1020C-420 A1020C-440 A1020C-444	White White White White	48" 48" 60" 60"	96" 120" 96" 120"	.125 .125 .125 .125



BONDING: Bonding can be accomplished using solvent-type cements (with the exception of "Crystal" varieties of LUMAsite®). Thin slow-setting cements like IPS-4 are recommended. Butt-joints between panels are not recommended due to the irregular edges caused by the glass fibers.

FASTENING: LUMAsite® can be fastened to sheet metal using pressure-sensitive tape such as 3M VHB. LUMAsite® can also be fastened using rivets, screws or bolts. Holes should be drilled slightly oversize and no less than 1/2" from the edge of the sheet.

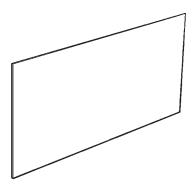
PAINTING: Most paints or screening inks for use on ordinary cast acrylic may be used on LUMAsite®.

CUTTING: LUMAsite® may be sheared using foot or power sheet metal shears. For cutting 1/8" thickness, a 12 gauge shear is recommended. A circular saw with a medium to coarse carbide blade 14 teeth per inch can also be used.

#### **STYRENE SHEETS**

Styrene sheets are made of high impact styrene with smooth surfaces. Quantity orders can be cut to custom sizes. Styrene sign blanks in small sizes can be found in the Sign Supplies section under Sign Blanks. Other colors, sizes and thicknesses also available.

Catalog Number Color		Dime Width	Thickness (Inches)	
STY-009	White	48"	96"	.020
STY-013	White	48"	96"	.030
STY-018	White	48"	96"	.040
STY-218	White	48"	96"	.060
STY-418	White	48"	96"	.125



#### **CORRUGATED PLASTIC SHEETS**

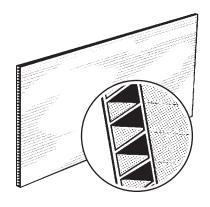
A twin-walled, corrugated polypropylene sheet plastic substrate that is ideal for many sign and display applications. It is weatherproof, durable and lightweight which makes it suitable for both indoor and outdoor signage such as real estate signs, political signs, bus and truck signs. It is combustible but can be easily extinguished with conventional fire extinguishers. Sheets can be fabricated using normal techniques associated with corrugated cardboard. It is UV enhanced and should give 3 years outdoor service before breakdown occurs.

INT-02-618US denotes an ultra-smooth version which has a thicker face to reduce the "ribbed" appearance and provides a smoother face ideal for printing or producing a more finished look.

Sheets are rigid and can be best screen-printed on flat bed presses. Because it is non-absorbent, use a minimum film thickness to expedite drying. Forced drying temperatures should not exceed 100°F. Squeegee pressure should be normal and the squeegee should be slightly rounded to help compensate for fluted surfaces. Ink viscosity should be slightly higher than normal to prevent spreading in the flutes.

Custom cutting is available in our modern cutting facility. Please call for quote. Other sizes and thicknesses also available.

Catalog	Dimensions					
Number	Color	Across Corrugation	Parallel to Corrugation	Thickness		
INT-02-418 INT-02-601 INT-02-602 INT-02-604 INT-02-618 INT-02-618US INT-02-718 INT-02-8.518	White White White White White White White, Ultra-Smooth White White	48" 18" 24" 24" 48" 48" 48"	96" 24" 18" 36" 96" 96" 96"	3mm (.118") 4mm (.157") 4mm (.157") 4mm (.157") 4mm (.157") 4mm (.157") 6mm (.236") 10mm (.394")		
INT-01-618	Black	48"	96"	4mm (.157")		
INT-00-618	Natural	48"	96"	4mm (.157")		
INT-03-618	Red	48"	96"	4mm (.157")		
INT-07-618	Blue	48"	96"	4mm (.157")		
INT-06-618	Green	48"	96"	4mm (.157")		
INT-05-618 INT-05-718	Yellow Yellow	48" 48"	96" 96"	4mm (.157") 6mm (.236")		
INT-04-618	Orange	48"	96"	4mm (.157")		
INT-08-618	Brown	48"	96"	4mm (.157")		
INT-10-618	Gray	48"	96"	4mm (.157")		
INT-12-618	lvory	48"	96"	4mm (.157")		







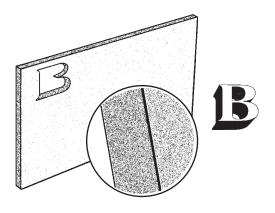


#### **EPSILON FOAM SHEETS • BEAD BOARD**

Epsilon foam is made from an expanded polystyrene closed-cell material. It can be used for dimensional cut-outs for signs and exhibits. These sheets are also used as an economical sacrificial layer between work and the router or saw table.

Catalog	Color	Dimensions		Thickness	Density
Number		Width Length		(Inches)	(Lbs./Cubic Ft.)
EPS-918-1	White	48"	96"	.5	1
EPS-1318-1	White	48"	96"	1.0	1
EPS-1718-1	White	48"	96"	2.0	1
EPS-1518-2	White	48"	96"	1.5	2 2
EPS-1718-2	White	48"	96"	2.0	

**EPSILON** 





#### **FOME-COR**

Fome-Cor® is composed of a rigid and lightweight extruded polystyrene foam core laminated on both sides with satin-smooth, 12 pt. clay-coated paper stock. Fome-Cor® is ideal for picture framing, displays, photo backups, exhibits, models and a number of other uses. Custom cutting is available in our modern cutting facility. Please call for quote.

Catalog Number F245C-404CTN	Surface Color White	Core Color		ensions	Thickness	Put
	\/\b:40		Width	Length	(Inches)	Up
	υν η ΙτΔ	White	32"	40"	.125	25
F245C-406CTN	White	White	40"	60"	.125	25
F245C-418BU	White	White	48"	96"	.125	Bulk
F245C-418CTN	White	White	48"	96"	.125	25
F327C-601CTN	White	White	24"	36"	.187	25
F327C-602CTN	White	White	30"	42"	.187	25
F327C-603BU	White	White	30"	40"	.187	Bulk
F327C-603CTN	White	White	30"	40"	.187	25
F327C-604CTN	White	White	32"	40"	.187	25
F327C-606BU	White	White	40"	60"	.187	Bulk
F327C-606CTN	White	White	40"	60"	.187	25
F327C-614BU	White	White	48"	72"	.187	Bulk
F327C-614CTN	White	White	48"	72"	.187	25
F327C-618BU	White	White	48"	96"	.187	Bulk
F327C-618CTN	White	White	48"	96"	.187	25
F327C-620BU	White	White	48"	120"	.187	Bulk
F327C-620CTN	White	White	48"	120"	.187	25
F327C-54X77	White	White	54"	77"	.187	Bulk
F327C-640BU	White	White	60"	96"	.187	Bulk
F327C-640CTN	White	White	60"	96"	.187	25
F327BB-28X40	Black	Black	28"(1)	40"(1)	.187	Bulk
F327BB604BU	Black	Black	32"	40"	.187	Bulk
F327BB604CTN	Black	Black	32"	40"	.187	25
F327BB618BU	Black	Black	48"	96"	.187	Bulk
F327BB618CTN	Black	Black	48"	96"	.187	25
F327BB-54X77	Black	Black	54"	77"	.187	Bulk
F-ST-818	White	White	48"	96"	.375	12

#### **NOTE:** (1) Actual dimensions are 27.875" x 39.875".

JETMOUNT GRAPHIC ARTS BOARD

#### **FOME-COR**

Fome-Cor<sup>®</sup> is composed of a rigid and lightweight extruded polystyrene foam core laminated on both sides with satin-smooth, 12 pt. clay-coated paper stock. Fome-Cor<sup>®</sup> is ideal for picture framing, displays, photo backups, exhibits, models and a number of other uses. Custom cutting is available in our modern cutting facility. Please call for quote.

CUTTING: Fome-Cor $^{\odot}$  can be cut effortlessly with a mat knife, razor, slitter, fine toothed band saw or table saw. Square edges and bevels up to  $90^{\circ}$  can be cut with standard sharp-edged mat cutters.

DIE CUTTING: Fome-Cor® cuts cleanly to intricate shapes. When die cut with a standard rule the edges compress and stay closed giving a "pillowed" effect.

EMBOSSING: Fome-Cor's absence of "memory" allows sharp and permanent designs by embossing or de-bossing. Embossing is accomplished on standard presses without heat, with only moderate pressure.

SCREEN PRINTING: The surfaces of Fome-Cor® are outstanding for screening with sharp detail, great color coverage and fast drying.

LAMINATING: Foil, printed paper, poster, photo paper and fabrics may all be laminated to Fome-Cor® using standard mounting equipment and bonding agents.

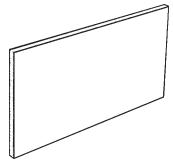
MOUNTING: Use standard dry mounting equipment and adhesives that operate in the range of  $180 - 225\,^{\circ}\text{F}$ . 30 - 60 seconds in the press is sufficient for most applications. Fome-Cor® accepts either hot or cold vacuum mounting. It is also suitable for cold mounting using standard adhesives and low to moderate pressure rollers.

PRINTING AND PAINTING: The white clay-coated surface of Fome-Cor® is a top quality printing surface. It may also be painted with latex, oil based or acrylic paints.

### Jet Mount. INTERNATIONAL PAPER

JetMount™ is rigid while lightweight. It consists of a thicker extruded polystyrene foam core laminated between 12pt. clay-coated paper liners. Foam is enhanced to resist dents and provide exceptional durability. JetMount™ was engineered a quarter inch thick resulting in a more rigid board. Available in up to 5' by 8' panels, JetMount™ is the ideal mounting substrate for digital imaging.

Catalog	Color	Dimensions		Thickness	Put
Number		Width Length		(Inches)	Up
F435C-718CTN	White	48"	96"	.250	20
F435C-740CTN	White	60"	96"	.250	20
F435BB718CTN	Black	48"	96"	.250	20
F435BB740CTN	Black	60"	96"	.250	20



MOUNTING AND LAMINATING: While JetMount™ is designed for indoor applications, most paper, foil or plastic sheet film can be mounted to its smooth surface. The special properties of JetMount™ are perfect for almost any mounting project, including lithos, posters, art and photographs. Virtually any mounting fabrication technique may be used, including dry mounting, wet pressure-sensitive adhesives and automatic litho mounting.

CUTTING: Smooth, crisp edges can be achieved by cutting the high-density foam with a standard mat and glass cutter. To make numerous sizes and intricate shapes with ease, use a utility knife or Cutawl.

# INTERNATIONAL (Λ) PAPER

#### **ACID-FREE FOME-COR**

Acid-Free Fome-Cor® is ideal for use in conservation quality framing. Paper surface of the board is buffered to maintain a non-acidic stability. Designed to be used in direct contact with artwork. Meets the highest conservation standards for preserving works of art.

Catalog	Surface	Core	Dime	ensions	Thickness	Put
Number	Color	Color	Width	Length	(Inches)	Up
F-AF-604CTN	White	White	32"	40"	.187	25
F-AF-606CTN	White	White	40"	60"	.187	25
F-AF-48X80	White	White	48"	80"	.187	Bulk
F-AF-618BU	White	White	48"	96"	.187	Bulk

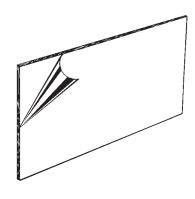
#### **SELF-ADHESIVE & HEAT-ACTIVATED FOME-COR**

Both Self-Adhesive and Heat-Activated Fome-Cor® are extruded polystyrene bonded between various high-quality papers. Available in a wide variety of sizes and thicknesses for mounting just about anything.

Catalog	Description W		Dimensions		Put
Number			Width Length		Up
F-PRO-601CTN	Self-Adhesive, White	24	36	.187	25
F-PRO-614CTN	Self-Adhesive, White	48	72	.187	25
F-HA-606CTN	Heat-Activated, White	40	60	.187	25
F-HA-618CTN	Heat-Activated, White	48	96	.187	25

To use Self-Adhesive Fome-Cor®: peel back the release paper as positioning a photograph or a print on the sticky surface.

To use Heat-Activated Fome-Cor®: place the piece to be mounted on the heat-activated adhesive side of the board, then place it in a heated mechanical or vacuum dry mount press with the release liner. After it cools, the board can be trimmed. Heat-Activated Fome-Cor® has also been used with heated roller laminators to reduce mounting and process times.

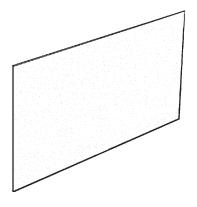


### <u>VALUBOARD</u>

ValuBoard was designed and developed by Fome-Core as an intermediate substrate for the point-of-purchase (POP) display market. Its economical natural kraft liners are similar to those used in corrugated boards so costs are comparable. However, the smooth, foam, core of ValuBoard provides a superior mounting surface and graphic presentation. In addition, its foam core permits the user to die cut displays and achieve an attractive pillowed edge that simply can not be achieved with corrugated products. Virtually any type of paper, foil or plastic sheet film can be mounted on ValuBoard if the proper mounting techniques and adhesives are used. Adhesives should be solvent free and compatible with the print to be mounted. Plastics, coated stock and ink jet receptive materials may not be compatible with all adhesives.

Catalog Number	Color	Width	Length	Thickness (Inches)
VB-618	Natural Kraft	48"	96"	.187







#### GATORFOAM



Gatorfoam® surfaced panels consist of a, rigid, polystyrene foam core faced on both sides with smooth resin impregnated, moisture resistant fiber veneers which are excellent for painting, screening, laminating and photo mounting. Although weather resistant, proper support must be added for outdoor use since panels have a tendency to bow towards the sun. Black surfaced Gatorfoam® has a black foam core and is not recommended for exterior use. Gatorfoam's high strength-to-weight ratio makes it ideal for exhibits, displays and signage construction.

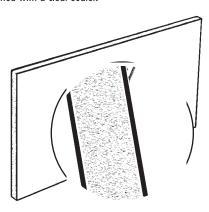
Custom sizes also available from our modern cutting facility. Please call for quote.

					•	
Catalog Number	Surface Color	Core Color	Dimei Width	nsions Length	Thickness (Inches)	Put Up
IPC-618-W IPC-640-W IPC-644-W IPC-918-W	White White White White	White White White	48" 60" 60" 48"	96" 96" 120" 96"	.187 .187 .187 .50	15 15 10 12
IPC-940-W IPC-944-W IPC-1118-W IPC-1318-W IPC-1518-W IPC-1718-W	White White White White White	White White White White White White	60" 60" 48" 48" 48" 48"	96" 120" 96" 96" 96" 96"	.50 .50 .75 1.00 1.50 2.00	12 8 8 6 4 3
IPC-618-01 IPC-640-01 IPC-644-01 IPC-918-01 IPC-940-01 IPC-944-01 IPC-1118-01 IPC-1318-01 IPC-1518-01	Black Black Black Black Black Black Black Black	Black Black White Black Black White Black Black Black Black Black	48" 60" 60" 48" 60" 60" 48" 48"	96" 96" 120" 96" 96" 120" 96" 96"	.187 .187 .187 .50 .50 .50 .75	15 15 10 12 12 12 8 8 8 6 4
IPC-618-N IPC-640-N IPC-644-N IPC-918-N IPC-940-N IPC-944-N IPC-1118-N IPC-1318-N IPC-1518-N	Natural Natural Natural Natural Natural Natural Natural Natural	White	48" 60" 48" 60" 48" 48" 48"	96" 96" 120" 96" 96" 120" 96" 96" 96"	.187 .187 .187 .50 .50 .50 .75 1.00	15 15 10 12 12 8 8 6 4

CUTTING: Gatorfoam® may be cut with a standard table or band saw using thin, fine toothed blades. Irregular cuts can be made by routers using a multi-fluted bit. A K11 Cutawl tool is also suitable. Die or quillotine cutting is not recommended.

GLUING: Gatorfoam® can be glued with any good water based contact cement. Edging can be glued-on using the heat activated Edgemate system shown in the Sign Supplies section.

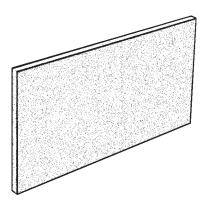
PAINTING: Gatorfoam's surface needs no special preparation other than to be clean and oil free. Minor blemishes can be sanded out using 180 grit silicone carbide dry paper. Gatorfoam® accepts acrylic, vinyl, enamel or lacquer paints. Oil or solvent-based paints should not make contact with the polystyrene core as it will cause deterioration. For best results, surfaces to be screen printed should be finished with a clear sealer.



#### **GATORLITE**

GatorLite is a lightweight structural panel of rigid polystyrene foam core laminated on both sides by moisture resistant man-made wood fiber veneer. The face veneer is less refined than that of Gatorfoam. The face laminates have been specially developed to provide an excellent surface for digital imaging and photo mounting.

Catalog	Surface	Core	Dimensions		Thickness	Put
Number	Color	Color	Width Length		(Inches)	Up
IPC-640-NL	Natural	White	60"	96"	.187	15
IPC-940-NL	Natural	White	60"	96"	.50	12
IPC-640-0IL	Black	Black	60"	96"	.187	15
IPC-940-0IL	Black	Black	60"	96"	.50	12



## Stymbam INTERNATIONAL (A) PAPER

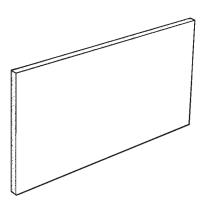
#### **FOAM BLANKS**

Dow Styrofoam brand "Square Edge" is a light blue extruded polystyrene sheet. Dow "Square Edge" has silk-like surfaces that can be painted or printed on with water based paints or non-solvent inks.

Gatorblanks<sup>®</sup> are first quality Gatorfoam<sup>®</sup> cores with no rigid surface applied.

Both brands are ideal for light duty applications and can be used outdoors when UV protected. Most water based contact cements can be used.

Catalog	Material	Dime	ensions	Thickness	Put
Number	Color	Width	Length	(Inches)	Up
DOW-SE-1318	Light Blue	48"	96"	1.00	Bulk
DOW-SE-1718	Light Blue	48"	96"	2.00	Bulk
IPC-GB-1318	White	48"	96"	1.00	Bulk
IPC-GB-1718	White	48"	96"	2.00	Bulk

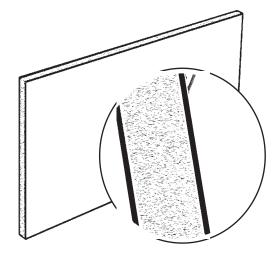


#### **GATORPLAST**

INTERNATIONAL (A) PAPER Gatorplast™ consists of a lightweight, extruded foam core laminated on both sides with a 15 mil, high-impact matte polystyrene cap sheet. It is ideal for displays, photo

mounting and sign making. It accepts both cut-to-shape lettering and vinyl lettering and can be used indoors and outdoors. It is recommended that the foam be covered with channels of painted with a UV barrier coating. Cap sheet should also be protected with a UV barrier for maximum outdoor life.

Catalog	Surface	Core	Dime	ensions	Thickness	Put
Number	Color	Color	Width	Length	(Inches)	Up
IPC-618-GP	White	White	48"	96"	.187	15
IPC-918-GP	White	White	48"	96"	.50	12
IPC-1118-GP	White	White	48"	96"	.75	8
IPC-618-GP01	Black	Black	48"	96"	.187	15
IPC-918-GP01	Black	Black	48"	96"	.50	12



CUTTING: Can be cut with standard table saws. A thin kerfed blade will produce optimal cuts. Detailed shapes and contours can be created by using routers.

DIE CUTTING: 3/16" and 1/2" Gatorplast™ can be die cut using a side bevel and serrated-edge steel rules. It is also possible to die cut 3/16" Gatorplast™ with a standard rule. Thicker Gatorplast™ is not commonly die cut. Can also be quillotine cut.

PAINTING: Can be painted with a variety of paints without special preparation. Surface should be clean and free of dust. Latex or water based enamels can be used with little concern. A small area should be tested. Solvent based paints such as acrylics, some enamels and lacquers are often used. Prevent the foam from coming into contact with solvent based paints. Air drying is recommended.

SCREEN PRINTING: Gatorplast<sup>™</sup> has been printed with solvent based, water based and UV-curable inks. Ink manufacturers can make detailed recommendations.

ADHESIVES: Typical adhesives successfully used include epoxies and 3M's Super 77 Spray Adhesive which can be found in the Sign Supplies section under Miscellaneous Cements & Sealants.

MOUNTING: The pressure sensitive film selection is critical to the proper mounting of photographs. Films manufacturers can make detailed recommendations. Dry mounting is not recommended.

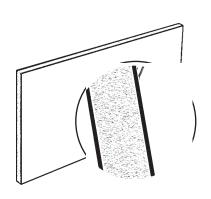


#### **FOAM-X**



Foam-X® board is composed of a polystyrene foam core laminated on both sides with paper stock. It offers many design possibilities for picture or photo framina and mounting, die cutting and painting. Its "memory" characteristic resists dents and retains original dimensions when die cut. It cuts cleanly and evenly resulting in sharp, crisp edges. Unlike other foam boards, Foam-X's edges stay open and apart when cut. The Foam-X® surface finish provides excellent paint and ink adhesion. Custom cutting is available in our modern cutting facility. Please call for quote.

Catalog	Surface	Core	Dime	ensions	Thickness	Put
Number	Color	Color	Width	Length	(Inches)	Up
FOM-604CTN FOM-606BU FOM-606CTN FOM-618BU FOM-618CTN FOM-620BU FOM-803BU FOM-804BU FOM-918BU FOM-918CTN	White	White	32" 40" 48" 48" 48" 27.75" 48" 48"	40" 60" 96" 96" 120" 39.75" 32" 96"	.187 .187 .187 .187 .187 .187 .375 .375 .500	45 Bulk 25 Bulk 25 Bulk Bulk Bulk Bulk
FOM-61801CTN	Black	Black	48"	96"	.187	25
FOM-91801CTN	Black	Black	48"	96"	.500	10



CUTTING: Foam-X® can be cut effortlessly with mat knives, razors, slitters, fine toothed band saws and table saws. Square edges and bevels up to  $90^\circ$  can be cut with standard sharp-edged mat cutters.

DIE CUTTING: Foam-X® cuts cleanly to intricate shapes. When die cut with a standard rule, the edges spring back open.

SCREEN PRINTING: The surfaces of Foam-X® are outstanding for screening.

Sharp detail, great color coverage and fast drying.

LAMINATING: Foil, printed paper, poster, photo paper and fabrics may all be laminated to Foam-X® using standard mounting equipment and standard bonding agents.

MOUNTING: Use standard dry mounting equipment and adhesives that operate in the range of 180 - 225 °F. 30 - 60 seconds in the press is sufficient for most applications. Foam-X $^{\tiny \circledR}$  accepts either hot or cold vacuum mounting. It is also suitable for cold mounting using standard adhesives and low to moderate pressure rollers.

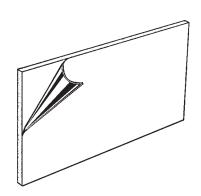
PRINTING AND PAINTING: The white clay-coated surface of Foam-X® is a top quality printing surface. It may also be painted with latex, oil base or acrylic paints.

#### PRESSURE SENSITIVE FOAM-X



A pressure sensitive Foam-X with DF adhesive film already applied. Hi-Tac version is non-removable while the Lo-Tac version is re-positionable.

Catalog Number	Surface Color	Core Color	Dim Width	ensions Length	Thickness (Inches)	Put Up	Adhesive Type
FOM-618-PSHT	White	White	48"	96"	.187	25	Hi-Tac Adhesive
FOM-618-PSLT	White	White	48"	96"	.187	25	Lo-Tac Adhesive

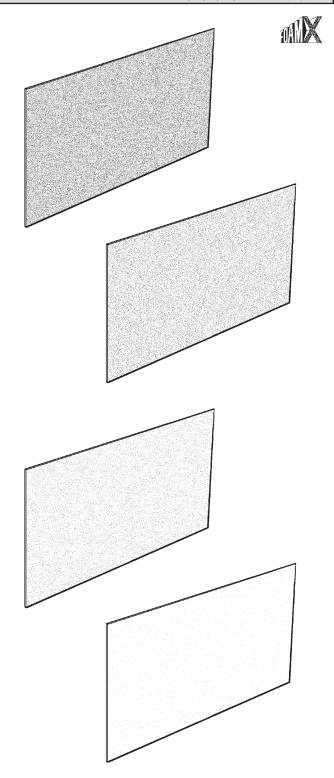


### **COLORED FOAM-X • FOAM BOARD**

We offer foam board in a wide variety of vibrant colors. Boards are coated with high quality pigmented inks on one side. Our modern coating facility and unique ink formulas enables color matching to any Pantone® color including fluorescents and metallics. Other Pantone® colors, board sizes and thicknesses also available. Please call for quote.

A Pantone  $^{\rm @}$  Color Matching System Guide is helpful in deciding on color shade, intensity and finish when selecting colored foam boards from chart below.

Catalog Number	Pantone® Color <sup>(1)</sup>	Width	Length	Thickness (Inches)
C1F-012C-618	Yellow 012 C	48"	96"	.177
C1F-WRC-618	Warm Red C	48"	96"	.177
C1F-RHRC-618	Rhodamine Red C	48"	96"	.177
C1F-FBU-618	Flat Black U Purple C Violet C	48"	96"	.177
C1F-PC-618		48"	96"	.177
C1F-VC-618		48"	96"	.177
C1F-PBC-618	Process Blue C	48"	96"	.177
C1F-GC-618	Green C	48"	96"	.177
C1F-GBC-618	Black C	48"	96"	.177
C1F-RBC-618	Reflex Blue C	48"	96"	.177
C1F-021C-618	Orange 021 C	48"	96"	.177
C1F-032C-618	Red 032 C	48"	96"	.177
C1F-PYC-618	Process Yellow	48"	96"	.177
C1F-116C-618	Yellow 116 C	48"	96"	.177
C1F-170C-618	Coral 170 C	48"	96"	.177
C1F-178C-618	Dark Coral 178 C	48"	96"	.177
C1F-210C-618	Light Pink 210 C	48"	96"	.177
C1F-220C-618	Raspberry 220 C	48"	96"	.177
C1F-2602C-618	Dark Purple 2602 C	48"	96"	.177
C1F-300C-618	Blue 300 C	48"	96"	.177
C1F-320C-618	Teal 320 C	48"	96"	.177
C1F-322C-618	Dark Teal 322 C	48"	96"	.177
C1F-354C-618	Green 354 C	48"	96"	.177
C1F-3955C-618	Lemon Yellow 3955 C	48"	96"	.177
C1F-422C-618	Light Gray 422 C	48"	96"	.177
C1F-430C-618	Gray 430 C	48"	96"	.177
C1F-464C-618	Brown 464 C	48"	96"	.177
C1F-467C-618	Light Beige 467 C	48"	96"	.177
C1F-473C-618	Light Peach 473 C	48"	96"	.177
C1F-485C-618	Red 485 C	48"	96"	.177
C1F-801U-618 C1F-802U-618 C1F-803U-618 C1F-804U-618 C1F-805U-618	Florescent Blue 801 U Florescent Green 802 U Florescent Yellow 803 U Florescent Orange 804 U Florescent Red 805 U	48" 48" 48" 48"	96" 96" 96" 96" 96"	.177 .177 .177 .177
C1F-806U-618	Florescent Pink 806 U	48"	96"	.177
C1F-807U-618	Florescent Purple 807 U	48"	96"	
C1F-872C-618	Metallic Gold 872 C	48"	96"	.177
C1F-877C-618	Metallic Silver 877 C	48"	96"	.177
INT-PMS-G	Pantone® Color Matching S			
NOTE: (1) C=Coat	ed (Gloss). U=Un-coated (F	lat).		

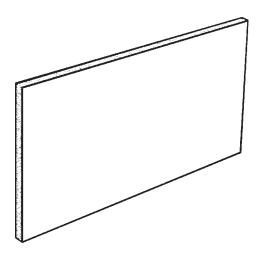




KADA BLOC KAPA-BLOC

Kapa-Bloc is a polyurethane foam-centered board, laminated to two sheets of melamine resin coated paper. This rugged durable board can be used for a wide range of applications including photo mounting, exhibits, signage, screen-printing and POP displays.

Catalog	Surface	Core	Dime	nsions	Thickness	Put
Number	Color	Color	Width	Length	(Inches)	Up
K-618-02	White	Gray	48"	96"	.187	18
K-644-02	White	Gray	60"	120"	.187	18
K-918-02	White	Gray	48"	96"	.500	9
K-944-02	White	Gray	60"	120"	.500	6
K-618-01	Black	Gray	48"	96"	.187	18
K-644-01	Black	Gray	60"	120"	.187	18
K-918-01	Black	Gray	48"	96"	.500	9
K-944-01	Black	Gray	60"	120"	.500	



CUTTING: Mat knives, razor blades or utility knives will provide a clean consistent edge. The blades must be sharp and positioned at a minimal angle (approx. 30°). Mat or foam board cutters are also suitable.

SAWING: Rotary saws, band saws, scroll saws or standard table saws can also provide an acceptable cut edge. A blade with carbide teeth and triple chip tooth configuration produces the best cut. The rotation speed of the blade should be at the maximum setting with the travel speed at a low setting.

ROUTING: Single edged straight carbide bits produce the best results.

DIE CUTTING: 3/16" (5mm) Kapa-Bloc material can be die-cut with steel rule dies or rotary die cutters.

PAINTING AND SCREEN PRINTING: Kapa-Bloc material can be painted or screenprinted with many common water or solvent based coatings (core material does not deteriorate upon contact with solvent based coatings). Both conventional and UV cured screen print inks can be used with Kapa-Bloc material. When using water dispersion coating on foam centered boards, it is important to cover both sides of the board in order to reduce bowing.

MOUNTING: Dry mounting on Kapa-Bloc material can be accomplished with a heat press or combination heat/vacuum presses. Vacuum mounting can be accomplished with either spray or wet mounting adhesives. When utilizing wet adhesives, it is important not to use an excess of adhesive. It is also advisable to apply a backing sheet of the same strength on the reverse side of the board to help prevent bowing. Pressure sensitive adhesives, depending on the product used, can be used with or

Pressure sensitive adhesives, depending on the product used, can be used with or without press equipment.

BONDING: White glues, hot melt adhesives, spray cements and double sided tapes will bond Kapa-Bloc material. Solvent based adhesives may also be used. All methods of bonding Kapa-Bloc material should be tested prior to committing to a production run. production run.

WEATHERABILITY: Kapa-Bloc material is moisture resistant. There is little to no change in Kapa-Bloc material when exposed to a very moist conditions for a prolonged period of time. The core material is unaffected by ultraviolet radiation and requires no protection when used out doors.

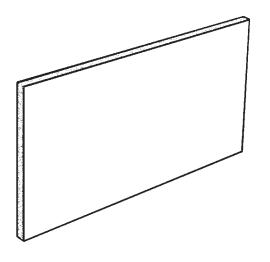
### **Interstate** Electric Co.

#### **MIGHTYCORE**



Mightycore has a smooth paper cap sheet with an underlying moisture barrier that helps prevent bowing and twisting and creates a "no preparation" surface for many applications. Most paints, inks and adhesives are very receptive to the specially engineered paper laminate. The MightyCore heavy duty liners resist denting, bending, crushing, cracking and splintering. Its dense polystyrene core has added durability to resist bending or crushing. MightyCore is stable at various temperatures and humidity levels. May be available with a black surface, black core.

Catalog	Surface	Core	Dime	nsions	Thickness	Put
Number	Color	Color	Width	Length	(Inches)	Up
HUN-706-02	White	White	40"	60"	.250	25
HUN-718-02	White	White	48"	96"	.250	12
HUN-918-02	White	White	48"	96"	.500	12
HUN-920-02	White	White	48"	120"	.500	10



MOUNTING: When working with a hot roller laminator, use a heat-activation adhesive like Seal MultiBond. When working with a cold roller laminator use a pressure sensitive adhesive such as Seal PrintMount. You can mount 1/4" MightyCore in a mechanical or vacuum press with Seal ColorMount adhesive films, with temperatures between 170° and 190°F for three to four minutes, depending upon the adhesive's recommendation. Additionally, 1/4" MightyCore has been used successfully with Seal Print Guard UV laminates, with require 200°F to 215°F temperature for seven minutes. We do no recommended dry mounting with 1/2" MightyCore.

HAND CUTTING: Use a knife with a thin, short blade. Mat cutters, power cutters and single-edge razor blades all can be used for manual cutting.

MACHINE CUTTING: The Piranha Black & Decker carbide tooth blade on a table saw, radial arm saw or circular saw is recommended. MightyCore can also be cut with a very fine brand saw.

ROUTING: Routing in generally not recommended because of the sensitive nature of the product's paper liners.

DIE CUTTING: MightyCore 1/4" board can be die-cut using a 3-point center bevel and 1/2" medium density ejection rubber. A side bevel will also work in most cases. Because MightyCore is a full 1/4" thick, use a 1/2" dieboard when constructing the die.

PRINTING: MightyCore accepts most solvent based, water based and UV inks. There is no need for surface preparation prior to printing; however, a clear sealer may be used.

GLUING: Use a roller for easy application. Use hot melt glue, white glue or carpenter's glue for edge-to-edge gluing. Apply a thin coat to the edge of one board and press firmly against the edge to be joined to it. To join two MightyCore boards together, use hot melt glue, rubber cement, contact cement, spray adhesives or white glue.

WORKING WITH VINYL: Vinyl lettering successfully adheres to MighyCore, however repositioning vinyl letters or removing them will damage the surface paper.

GROMMETS AND SCREWS: MightyCore holds grommets and screws effectively and more securely than any other heavy duty foam board without cracking the surface.



#### **POLYGUARD • PAPERBOARD**

Polyguard is a smooth, heavy polyethylene, gloss coated white paperboard. It is an excellent choice for vinyl graphics, screen printing and mounting applications, especially when an inexpensive yet rigid substrate is needed. It is designed for indoor displays and outdoor signs that are subject to high changeover with low structural strength. Edges are not coated and should be protected with tape, vinyl or edge moulding for longer life. The super smooth Corona treated surfaces accepts screen printing inks and mounting adhesives. Vinyl graphics may be applied wet or dry without damage to the board by the transfer tape. The water resistant coating on both sides allows indoor or outdoor use.

Catalog Number	Color	Width	Length	Thickness (Inches)	Weight (Lbs.)	Put Up
PAP2844048PG	White	28"	44"	.048	1.5	25

CUTTING: Hand cut using a sharp mat or utility knife. Can be guillotine or die cut. May also be hand or machine scored.

SCREEN PRINTING: UV inks can be used and must be properly cured. Approximate Dyne level is 40. Always pre-test selected ink prior to a production run.

MOUNTING: Pressure sensitive, acrylic or hot melt mounting may be used. Avoid high solvent adhesives. Wet or dry vinyl graphics may be applied to cleaned surface. Always remove transfer tape at a 180 degree angle. To reposition graphics, remove with razor knife and reapply.

#### **BLACK CHIPBOARD**

Brown chipboard, clay coated white on 1 side.

Catalog Number	Color	Width	Length	Thickness (Inches)
PAP-2844050BC	Black	28"	44"	.050

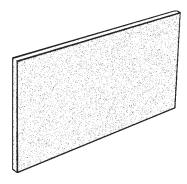
#### THRU WHITE PAPERBOARD

White clay coated on 2 sides with a white core.

Catalog Number	Color	Width	Length	Thickness (Inches)	Weight (Lbs.)
PAP-2844048	White	28"	44"	.048	1.6

#### **CARDSTOCK • PAPERBOARD**

A large variety of cardstock is available. Call for more information.



ULTRA

#### **ULTRA BOARD**

Ultra Board is a lightweight panel consisting of a polystyrene foam core faced on both sides with .015" polystyrene. These faces provide excellent surfaces for painting, silk screening, photo mounting and vinyl lay up. Ultra Board is trimmed and squared on four sides and is also available untrimmed at a lower cost. UV radiation degrades foam, any exposed foam should be protected with a good quality, pigmented water base coating. Chrome and other colored sheets also available.

UB-618-02T UB-918-02T	White	48"			
UB-1118-02T UB-1120-02T UB-1318-02T UB-1518-02T UB-1718-02T UB-1918-02T	White White White White White White	48" 48" 48" 48" 48" 48"	96" 96" 96" 120" 96" 96" 96"	.187 .50 .75 .75 1.00 1.50 2.00 3.00	16 12 8 Bulk 12 8 6 4
UB-618-01T UB-918-01T UB-1118-01T UB-1518-01T	Black Black Black Black	48" 48" 48" 48"	96" 96" 96" 96"	.187 .50 .75 1.50	16 12 8 8
UB-918-BG01 UB-918-BS01 NOTE: (1) 2nd	Brushed Gold (1)  Brushed Silver (1)  d surface is black.	48" 48"	96" 96"	.50 .50	12 12

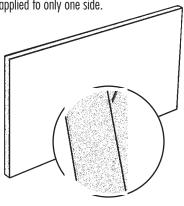
CUTTING: Ultra Board can be cut with a standard table saw. Routing Ultra Board works well. Use a 2 flute, 1/4" router bit at a speed of 20,000 rpm at a feed rate of 60 in./min. Ultra Board .187" to .50" thick die cuts well. Guillotine cutting is not recommended.

PAINTING: Ultra Board can be painted with water based latex or acrylic, water or oil based enamels and solvent based lacquers. Caution should be taken when using oil base or solvent base systems not to allow paint to make contact with the polystyrene core.

SCREEN PRINTING: Ultra Board accepts most printing inks. Panels may be cleaned with a tack cloth or isopropyl alcohol.

PHOTO MOUNTING: Pressure sensitive film is the most important consideration for mounting photographs to Ultra Board. Contact the film manufacturer for recommendations. Dry mounting is not recommended with Ultra Board as the panels tend to warp when heat is applied to only one side.

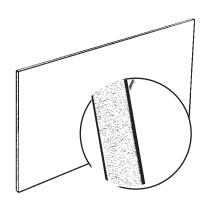




#### **ULTRA MOUNT**

Ultra Mount is a lightweight structural panel consisting of a white extruded polystyrene foam core faced on both sides with white poly-coated 18 pt. Kraft paper. Face laminates have been specially developed to provide a good surface for painting, silk screening, photo mounting and vinyl lay up. Ultra Mount is not recommended for exterior use.

Catalog	Color	Dime	nsions	Thickness	Put
Number		Width	Length	(Inches)	Up
UM-618-02	White	48"	96"	.187	32
UM-918-02	White	48"	96"	.50	24
UM-618-01	Black	48"	96"	.187	32
UM-918-01	Black	48"	96"	.50	24



CUTTING: Ultra Mount can be cut with a circular saw blade specifically designed for cutting paper faced foam boards. Thin-rimmed high speed carbide-tipped plastic cutting blades (72 to 80, 25° alternating teeth on a 10" dia.) are recommended.

PAINTING: Ultra Mount can be painted with poster colors, acrylic paints, tempra, India ink or latex-based pigments. Caution should be taken when using oil based or solvent based systems not to allow the paint to come in contact with the polystyrene core.

PRINTING AND SCREENING: Ultra Mount faces accept most printing and screening inks well. Always test ink prior to production run. For best results in silk screening, wipe the panel clean with a tack cloth prior to printing. Forced drying by hot air ovens is not recommended.

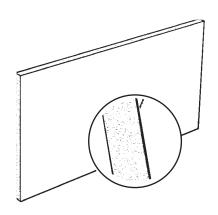
PHOTO MOUNTING: Dry mounting temperatures should be kept below 200° F if possible. Vacuum mounting works well. Spray adhesives and wet mounting techniques are also suitable.



ULTRA **ULTRA PLUS** 

Ultra Plus is a lightweight structural panel consisting of a white or black rigid polystyrene foam core faced on both sides with a smooth, moisture resistant sheet of 1 mm expanded PVC. Face laminates have been specially developed to provide an excellent surface for painting, silk screening, laminating, photo mounting and vinyl lay up. Ultra Plus is an excellent choice for interior and exterior signage, mounting, exhibits, POP displays and routed letters. Black Ultra Plus is not recommended for exterior Other sizes and colors also available.

Catalog	Color	Dime	nsions	Thickness	Put
Number		Width	Length	(Inches)	Up
UP-718-02	White	48"	96"	.25	12
UP-918-02	White	48"	96"	.50	12
UP-1518-02	White	48"	96"	1.50	8
UP-1718-02	White	48"	96"	2.00	6
UP-718-01	Black	48"	96"	.25	12
UP-918-01	Black	48"	96"	.50	12
UP-1318-01	Black	48"	96"	1.00	12



CUTTING: Ultra Plus can be cut with a circular saw blade designed for cutting Ultra Plus.

PAINTING: Ultra Plus needs no special preparation before priming or painting. For best results surface should be clean and free of any oil contaminates. Cleaning the panel with glass cleaner or isopropyl alcohol just prior to coating can accomplish this. Most sign quality oil and solvent based paints can be used provided that paint is not allowed to come into contact with the polystyrene core.

PRINTING AND SCREENING: Ultra Plus panels are rigid, lightweight and easy to handle. The surface of Ultra Plus has a closed cell matte finsih that makes screen printing easy to accomplish. The use of vinyl and vinyl/acrylic solvent based inks are very compatible. The use of water based inks has also had some success with Ultra Plus.

PHOTO MOUNTING: The surface of Ultra Plus makes an excellent material for pressure sensitive photo mounting. Because of the rigidity of the panel, finished mounts are stronger than mounts using lighter foam-type substances. Also suitable for mounting resin coated photo papers, Cibachrome prints, posters, lithographs, resin coated photo papers, Cibachrome prints, posters, lithographs, blueprints, plastic-coated maps, rice paper, vellum, art papers, foils, tissues, newsprint and most paper.



SECTION E: GRAPHICS









#### GERBER EDGE AND EDGE II DIGITAL IMAGING SYSTEMS

The Gerber Edge and Edge II is a revolutionary graphics output device that permanently fuses high-resolution images to 15" (381 mm) precision punched, Edge Ready vinyls and films. Through the use of the Edge and Edge II with an Edge compatible plotter, multiple-color jobs, halftones, airbrush-effects, tade and intricate text, become as simple as printing the complex portion and contour cutting around the outside edge.

#### The Gerber Edge is the only digital imaging system that offers:

- Output that's outdoor durable and ready to apply
- Cut any shape around any printed image with a Gerber 15" Edae-compatible plotter
- Print on a wide variety of Edge Ready materials
- · Continuous length printing and automatic paneling of large images
- A growing array of GerberColor foils, including many spot, medal, transparents, finishing, fluorescents plus four-color process printing to use in any combination
- Proven in production environments worldwide

#### Additional benefits include:

- Gerber Edge graphics are printed dry and are outdoor durable for three to five years without lamination or any post-printing processes
- Print menu boards full of text in minutes onto removable vinvl
- Prints directly onto dozens of Edge Ready vinyls and other specialty materials
- Use spot color printing to create decals with a custom cut around the outside
- After Gerber Edge graphics are printed, graphics can be cut on any Gerber Edge-compatible, 15" sprocketed plotter
- Add a blast of photography to an otherwise dull sign, using Gerber Edge process color printing
- Simulate traditional airbrush and beveled effects by printing spot colors onto colored vinyls; more than 50 GerberColor foil cartridge colors are currently available
- Use GerberColor Spectratone to create thousands of solid, rich colors.
   Perfect for matching corporate and other specified colors
- Use the same file to add a logo to a delivery van or to generate palm-sized decals and create small, medium and large graphics with the automatic panelina capability
- The Gerber Edge has been in use for years and is backed by Gerber

The Gerber Edge 2 continues the Gerber Edge revolution with everything one could expect from the classic Gerber Edge, only better. It has all the same features as the Gerber Edge, but with these new additional improvements:

- Print speed up to three times faster
- Improved pixel placement through the use of advanced thermal management techniques and finely tuned Edge Ready materials and GerberColor foil settings
- User selectable 600 X 300dpi print mode creates sharper edge definition and more colors. (Print speed decreases in this mode)
- Prints onto all Edge Ready materials
- Prints with all GerberColor and Gerber ColorSet foil cartridges
- 20" per minute per color print speed, 95 sq. ft. of printing per hour for one-color printing, 22 sq. ft. per hour for four-color printing
- 11.8" wide print width per pass. Larger images can be paneled with the Omega panelina feature
- Budget friendly, entry-level price

#### A Great Choice:

Whether the Gerber Edge 2 is chosen for its sheer performance and state-of-the-art transfer process control features or the Gerber Edge for its value and solid reputation, both feature versatility in depth. It's a trait with the Gerber Edge family.

Catalog Number	Description	Volts
P60067A	Gerber Edge	115
P70567A	Gerber Edge 2	110/115

#### **GERBER EDGE ACCESSORIES**

Catalog Number	Description
P50504A	Shielded Printer Cable, 15'
P66530B	Thermal Print Head Cleaning Card, 25/Box
P50099A	Lint-Free Cloth
P50508A	Power Cord
P50136B	Registration Eyepiece





#### **GERBERCOLOR EDGE CARTRIDGES**



Gerber has spent many years perfecting a complete system of equipment and materials designed for the highest quality output. Gerber designed and developed the GerberColor™ foil series, which is an integral component of the Matched Technology System (MTS), designed to work with the Gerber Edge and Edge II. Gerber's dedication to the creation of the GerberColor™ foil series has brought to Edge owners more capabilities and features than anyone else; Color accuracy that brings process color Edge output to life, outstanding print quality on the widest array of substrates, superior halftones, gradient fills and the most complete foil coverage for color replication. Only Gerber provides the complete system of equipment, materials and unrivaled technical assistance which equals the Gerber Matched Technology System.

#### **GERBERCOLOR SPOT • GCS SERIES**

GerberColor™ Spot series foils are available in a wide range of smooth, consistent pigments that match popular vinyls, films, inks and paints. Ideal for both interior and exterior printed graphics, in commercial and industrial applications. Custom-formulated, resin-based, semi-gloss spot color foils will provide 3 to 5 years exterior life performance. 150' cartridge.

#### **GERBERCOLOR METALLIC • GCS SERIES**

Silver, GCS-620	P60387A	Copper, GCS-629	P66280A
Gold, GCS-631	P60392A	Champagne Gold, GCS-601	P66284A

#### **GERBERCOLOR PROCESS • GCP SUPER CMYK SERIES**

Turn logos, custom artwork, and photographs no matter how complex into highly profitable, outdoor-durable graphics of exceptional quality. These specially formulated foils were developed in conjunction with the Super CMYK formula, GA Premier software and the Edge system to produce accurate four-color reproductions as well as process color simulations of solid Pantone® Colors. 150' cartridge.

Process Yellow, GCP-705	P65402A	Process Cyan, GCP-707	P65404A
	P65403A	Process Black, GCP-712	P65405A

#### **GERBERCOLOR MEDAL • GCM SERIES**

Adds a polished metallized finish to signs, labels and decals. Recommended for indoor use only. GerberColor™ Medal Series foils can be overprinted on top of GerberColor™ spot, process or transparent foils for additional impressive effects. 84' cartridge.

Silver Medal, GCP-720 **P49097A** Gold Medal, GCP-731 **P49096A** 

#### **GERBERCOLOR TRANSPARENT • GCT SERIES**

Use as standard spot colors or blend together to obtain new color combinations. The greatest feature of the GerberColor™ Transparent Series is that these foils allow the characteristics of the Edge ready base materials to come through. 150' cartridge.

Red, GCT-643	P60407A	Blue, GCT-617	P60397A
Orange, GCT-614	P60402A	Green, GCT-116	P60452A
Tomato Red, GCT-13	P60422A	Brown, GCLT-629	P60447A
Burgundy, GCT-49	P60437A	Yellow, GCLT-625	P60417A
Plum Purple, GCT-128	P60432A	Gold, GCLT-105	P60442A
Sannhire Blue GCT-37	P60427A	,	

#### **GERBERCOLOR LT • GCLT SERIES**

Used in conjunction with Gerber heat transfer paper, these spot and process GerberColor™ foils produce transferable graphics which are then heat press-applied to garments, textiles, caps and a wide variety of specialty items. 150' cartridge.

Process Yellow, GCLT-605	P59742A	Red, GCLT-613	P59727A
Process Magenta, GCLT-273	P59752A	Blue, GCLT-647	P59737A
Process Cyan, GCLT-607	P59757A	Green, GCLT-606	P59732A
Process Black, GCLT-12	P59747A	,	

#### **GERBERCOLOR FINISHING • GCF SERIES FOILS**

Abrasion Guard is designed for graphics likely to experience repeated handling. This clear topcoat makes Gerber Edge produced graphics more resistant to abrasion.

Matte Clear is designed to reduce the gloss level of Edge printed graphics by up to 60%. Enhances the readability of the resulting graphics in applications that require optimum clarity. 84' cartridge.

Abrasion Guard GCS-114 **P55151A** Matte Clear GCS-334 **P66870A** 









#### **EDGE FONTS**

Graphic fonts combined with computerized airbrushing, fades and other effects. These unique type treatments duplicate effects that previously could only be created by hand. Use alone or with other Vector Art. Fonts are serialized and require GA serial number and GSP system ID number.

Agenda Extra Bold	P52761A
Alloy	P54555A
AlloyAlpha Medium (2)	P50092A
Alumina Bold (2)	P55425A
Asiatic	P54556A
Blacksmith Bold	P56126A
Barnyard	P57820A
Beta	P57819A
Bubble Gum Script	P50083A
Burgess Chrome (2)	P56127A
Clearcut	P57813A
Classic Bold	P52759A
Cyborg	P57675A
Distinction	P55423A
Dropout	P52595A
DropoutEurostile Bold Shadow (2)	P50745A
Fairway Compact	P55424A
Flamingo	P56209A
Fusion	P57379A
Gothic Black	_P52764A
Gradual	P55418A
Festival	P69774A
Lazydaze	_P69776A

Heritage	P50743A
Heritage Hyde Park Bold	_ P54891A
Illusive	P55421A
Jade	P57816A
Jade Jamaica Bold	P52762A
Jasper	P60666A
Liquid Crystal (2)	P50084A
JasperLiquid Crystal (2)Mercury Italic (1)	P63576A
Millen	P50741A
Modula Roman	P50742A
Morning Glory	
	P56210A
Sahara	P57818A
Showbiz	P60459A
Stovepipe (2)	_ P54558A
Surge	P57814A
Taverna	P52763A
Tolerant	P55419A
Twofold	P57815A
Yankee Doodle	P50740A
Zany Connected	P57216A
Hot Chilies	P69780A
Stone	P69778A

#### **EDGE LIBRARIES**

Fonts are serialized and require GA serial number and GSP system ID number.

G-General Purpose Library	P52748A
G-Architectural Library	P52750A
G-Point-of-Sale 1 Library	P52752A
G-Caution Library	P52754A
G-Notice/Safety First Library	P52756A
G-Danger 2 Library	P52758A

G-Exit/Fire/No Smoking Lil G-Traffic Mgmt./Handica	
G-Point-of-Sale 2 Library	<sup>′-</sup> P52753A
G-Warning/Think Library	P52755A
G-Danger 1 Library	P52757A

 $\label{eq:Asmall sample of enhanced fonts.} A small sample of enhanced fonts.$ 







Agenda Extra Bold

Eurostile Bold Shadow

Yankee Dood







NOTE: (1) Requires GA release 6.0 or higher.

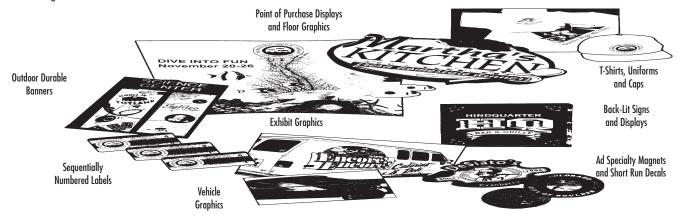
(2) Indicates Edge fonts included with GA Rev 6.2 and upgrades to GA 6.2



#### **GERBER EDGE READY PRINTING MATERIALS**



Gerber offers a wide range of materials, identified by the Edge Ready™ symbol, designed and approved for use in the Gerber Edge. Edge Ready™ printing materials can be found throughout this section.





#### **GERBER ENVISION PLOTTER**

World renowned Gerber enVision plotters are the ultimate in advanced sprocketfeed technology. Designed and built by Gerber, the enVision provides extreme accuracy in material tracking and alignment demanded by sign shops for long signs and unattended operation.

#### enVision 375:

The 15" Gerber enVision 375 plotter is the ultimate partner for cutting Gerber Edge and Edge 2 graphics with unsurpassed color-to-color and print-to-cut registration at lighting speed.

#### enVision 750:

The 30" Gerber enVision 750 plotter is the ideal solution for long signs, fleet graphics and other wide-format graphic applications.

#### Precise and Easy Material Loading:

Superior pin-feed system ensures that material loads quick and tracks with exacting precision for spectacular results. To make loading even easier, the enVision's "Advanced X-Axis Homing" feature brings the 3 pin setup to the original loading position at the touch of a key.

#### Pin-Feed Tracking for Extreme Accuracy:

Advanced bail/rollers system keeps even difficult to cut materials under complete control. Gerber enVision plotters have proven to preform so reliable unattended, the lengthy text or graphics can be run after hours to increase productivity.

#### **Outstanding Performance:**

At speeds up to 36" per second and 3G acceleration, the enVision ensures that even the most unwieldy jobs are precisely cut every time. The Gerber enVision is a great performer, powering through workloads, quickly and precisely.

#### **High Performance Servo Drive:**

Continuous, automatic system monitoring assures a precision cut at every position, at any velocity. With the enVision, the user is always in control and assured of maximum performance.

#### enVision Specifications:

- Material Width: enVision 375 15", enVision 750 30"
- Active Cutting Width: enVision 375 13.25", enVision 750 27.25"
- Maximum Media Thickness: .045"
- Drive Technology: Sprocket-Feed
- Cutting Technology: Swivel Knife
- Mechanical Resolution: 0.0002"
- Knife Options: 30, 45, 60 Degree
- Maximum On-Axis Speed: 36 ips
- Maximum Diagonal Speed: 50 ips
- Maximum Acceleration: 3G
- Knife Cycle Speed: 40 Up/Down Cycles/Second
- Cutting Pressure Range: 0.0 oz. 16 oz.
- Interface: 250 Kilobytes
- Input Buffer: 250 Kilobytes
- Stand: enVision 375 Desktop, enVision 750 Standard
- Pounce: Optional Tool
- Dimension: enVision 375 29"L x 11"W x 14"H enVision 750 - 38.5"L x 26"W x 48"H
- Weight: enVision 375 60 lbs. enVision 750 107 lbs
- Power Requirements: 100-230 Volts 47/63 Hz
- Software Command Set: GSP-GL or HP-GL2 Subset
- Vector Look Head and Curve & Arc Smoothing: Yes
- Test Plot and Cut Possibility: Yes
- Replot Function: Up to 9,999
- Pens: HP Compatible

#### **Plotter Options:**

#### **Long Sign Material Catcher**

Available for FasTrack models 650, 750, 1000 and 1300. Keeps material clean and collects cut off material.

#### Pounce tool:

Available for the Odyssey. Used for print models of Gerber enVision and FasTrack plotters and GS15<sup>plus</sup> Plotters.

#### Illuminated Target Locator:

Available for the Odyssey. Used for point-to-cut target registration of Maxx graphics.

#### **Plotter Stand:**

Available for all models of FasTrack plotters. Assists with proper material tracking.





#### **GERBER MAXX 2 DIGITAL IMAGING SYSTEM**

Gerber's Maxx 2 is an unbelievably versatile and productive wide format thermal transfer printing system. It prints outdoor-durable, pigment-based spot and process colors direct to Maxx Ready materials like uncoated pressure-sensitive vinyl and a growing list of specialty substrates. Output is ready to use the moment the Maxx 2 has finished printing it with no need to laminate.

Gerber Maxx 2 is a 36" wide thermal transfer printer that offers unmatched options for the wide format digital printing market. It offers unattended operation with six cassette bays and automatic cassette switching. Cut large format graphics on Maxx compatible plotters, eliminating the tedious hand cutting process. Print with process color, spot color, GerberColor Spectratone solid, rich, spot colors. SmartFoil Technology determines if the wrong color foils are installed or if not enough foil is left to finish the job. With the same foil formulation as for the Gerber Edge, Maxx 2 offers proven durability and color selection. Print onto a wide and growing selection of Maxx Ready materials. Maxx 2 Intelligent Material Advance System allows for a variety of Maxx Ready material sizes and allows for unattended operation for long color registration. Create larger graphics with the automatic tiling capability.

#### Print & Cut:

Maxx 2 can contour cut output if needed without dies or hand cutting. Works with Gerber cutting plotters using a simple registration system to align materials. Plotter then contour cuts output without the need to hand cut or spend for costly dies.

#### **Beyond Four Color:**

Four color printers simulate the colors they print resulting in visible textures and halftone patterns. Maxx 2 on the other hand, works with real spot colors in addition to four color process, so it gives unmistakable, texture free, dyed-in-the-mass pop and explosive visual impact so important to increasingly discriminating buyers of sians, decals and thousands of other types of specialty graphics.

#### Clean, Quick and Easy:

Maxx Ready media and Maxx Color foils are designed to make life easy and make every job look great. There are no messy liquids, toners or other chemicals to handle or dispose of. Job set-up is fast and simple. Compare this with high maintenance requirements of other digital imaging systems and Maxx 2 looks even better.

#### Driven by Powerful Software:

Working with Gerber powerful Omega CP software, one can design for print and contour-cutting right on the computer screen. Changes can be made without impacting the cost of work produced, improving work flow and bottom line.

#### Work with Data from Other Sources:

Omega software works with a variety of file formats from other design and production systems as well. End users and trade customers alike can bring in designs that can be reproduced with Maxx 2 in the required size and quantity. With volume considerations a thing of the past and the technical confines blown away, Maxx 2 is a huge asset to anyone serving the needs of trade buyers. Repeat orders become simple.

Catalog Number	Description
P75975A	Gerber Maxx 2, 220 Volts
P72966C	Cleaning Card, Gerber MaxxPrinthead (100 per box)
P72533A	Cassette Assembly

#### Print Direct to Uncoated Vinvl:

Maxx 2 works with many of the material types commonly worked with such as Maxx Ready uncoated pressure-sensitive vinyl. Maxx 2 prints direct, transferring potent color to the surface of the target media and fusing it there. The results are stunning and durable. Maxx 2 output resists weather and temperature that leave other technologies in the shade. Use Maxx 2 output with confidence for vehicle graphics, outdoor advertising and anywhere a long term result is necessary.

#### **Unattended Operation:**

Up to six colors can be loaded into the Maxx 2 at one time. At the user's option, the four process colors can be loaded with space still available for two spot colors or practically any combination required from the extension range of Maxx Color imaging foils. If jobs involve more than six loaded colors, Maxx 2 prompts the operator to simply replace a cassette and the job is underway with minimum interruption. Once loaded with the required cassettes and the appropriate Maxx Ready media, operation is unattended. Productivity gets a further boost because Ready media, operation is unattended. Productivity gets a further boost because Maxx 2 output needs no post-imaging processes like lamination or encapsulation to deliver outdoor durability. Fewer process steps mean less operator time per job, higher throughput and better profit opportunities.

#### Intelligent & Economical:

The incredible interplay of a precision, thermo controlled print head and unique Intelligent Materials Advance Systems (IMAS) enable Maxx 2 to build the images it prints in 4" wide passes, easily and efficiently. It intelligently manages and optimizes the use of Maxx Color Imaging Foils. Foil is not expended as the print head traverses speedily to non-print areas of the media. This saves time and money when printing boarders and long stripes. Maxx 2 also moves media in both directions through the system, minimizing the time the system spends preparing the next cassette auto-change, therefore it does not rely on unrealistic, high physical print speeds in order to deliver it's impressive throughput.

#### Service Contract:

Maxx 2 service contracts purchased during the first year may be eligible for an additional discount. Call for details.



#### **GERBER MAXX COLOR FOILS**

Ever since introducing automated graphics and lettering to the industry well over a decade ago, Gerber has stood at the forefront of equipment and materials innovation. Today, the same company that set the standard for computer-based design and production systems has set a new standard for high performance foils via the Maxx Color Foil Series. Developed as part of Gerber's unique Matched Technology System, a complete portfolio of the highest quality materials and equipment in the industry, these time-tested and proven GerberColor foils are designed to deliver everything necessary.

#### Maxx Color Spot (MCS) Series:

Maxx Color Spot (MCS) Series foils are available in a wide range of smooth, consistent pigments that match popular vinyls, films, inks and paints. Ideal for both interior and exterior printed graphics. In commercial and industrial applications, foils can be used separately, in conjunction with process and transparent color foils or overprinted to create custom colors, patterns, fade and shade effects. Maxx Color Spot (MCS) Series foils are a cost-effective and time saving alternative to four-color process for one, two or three-color jobs and offer color matching that cannot be achieved with four-color processes.

Catalog Number	Color	Length (Feet)
P70638A	Black	1640
P70640A	Cobalt Blue	1640
P70647A	Gray	1640
P70645A	Green	1640
P70643A	Intense Blue	1640
P70646A	Olympic Blue	1640
P70648A	Orange	1640
P70642A	Ruby Red	1640
P70641A	Tomato Red	1640
P70644A	Yellow	1640
P70693A	Apple Green	328
P70696A	Aqua	328
P70658A	Beige	1640
P70656A	Brown	1640
P70650A	Burgndy	1640
P70706A	Champagne Gold	328
P70705A	Copper	328
P70662A	Dark Gray	1640
P70694A	Dark Green	328
P70649A	Forest Green	1640
P70757A	Intense Red	1640
P70655A	Kelly Green	1640
P70661A	Lemon Yellow	1640
P70697A	Light Purple	328
P70660A	Navy	1640
P70701A	Pink	328
P70654A	Purple	1640
P70652A	Sunflower Yellow	1640

#### Maxx Winter White Foil:

Maxx Winter White foil can be used to place white output onto a colored background or to act as a primer for maintaining desired color output when printing onto a colored background. (ie: printing yelllow text on a blue background)

MCS610-500

#### Maxx Color Super CMYK:

Maxx Color Super CMYK Process (MCP) Series, was designed with the latest improvements in pigment and foil technologies for producing the most durable process color prints to date. These foils are the only thermal transfer foils in the industry recognized by Pantone® for process color simulations of solid Pantone® Colors. In addition, Super CMYK offers improved durability and expanded print definition.

Catalog Number	Color	Length (Feet)
P70637A	Super CMYK Process Black GCP-712	1640
P70636A	Super CMYK Process Cyan GCP-707	1640
P70635A	Super CMYK Process Magenta GCP-773	1640
P70634A	Super CMYK Process Yellow GCP-705	1640

#### Maxx Color Transparent (MCT) Series:

Maxx Color Transparent (MCT) Series foils offer expanded opportunities for the Maxx 2 user. Like the Maxx Color Spot (MCS) Series, MCT products are outdoor-durable, resin-based thermal transfer foils with the additional quality of being transparent. This unique transparent feature allows the characteristics of the base Maxx Ready material to come through and be enhanced. Reflectives reflect, metallics sparkle, chrome-finished films shine bright and translucents light up like never before. MCT foils can also be used on opaque films for traditional spot color applications. MCT Series foils are completely compatible with all Maxx Ready materials and Maxx Color foils.

Catalog Number	Color	Length (Feet)
MCT617-100	Transparent Blue	328
MCT629-100	Transparent Brown	328
MCT105-100	Transparent Gold	328
MCT116-100	Transparent Green	328
MCT643-100	Transparent Red	328
MCT37-100	Transparent Sapphire Blue	328
MCT13-100	Transparent Tomato Red	328
MCT625-100	Transparent Yellow	328

#### Maxx Color Finishing (MCF) Series:

Maxx Color Finishing (MCF) Series foil is designed to protect, enhance and add effects to Gerber Maxx 2 produced graphics. It is an Abrasion Guard and is a clear, semi-gloss, overprint foil that adds protection against moderate handling conditions.

MCF114-500





#### **GERBER ODYSSEY PLOTTER**

When it comes to precision and unparalleled performance, Gerber plotters are the benchmark against which all other plotters are measured. Whether a sign shop with an expanding business, a start-up looking for the best plotter to help business grow or an operation with highly focused niche applications, Gerber has a plotter to suit every situation. A choice of sprocket-feed, friction-feed and the newest GerberDrive plotters offering a range of media-width flexibility, tracking technologies and print-to-cut capabilities are available. The new Gerber Odyssey with GerberDrive is a breakthrough, first-of-its-kind cutting plotter that combines ultra-precise tracking with media-width flexibility. Providing the extreme accuracy in material tracking and alignment demanded by sign shops for long signs and unattended operation, the Gerber Odyssey offers the best of all worlds. Designed and built by Gerber, the Odyssey incorporates truly revolutionary technology designated GerberDrive, an entirely new active tracking technology. It works by detecting even the most minute movement in the material from the intended track. The moment any movement is detected, its unique sensing and active-tracking mechanism ensures the material is kept in line. It all happens automatically. It is Gerber technology at its best.

#### **Automatic Material Alignment:**

The Odyssey takes the guesswork out of lining up your material. Simply load material onto the plotter and material will align quickly and precisely, at the press of a kev.

#### **Active Tracking Control:**

Odyssey continues to work while the job is running, ensuring that it tracks and cuts correctly the first time.

#### **Exceptional Material Flexibility:**

The Odyssey delivers first-class material utilization, giving the flexibly to cut to 49" wide. A wide range of material widths, rolls, sheets and even scraps from 4" up to 52" can be loaded. Plus cutting force is easily adjustable up to 16 ounces, allowing one to work with a large assortment of materials from lightweight masking films, to pressure-sensitive vinyls, to tough materials such as reflectives and sandblast stencils.

#### **Outstanding Performance:**

At speeds up to 36 inches per second and 3G acceleration, the Odyssey powers through even most demanding work loads. Also features automatic cut off and tool setting, material measurement routine, repeats up to 9,999, Gerber MAXX cutting solution and cut, pounce and pen functions.

Catalog Number	Description
P71803A	Gerber Odyssey 48" Plotter, 115 Volt
P63681B P63679B P63680B P67579A P72400A P69653D P68430B P72100C	30" Knife Blades, Set of 2 45" Knife Blades, Set of 2 60" Knife Blades, Set of 2 Cable, PC to Plotter, 15' Cleaning Brush Cut-Off Mat, 48" Cutting Strip, 48" Illuminated Target Locator
P32945A P61643A P61644A	Material End Plug Pen, Rollerball Black, Set of 4 Pen, Rollerball Blue, Set of 4
P61646A P61645A	Pen, Rollerball Green, Set of 4 Pen, Rollerball Red, Set of 4 Pounce Mat
P72613A P72482A P73828B	Pounce Mat & Tool Kit Pounce Tool
P67283B P65916B	Registration Eyepiece Swivel Knife Assembly w/45" Blade



#### GERBER MAXX READY MATERIALS

Maxx Ready materials are fully compatible with the Gerber Maxx 2. Additionally, every Gerber product is backed by Gerber on systems, materials and foils and is completely supported by a staff of knowledgable professionals who truly understand how equipment and materials must work together to produce exceptional results.

"Maxx Ready" is the term used to identify Gerber's line of materials for a wide range of markets and applications that have been specifically designed and tested to provide optimal printing on the Gerber Maxx 2. "Image Ready" is the term used to identify Gerber's Digital Imaging Material and foils for a wide range of markets and applications. Image Ready materials and foils have been specifically designed, developed and manufactured to provide optimal results on Gerber Digital Imaging Systems.

Image Ready products are integral components of the Matched Technology System, taking the guesswork out of digital printing. Look for the Image Ready label for unsurpassed performance, confidence and success.

The Image Ready label encompasses all GerberColor, Gerber ColorSet, Edge Ready, Maxx Color and Maxx Ready materials and foils.

# 3M SCOTCHCAL SERIES 225 PREMIUM FILM NON-PERFORATED

Catalog Number	Description	Width	Length
P71364A	Maxx Ready White Film	36"	50 Yards
P71323A P71365A	Maxx Ready Clear Film Maxx Ready Clear Film	36" 36"	10 Yards 50 Yards

# 3M SCOTCHCAL SERIES 231 TRANSLUCENT FILM NON-PERFORATED

Catalog Number	Description	Width	Length
P73973A	Maxx Ready White Film	36"	10 Yards
P73974A	Maxx Ready White Film	36"	50 Yards

# GERBER QUANTUM MARKING FILM NON-PERFORATED

Catalog Number	Catalog Number Description		Length	
P71384A	P71384A Series 4000 White Film		50 Yards	

# 3M SCOTCHCAL SERIES 281 REFLECTIVE SHEETING NON-PERFORATED

Catalog Number	Description	scription Width L	
P74194A	Maxx Ready White Film	36"	25 Yards

# 3M CONTROLTAC 250C WITH COMPLY PERFORMANCE NON-PERFORATED

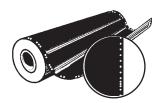
Catalog Number	Description	Width	Length
P71348A	White Film	36"	10 Yards
P71390A	White Film	36"	50 Yards

# MAXX READY OVERLAMINATES UV GERBER GUARD NON-PERFORATED

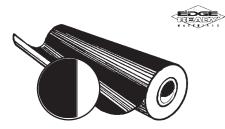
Catalog Number	Description	Width	Length
P73547A	UVGuard Overlaminate	36"	10 Yards
P73548A	UVGuard Overlaminate	36"	50 Yards







## **SERIES 220** PREMIUM 3M SCOTCHCAL FILM



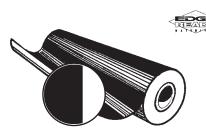
High performance 2 mil cast vinyl specifically developed for Gerber by 3M for optimal cutting, weeding and application. Clear pressure sensitive adhesive allows production of attractive two-way marking. Excellent durability with five-to-seven year exterior life. Other widths and colors also available.

Color	15" x 10 yd	Perfora 15" x 50 yd	ted Rolls 30" x 10 yd	30" x 50 yd	Non-Perfo 30" x 10 yd	orated Rolls 30" x 50 yd
Matte White	P20867C	P20868C	P21915C	P20959C	P58333A	P58433A
White	P20853C	P20854C	P21919C	P20963C	P58334A	P58434A
Matte Black	P20871C	P20872C	P21916C	P20960C	P58344A	P58444A
Black	P20855C	P20856C	P21918C	P20962C	P58345A	P58445A
Antique White	P53024A	P53044A	P53064A	P53084A	P58335A	P58435A
Eggshell	P53023A	P53043A	P53063A	P53083A	P58336A	P58436A
Oyster	P53022A	P53042A	P53062A	P53082A	P58337A	P58437A
Palm Oyster	P53020A	P53040A	P53060A	P53080A	P58338A	P58438A
Pearl Grey	P20869C	P20870C	P21930C	P21974C	P58339A	P58439A
Medium Grey	P27325A	P27326A	P27363A	P27364A	P58340A	P58440A
Traffic Grey	P53036A	P53056A	P53076A	P53096A	P58341A	P58441A
Dark Grey	P27327A	P27328A	P27365A	P27366A	P58342A	P58442A
Nimbus Grey	P53035A	P53055A	P53075A	P53095A	P58343A	P58443A
Duranodic	P57480A	P57495A	P57510A	P57525A	P58346A	P58446A
DeepMchoganyBin.	P20851C	P20852C	P21925C	P20969C	P58347A	P58447A
Russet Brown	P27491A	P27492A	P27493A	P27494A	P58348A	P58448A
Saddle Brown	P35320A	P35321A	P35342A	P35343A	P58349A	P58449A
Sandstone	P27331A	P27332A	P27369A	P27370A	P58350A	P58450A
Tan	P20883C	P20884C	P21926C	P20970C	P58351A	P58451A
Beige	P20885C	P20886C	P21914C	P20958C	P58352A	P58452A
Fawn	P27333A	P27334A	P27371A	P27372A	P58353A	P58453A
Primrose Yellow	P57477A	P57492A	P57507A	P57522A	P58354A	P58454A
Bright Yellow	P20861C	P20862C	P21921C	P20965C	P58355A	P58455A
Sunflower	P27495A	P27496A	P27497A	P27498A	P58356A	P58456A
Chrome Yellow	P57478A	P57493A	P57508A	P57523A	P58357A	P58457A
Imitation Gold	P27337A	P27338A	P27375A	P27376A	P58358A	P58458A
Apricot	P27339A	P27340A	P27377A	P27378A	P58359A	P58459A
Coral	P53029A	P53049A	P53069A	P53089A	P58360A	P58460A
Dark Coral	P53030A	P53050A	P53070A	P53090A	P58361A	P58461A
Light Orange	P27499A	P27500A	P27501A	P27502A	P58362A	P58462A
Bright Orange	P20863C	P20864C	P21923C	P20967C	P58363A	P58463A
Intense Orange	P53026A	P53046A	P53066A	P53086A	P58364A	P58464A
Terra Cotta	P27341A	P27342A	P27379A	P27380A	P58365A	P58465A
Salmon Pink	P35322A	P35323A	P35344A	P35345A	P58366A	P58466A
Mauve	P35324A	P35325A	P35346A	P35347A	P58367A	P58467A
Magenta	P27343A	P27344A	P27381A	P27382A	P58368A	P58468A
Process Magenta	P53034A	P53054A	P53074A	P53094A	P58369A	P58469A
Warm Red	P53027A	P53047A	P53067A	P53087A	P58370A	P58470A
Matte Red	P57481A	P57496A	P57511A	P57526A	P58371A	P58471A
Perfect Match Red	P53025A	P53045A	P53065A	P53085A	P58372A	P58472A





## SERIES 220 PREMIUM 3M SCOTCHCAL FILM cont.



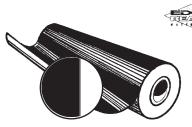
		Non-Perfo	orated Rolls			
Color	15" x 10 yd	15" x 50 yd	30" x 10 yd	30" x 50 yd	30" x 10 yd	30" x 50 yd
Atomic Red	P57468A	P57483A	P57498A	P57513A	P58373A	P58473A
Tomato Red	P20865C	P20866C	P21917C	P20961C	P58374A	P58474A
Geranium	P27503A	P27504A	P27505A	P27506A	P58375A	P58475A
Cardinal Red	P20881C	P20882C	P21920C	P20964C	P58376A	P58476A
Cranberry	P53038A	P53058A	P53078A	P53098A	P58377A	P58477A
Burgundy	P21032C	P21033C	P22304C	P22305C	P58378A	P58478A
Dark Burgundy	P57471A	P57486A	P57501A	P57516A	P58379A	P58479A
Dark Violet	P35326A	P35327A	P35348A	P35349A	P58380A	P58480A
Dark Magenta	P53028A	P53048A	P53068A	P53088A	P58381A	P58481A
Raspberry	P53031A	P53051A	P53071A	P53091A	P58382A	P58482A
Violet	P27345A	P27346A	P27383A	P27384A	P58383A	P58483A
Pale Lavender	P53021A	P53041A	P53061A	P53081A	P58384A	P58484A
Royal Purple	P27347A	P27348A	P27385A	P27386A	P58385A	P58485A
Purple	P27349A	P27350A	P27387A	P27388A	P58386A	P58486A
Royal Blue	P57479A	P57494A	P57509A	P57524A	P58387A	P58487A
Navy	P21036C	P21037C	P22334C	P22335C	P58388A	P58488A
Light Navy	P35328A	P35329A	P35350A	P35351A	P58389A	P58489A
Dark Blue	P57475A	P57490A	P57505A	P57520A	P58390A	P58490A
Shadow Blue	P35330A	P35331A	P35352A	P35353A	P58391A	P58491A
Wedgewood Blue	P35332A	P35333A	P35354A	P35355A	P58392A	P58492A
Sapphire Blue	P20873C	P20874C	P21928C	P20972C	P58393A	P58493A
Vivid Blue	P20875C	P20876C	P21913C	P20957C	P58394A	P58494A
Matte Blue	P57482A	P57497A	P57512A	P57527A	P58395A	P58495A
Intense Blue	P20857C	P20858C	P21922C	P20966C	P58396A	P58496A
Periwinkle	P57473A	P57488A	P57503A	P57518A	P58397A	P58497A
Olympic Blue	P20877C	P20878C	P21929C	P20973C	P58398A	P58498A
Sky Blue	P57474A	P57489A	P57504A	P57519A	P58399A	P58499A
Peacock Blue	P21034C	P21035C	P22332C	P22333C	P58400A	P58500A
Robin Egg Blue	P27351A	P27352A	P27389A	P27390A	P58401A	P58501A
Powder Blue	P53033A	P53053A	P53073A	P53093A	P58402A	P58502A
Aqua	P35334A	P35335A	P35356A	P35357A	P58403A	P58503A
Dark Aqua	P35336A	P35337A	P35358A	P35359A	P58404A	P58504A
Blue Bird	P57472A	P57487A	P57502A	P57517A	P58405A	P58505A
Teal	P27353A	P27354A	P27391A	P27392A	P58406A	P58506A
Celestial Blue	P57470A	P57485A	P57500A	P57515A	P58407A	P58507A
Bermuda Blue	P53032A	P53052A	P53072A	P53092A	P58408A	P58508A
Apple Green	P35338A	P35339A	P35360A	P35361A	P58409A	P58509A
Jade Green	P53037A	P53057A	P53077A	P53097A	P58410A	P58510A
Kelly Green	P20859C	P20860C	P21924C	P20968C	P58411A	P58511A
Bright Green	P35340A	P35341A	P35362A	P35363A	P58412A	P58512A
Cactus Green	P57469A	P57484A	P57499A	P57514A	P58413A	P58513A
Dark Green	P20879C	P20880C	P21927C	P20971C	P58414A	P58514A







## **SERIES 220** PREMIUM 3M SCOTCHCAL FILM cont.



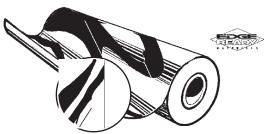
	Perforated Rolls								
Color	15" x 10 yd	15" x 10 yd 15" x 50 yd 30" x 10 yd 30" x							
Eucalyptus Forest Green Bottle Green	P57476A P27355A P53039A	P57491A P27356A P53059A	P57506A P27393A P53079A	P57521A P27394A P53099A					
Clear Enamel Receptive	P27323A	P27324A	P27361A	P27362A					

Non-Perforated Rolls 30" x 10 yd 30" x 50 yd				
P58415A P58416A P58417A	P58515A P58516A P58517A			
P58418A	P58518A			





### **SERIES 220 METALLIC FILM**



High performance 2 mil cast vinyl with the visual addition of a metallic sparkle. These films are perfect for use on cars, trucks, boats, RV's and signs. Excellent durability with five-to-seven year exterior life. Other widths also available.

	Perforated Rolls					rated Rolls
Color	15" x 10 yd	15" x 50 yd	30" x 10 yd	30" x 50 yd	30" x 10 yd	30" x 50 yd
Silver	P27359A	P27360A	P27397A	P27398A	P58432A	P58532A
Gold	P27357A	P27358A	P27395A	P27396A	P58431A	P58531A
Light Gold	P31813A	P31814A	P31858A	P31859A	P58430A	P58530A
Sage Green	P31843A	P31844A	P31888A	P31889A	P58419A	P58519A
Pine Green	P31840A	P31841A	P31885A	P31886A	P58420A	P58520A
Dark Blue	P31828A	P31829A	P31873A	P31874A	P58421A	P58521A
Bright Blue	P31831A	P31832A	P31876A	P31877A	P58422A	P58522A
Silver Blue	P31834A	P31835A	P31879A	P31880A	P58423A	P58523A
Charcoal	P31801A	P31802A	P31846A	P31847A	P58424A	P58524A
Slate	P31837A	P31838A	P31882A	P31883A	P58425A	P58525A
Burgundy	P31819A	P31820A	P31864A	P31865A	P58426A	P58526A
Light Rose	P31816A	P31817A	P31861A	P31862A	P58427A	P58527A
Dark Brown	P31804A	P31805A	P31849A	P31850A	P58428A	P58528A
Copper	P31810A	P31811A	P31855A	P31856A	P58429A	P58529A







### **SERIES 230** TRANSLUCENT VINYL FILM



High performance 2 mil cast vinyl designed for use on internally illuminated signs, awnings and window graphics. Features uniform color with a surface finish to eliminate glare. Five year exterior life.

	Perforated Rolls					
Color	15" x 10 yd	15" x 50 yd	30" x 10 yd	30" x 50 yd		
White	P20921C	P20922C	P21948C	P20992C		
Ivory	P21028C	P21029C	P22299C	P22300C		
Light Beige	P37721A	P37707A	P37693A	P37679A		
Silver	P43249A	P43250A	P43257A	P43258A		
Silver Gray	P37714A	P37700A	P37686A	P37672A		
Shadow Gray	P37719A	P37705A	P37691A	P37677A		
State Gray	P37716A	P37702A	P37688A	P37674A		
Black	P37708A	P37694A	P37680A	P37666A		
Rust Brown	P20911C	P20912C	P21943C	P20987C		
Dark Brown	P20919C	P20920C	P21947C	P20991C		
Duranodic	P20913C	P20914C	P21944C	P20988C		
Burgundy	P21026C	P21027C	P22297C	P22298C		
Raspberry	P37710A	P37696A	P37682A	P37668A		
Mulberry	P51447A	P51461A	P51475A	P51489A		
Vivid Rose	P37713A	P37699A	P37685A	P37671A		
Pink Lavender	P51444A	P51458A	P51472A	P51486A		
Cardinal Red	P30810A	P30811A	P30822A	P30823A		
Dark Red	P20917C	P20918C	P21946C	P20990C		
Scarlet Red	P51441A	P51455A	P51469A	P51483A		
Red	P20909C	P20910C	P21942C	P20986C		
Light Tomato Red	P30808A	P30809A	P30820A	P30821A		
Poppy Red	P37711A	P37697A	P37683A	P37669A		
Orange	P20907C	P20908C	P21941C	P20985C		
Tangerine	P37717A	P37703A	P37689A	P37675A		
Kumquat	P37718A	P36704A	P37690A	P37676A		
Gold Nugget <sup>(1)</sup>	P51451A	P51465A	P51479A	P51493A		

	Perforated Rolls			
Color	15" x 10 yd	15" x 50 yd	30" x 10 yd	30" x 50 yd
Metallic Gold (1)	P37712A	P37698A	P37684A	P37670A
Sunflower	P30806A	P30807A	P30818A	P30819A
Mango	P51448A	P51462A	P51476A	P51490A
Yellow	P20905C	P20906C	P21940C	P20984C
Lemon Yellow	P51445A	P51459A	P51473A	P51487A
Emerald Green	P51449A	P51463A	P51477A	P51491A
Holly Green	P30814A	P30815A	P30826A	P30827A
Green	P20903C	P20904C	P21939C	P20983C
Bright Jade Green	P51446A	P51460A	P51474A	P51488A
Vivid Green	P37715A	P37701A	P37687A	P37673A
Kelly Green	P51452A	P51466A	P51480A	P51494A
Apple Green	P51443A	P51457A	P51471A	P51485A
Teal	P43253A	P43254A	P43261A	P43262A
Turquoise	P43251A	P43252A	P43259A	P43260A
Dark Blue	P21030C	P21031C	P22301C	P22302C
Royal Blue	P20915C	P20916C	P21945C	P20989C
Cobalt Blue	P51454A	P51468A	P51482A	P51496A
Delft Blue	P51442A	P51456A	P51470A	P51484A
Blue	P31344A	P31345A	P31346A	P31347A
Intense Blue	P37709A	P37695A	P37681A	P37667A
Process Blue	P49908A	P49909A	P49910A	P49911A
Deep Sky Blue	P51453A	P51467A	P51481A	P51495A
Olympic Blue	P30812A	P30813A	P30824A	P30825A
Plum Purple	P51450A	P51464A	P51478A	P51492A
NOTE: (1) 3 year exterior life.				





# SERIES 210 3M SCOTCHCAL FILM



#### **FLUORESCENT FILM**



Vibrant films providing excellent visibility under normal or low light conditions. Perfect for POP, window graphics and displays. One year exterior life.

Color	Perforated Rolls 15" x 10 yd
Yellow Orange	P48303A
Lemon Yellow	P48304A
Lime Green	P48305A
Blue	P48306A
Pink	P48307A
Red Orange	P48534A

#### **DUSTED/FROSTED CRYSTAL SPECIALTY FILM**

Dusted Crystal provides the appearance of etched glass and Frosted Crystal provides the appearance of sandblasted glass. Perfect for all windows, glass, mirror and clear plastic applications. Three-year exterior life.

	Perforated Rolls			
Description	15" x 10 yd	15" x 50 yd	30" x 10 yd	30" x 50 yd
Dusted Crystal	P32442A	P32443A	P32444A	P32445A
Frosted Crystal	P35717A	P35718A	P35715A	P35716A



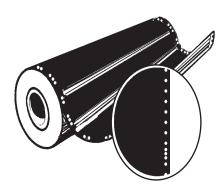
# SERIES 280 & 280i 3M SCOTCHCAL REFLECTIVE SHEETING



Series 280 reflective sheeting is designed for markings requiring high visibility, both day and night. Material has good flexibility and provides excellent conformance to flat or moderately curved surfaces. Seven-year exterior life on all colors, five-year exterior life on black.

Series 280i white reflective sheeting is designed to provide optimal print results on the Gerber Edge. Seven-year exterior life.

	Perforated Rolls			
Color	15" x 10 yd	15" x 50 yd	30" x 10 yd	30" x 50 yd
Gold	P21020C	P21021C	P21962C	P21008C
White <sup>(1)</sup>	P20887C	P20888C	P21931C	P20975C
Black	P20899C	P20900C	P21933C	P20977C
Ruby Red	P37319A	P37320A	P37321A	P37322A
Red	P28494A	P28495A	P28498A	P28499A
Orange	P20895C	P20896C	P21936C	P20980C
Lemon Yellow	P20893C	P20894C	P21934C	P20978C
Yellow	P28496A	P28497A	P28500A	P28501A
Green	P20891C	P20892C	P21937C	P20981C
Light Blue	P39822A	P39823A	P39820A	P39821A
Blue	P20889C	P20892C	P21932C	P20976C
White Series 280i (1)	P60923A	P60924A	-	-



Commerce: 323.803.2000 / 800.225.5432 (CALL IEC) / Fax 323.803.2019

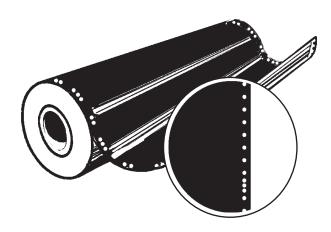




### **QUANTUM 2000 FILM**

Quantum 2000 is a custom formulated, 3.6 mil polymeric calendered vinyl. An economical, yet extremely versatile product with a five year exterior life. Other widths also available.

	Perforated Rolls		
Color	15" x 50 yd	30" x 50 yd	
Matte White	P69021A	P69147A	
White	P69016A	P69142A	
Matte Black	P69023A	P69149A	
Black	P69017A	P69143A	
Brown	P69035A	P69161A	
Beige	P69032A	P69158A	
Yellow	P69020A	P69146A	
Orange	P69030A	P69156A	
Tomato Red	P69024A	P69150A	
Red	P69018A	P69144A	
Burgundy	P69026A	P69152A	
Fuchsia	P69036A	P69162A	
Purple	P69028A	P69154A	
Navy	P69034A	P69160A	
Sapphire Blue	P69019A	P69145A	
Blue	P69022A	P69148A	
Olympic Blue	P69033A	P69159A	
Teal	P69029A	P69155A	
Green	P69508A	P69511A	
Dark Green	P69025A	P69151A	
Gold	P69027A	P69153A	
Silver	P69031A	P69157A	



### **QUANTUM 4000 FILM**

Quantum 4000 film is a state-of-the-art, 3.6 mil polymeric calnedered vinyl film with superior gloss and high performance qualities designed to withstand severe weather and handling conditions. Features a clear adhesive and is therefore suitable for use as a cut vinyl in window or transparent substrate applications. An economical, yet extremely versatile product with a six year exterior life. Other widths also available.

Color	Perforated 15" x 50 yd	Rolls 30" x 50 yd
Black	P68576A	P68816A
White	P68575A	P68815A
Beige	P68592A	P68832A
Bright Green	P68594A	P68834A
Bright Yellow	P68583A	P68823A
Burgundy	P68584A	P68824A
Cardinal Red	P68577A	P68817A
Dark Gray	P68595A	P68835A
Dark Green	P68585A	P68825A
Forest Green	P68588A	P68828A
Gold	P68580A	P68820A
Imitation Gold	P68598A	P68838A
Intense Red	P68600A	P68840A
Light Blue	P68599A	P68839A
Lime Green	P68604A	P68844A
Magenta	P68602A	P68842A
Mahogany Brown	P68597A	P68837A
Medium Gray	P68589A	P68829A
Navy	P68587A	P68827A
Olympic Blue	P68591A	P68831A
Orange	P68596A	P68836A
Primrose Yellow	P68601A	P68841A
Royal Purple	P68593A	P68833A
Sapphire Blue	P68578A	P68818A
Silver	P68581A	P68821A
Sunflower	P68586A	P68826A
Teal	P68590A	P68830A
Tomato Red	P68579A	P68819A
Vivid Blue	P68582A	P68822A
Warm Red	P68603A	P68843A



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### METALLIZED **POLYESTER FILM**

Polyester, 1 or 2 mil film, for use in the Gerber Edge for the production of display graphics, labels, decals and identification nameplates. Both products feature a brushed, metallized finish and are not recommended for exterior use.

	Perforated Rolls			
	1 MIL 2 MIL			MIL
Color	15" x 10 yd	15" x 50 yd	15" x 10 yd	15" x 50 yd
Brushed Gold	P61297A	P61296A	P61288A	P61289A
Brushed Silver	P61300A	P61299A	P61285A	P61286A

Polyester, 2 or 3 mil film with mirror look for interior and limited exterior use. One to two-year life on Silver and Brushed Aluminum. Gold polyesters are not recommended for exterior use.

	Perforated Rolls		
Color	15" x 10 yd	15" x 50 yd	
Shiny Gold w/Silver Backing	P21014C	P21015C	
Shiny Gold w/Gold Backing	P26697A	P26696A	
Brushed Aluminum Shiny Sliver	P21016C P21018C	P21017C P21019C	





### SPECIALTY PRINTING **MATERIALS**



#### STATIC CLING FILM



Designed to adhere to glass without adhesive, these specialty vinyls are ideally suited to work with the Gerber Edge. Intended for interior applications. Can also be decorated with vinyl graphics.

	Perforated Rolls		
Color	15" x 10 yd		
Clear	P50823A	P50824A	
White	P53201A	P53202A	

### **SCREENPRINTING FILM**



Crystal clear, 7 mil top coated polyester film. For Gerber Edge use in the production of screening film positives. Designed for use with Spot black GerberColor cartridges.

		Perforated Rolls		
	Color	15" x 10 yd	15" x 50 yd	
Cle	ear	P54964A	P54965A	

#### ADHESIVE BACKED CLEAR FILM

Cast, 2 mil clear vinyl with clear adhesive that can be reverse printed for sub-surface or second surface applications. Excellent durability with five-year exterior life.

	Perforated Rolls		
Color	15" x 10 yd		
Clear	P27323A	P27324A	

#### SMOOTH LABEL STOCK



Polyester, 1 or 2 mil material for use in the Gerber Edge for the production of labels, decals and identification nameplates. Matte Silver only available in 2 mil thickness.

	Perforated Rolls			
	1 MIL 2 MIL			MIL
Color	15" x 10 yd	15" x 50 yd	15" x 10 yd	15" x 50 yd
Clear	P59875A	P59876A	P59878A	P59879A
White	P59881A	P59882A	P59884A	P59885A
Matte Silver	-	-	P60557A	P60558A

#### **MAGNETIC SHEETING**



Flexible magnetic material with a white matte surface. For optimal printing on the Gerber Edge. Output contour cut on any Graphix Advantage compatible 15" plotter. GerberMag 15 mil is used in the production of custom ad specialty magnets. Vehicle strength AutoMag 24 mil is used for production of removable vehicle graphics. Also available in 100' rolls.

	Perforated Rolls	
	15 MIL 24 MIL	
Description	15" x 25 ft	15" x 25 ft
GerberMag	P55112A	-
AutoMag	-	P59763A









#### **GERBER EDGE READY SPECIALTY MATERIALS**

Gerber offers a wide range of materials, identified by the Edge Ready symbol, designed and warranted specifically for use in the Gerber Edge and Edge II. The following materials are part of the growing Edge Ready specialty printing materials group. Additional Edge Ready materials are always being developed. Please call for up-to-date Edge Ready materials information.

#### **EDGE POSITIVE**



EdgePositive is a crystal clear 7 mil polyester film designed for use with the Gerber Edge and GerberColor Spot black foil in the production of screen print film positives.

Perforated Rolls	
15" x 10 yd	15" x 50 yd
P54964A	P54965A

#### **3M FLOORMINDERS**



This dynamic Edge Ready material allows Gerber Edge users to realize the retail advertising potential of floor space and counter tops. Available only to authorized fabricators, the 3M FloorMinders package includes both Controltac 160 film and Scotchcal overlaminate 3645 film. Please call for necessary forms to become a FloorMinder authorized fabricator.

15" x 10 yd Roll	15" x 50 yd Roll
P66992A	P66991A

### **GERBER GLOW LUMINOUS FILM**



13mil, durable glow-in-the-dark vinyl custom formulated for use with the Gerber Edge in the production of graphics that are visible in total darkness. Luminous Film glows for up to 6 hours and takes only 3 minutes of light exposure to recharge. Ideal for emergency and exit signage as well as general signs that demand maximum visibility. Available in luminous green only.

15" x 10 yd Roll	15" x 50 yd Roll
P68495A	P68496A

#### **GERBER GUARD OVERLAMINATE**



Designed for additional protection from petroleum based or other chemicals as well as increased abrasion protection to Edge graphics. Glossy, lustrous finish. UV version is a custom formulates Tedlar film that offers resistant from UV rays and environmental pollution. Overlaminate not intended for printing.

	15" x 10 yd Roll	15" x 50 yd Roll
Gerber Gaurd	P61385A	P61386A
Gerber UV Gaurd	P65978A	P65979A

#### **GERBERVISION WINDOW FILM**



GerberVision clear window film is designed for transit and retail window applications. Its perforation allows one to see through the clear substrate when viewed from reverse

Perforated Rolls	
15" x 10 yd	15" x 50 yd
P63021A	P63022A

#### **HEAT TRANSFER PAPER**



Use with GerberColor L.T. (GCLT) Series Foils to produce wash-fast and durable textile transfers.

Perforated Rolls	
15" x 10 yd	15" x 50 yd
P60345A	P60346A

#### HOLOGRAPHIX PRISMATIC VINYL



Available in four different patterns that range from mirror finish to prismatic rays. These vinyls create a spectrum of colors that add dynamic effects to graphics. Can be over printed with GCT transparent foils for spectacular effects. Also available in custom widths.

	Perforated Rolls	
Pattern	15" x 10 yd	15" x 50 yd
Silver Sheen Mosaic Kaleidoscope Crystal Blizzard	P63221A P63224A P63227A P63230A	P63222A P63225A P63228A P63231A

#### **GERBER IMAGECAL P FILM**



Clear calendered vinyl film that offers a permanent adhesive system that is outdoor durable for up to two years from the time of application. Also extremely easy to handle and apply, Gerber ImageCal P is perfect for window displays, exhibit and trade show graphics and P.O.P. displays.

15" x 10 yd Roll	15" x 50 yd Roll
P65583A	P65584A









#### **GERBER IMAGECAL R FILM**



Clear calendered vinyl film that offers a removable adhesive system for up to six months from the time of application. Easy to handle and apply, Gerber ImageCal

R is ideal for labels, decals and P.O.P. displays.

15" x 10 yd Roll	15" x 50 yd Roll
P65587A	P65588A

#### **GERBER IMAGECAST ECLIPSE**



A versatile 2mil , semi-transparent tinted vinyl. Ideal for window graphics, vehicle graphics, decals and sign of all kinds where realistic shadowing and high visual impact are desired. Also available in 30" width rolls.

15" x 10 yd Roll	15" x 50 yd Roll
P68487A	P68488A
15" v 10 vd Pall	15" v 50 vd Pall

#### **IMAGECAST FILM**



A 2 mil clear pressure sensitive vinyl film for use in the production of window displays, exhibit graphics and identification labeling.

15" x 10 yd Roll	15" x 50 yd Roll
P65579A	P65580A

#### INSTACHANGE REMOVABLE VINYL FILM



White 4 mil material that provides Edge users with a material solution for graphics, decals and labels that require a strong bond, yet must be easily removed and changed with a new marking. Simply remove and replace for up to two years with no adhesive residue.

15" x 10 yd Roll	15" x 50 yd Roll
P63030A	P63031A

#### **3M INSTACHANGE VINYL**



A white removable vinyl which has a strong bond yet is easily removed and replaced for up to 2 years with out adhesive residue. For short term or repeated replacement application

Perforated Rolls	
15" x 10 yd	15" x 50 yd
P63030A	P63031A

#### **3M PANAFLEX 645**



A rugged, durable white face material with a matte finish designed for translucent and opaque applications including internally illuminated signs, exhibits and banners. To produce direct print translucent graphics for backlit applications, a double-hit method is recommended with either transparent or process series foils.

Perforated Rolls	
15" x 10 yd	15" x 50 yd
P63532A	P63533A

#### **PERMAGRIP**



PermaGrip is a durable cast white vinyl featuring an extremely aggressive, pigmented adhesive. Ideal for all surfaces. Good on low surface energy substartes and moderately rough surfaces where exceptional "vandal resistant" characteristics are needed.

Perforated Rolls	
15" x 10 yd	15" x 50 yd
AP75517-10Y	AP75517-50Y

#### PLASTIGRAPHIX LEXEDGE CLEAR



Polished version of LexEdge II with a removable protective mask on the print side. Ideal for use in architectural signage, point-of-purchase displays, exhibit graphics and membrane switches.

Perforated Rolls	
15" x 10 yd	15" x 50 yd
P67002A	P67003A

#### PLASTIGRAPHIX LEXEDGE II



A clear velvet/polished, 10 mil semi-rigid Lexan® film for the production of exhibits, displays, ad speciality items and other types of sub-surface graphics. The polished velvet side of this material will generally be the viewing side. Since the print surface is the opposite side and LexEdge II will most often be used in second surface applications, reverse print procedures will need to be followed.

Perforated Rolls	
15" x 10 yd	15" x 50 yd
P63562A	P63563A





## **GERBER EDGE READY SPECIALTY MATERIAL cont.**



#### PLASTIGRAPHIX OUTDOOR LEXEDGE



10 mil matte/polished clear semi-rigid Lexan® based polycarbonate with a matte/polished clear finish. Offers the benefit of printing directly onto the final substrate in second surface applications. Resists tearing, abrasion and the yellowing effects from UV exposure. Features a removable protective mask on both sides for optimal printing.

Perforated Rolls	
15" x 10 yd	15" x 50 yd
P72790A	P72791A

#### **GERBER PLASTIGRAPHIX PVC-10HG**



Custom-coated 10mil PVC material with a bright white, high gloss surface developed for use with the Edge in the production of all types of semi-rigid graphics including signs, menu boards, point-of-sale displays, permit and identification tags, door hangers and exhibit graphics. PVC-10 may be score-cut using any Gerbercompatible 15" plotter.

15" x 10 yd Roll	15" x 50 yd Roll
P75074A	P75075A

#### SECURITY LABEL STOCK



4 mil chrome silver label stock used to produce tamper-evident identification markings. If label is removed, the word "VOID" remains on the applied surface and on the label.

Perforated Rolls	
15" x 10 yd	15" x 50 yd
P63033A	P63034A

#### **SERIES 210 DELUXE SILVER**



Deluxe silver is a mirror finish vinyl film that can be used in standard cut vinyl graphics and Gerber Edge systems. Expect 3-5 years outdoor durability.

Perforated Rolls	
15" x 50 yd	30" x 50 yd
D57757A	P51897A

#### **STARDUST**

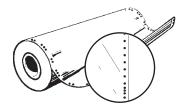


2 mil cast vinyl featuring an ultrametallic flake. Pigmented adhesive system, outdoor durability and visual appeal is ideal for vehicle, marine and graphic applications of all kinds. Use with GerberColor foils such as the transparent series GCLT to create other Stardust colors.

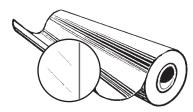
	Perforated Rolls				
Color	15" x 10 yd 15" x 50 yd				
Metallic Stardust Gold Metallic Stardust Silver	P74779A P74782A	P74780A P74783A			







## **GERBER** SPECIALTY MATERIAL



#### **GERBERMASK I**

GerberMask I is a 4 mil, white vinyl film coated with a low tack removable adhesive. Designed to be used as a stencil masking film for application to a variety of smooth, flat substrates. The low-tack adhesive allows for easy removal with no adhesive transfer and easy removal from high energy surfaces. Suitable for use on glass, acrylic, polycarbonate, flexible vinyl or stainless steel.

		Perforated Rolls					
Description	15" x 10 yd	15" x 10 yd 15" x 50 yd 30" x 10 yd 30" x 50 yd					
GerberMask I Standard Tack Adhesive Red Logo Printed on Liner	P28484A	P28485A	P28486A	P28487A			

Non-Perforated Rolls							
20" x 10 yd	20" x 10 yd 20" x 50 yd 45" x 10 yd 45" x 50 yd						
P59448A	P59449A	P59454A	P59455A				

#### **GERBERMASK II**

GerberMask II is a durable, conformable 4 mil white vinyl film coated with an aggressive acrylic removable adhesive. Designed to hold during light sandblasting, acid etching or paint applications. Easily removable with no adhesive transfer. Suitable for use on glass, Acrylic, polycarbonate, flexible vinyl, stainless steel and unfinished or finished wood surfaces. Not for application on flexible vinyl film. GerberMask II will adhere strongly to smooth, high energy surfaces such as Acrylic and polycarbonate. GerberMask II requires some effort to remove.

	Perforated Rolls					
Description	15" x 50 yd	30" x 50 yd				
GerberMask II High Tack Adhesive Blue Logo Printed on Liner	P35872A	P37055A				

Non-Perforated Rolls					
20" x 50 yd 30" x 50 yd 45" x 50 yd					
P59457A	P59459A	P59461A			

#### **SCREENPRINTING & GRAPHIC ARTS FILMS**

Carefully selected materials designed for screenprinting. Developed for use on Gerber systems.

	Perforated Rolls					
Description	15" x 25 ft	15" x 50 yd	30" x 25 ft	30" x 50 yd		
Ulano Rubylith G3GR Ulano Rubylith RM3 Ulano Amberlith A3A Ulano Cut Green Ulano S3S-StaSharp	P21038C P20946C P20948C P20950C P20952C	P21039C P20947C P20949C P20951C P20953C	P26930A P21958C P21959C P21960C P21961C	P26931A P21002C P21003C P21004C P21005C		

SANDBLASTING MASK

Single or double liner, rubber masking stencil for sandblasting on stone, glass and hard or soft

Description	Perforat 15" x 10 yd	ed Rolls 30" x 10 yd
3M Scotch Brand #521 One-liner for Stone and Wood	P47527A	P47529A
3M Scotch Brand #522 Two-liner for Stone and Wood	P47528A	P47530A

#### DRAWING & POUNCING PAPER

Plain white, 20# paper for producing scaled or full-size line drawings and pounce patterns.

	Perforated Rolls					
Description	15" x 100 ft 15" x 500 yd 30" x 100 ft 30" x 300 yd					
Plain White, 20#	-	P20944C	-	P21965C		
Drafting Vellum	P20945C	-	P22303C	-		

#### SANDBLASTING TRANSFER TAPE

Description	Rolls 6" x 72 yd
Sandblast Transfer Tape	P26522A

Commerce: 323.803.2000 / 800.225.5432 (CALL IEC) / Fax 323.803.2019

## **ARLON**



## **SERIES 2200 & 2100** HIGH PERFORMANCE FILM



High performance 2 mil cast vinyl. Increased productivity provided by a unique liner design for easier cutting, faster consistent weeding and effortless character transfer. Excellent durability for seven years. Vinyl has been removed from the perforated margin for trouble free feeding. Other widths also available.

6.1	15" 10 1	Perforat		001 50 1		0011 50 1	Non-Perforated Rolls	401 50 1
Color	15" x 10 yd	15" x 50 yd	30" x 10 yd	30" x 50 yd		20" x 50 yd	24" x 50 yd	48" x 50 yd
Clear Red	2200-1503-00 2200-1503-01	2200-1515-00 2200-1515-01	2200-3003-00 2200-3003-01	2200-3015-00 2200-3015-01	Ш	2100-2015-00 2100-2015-01	2100-2415-00 2100-2415-01	2100-4815-00 2100-4815-01
White	2200-1503-02	2200-1515-02	2200-3003-02	2200-3015-02		2100-2015-02	2100-2415-02	2100-4815-02
Black	2200-1503-03	2200-1515-03	2200-3003-03	2200-3015-03	$\  \ $	2100-2015-03	2100-2415-03	2100-4815-03
Gold Metallic Blue	2200-1503-04 2200-1503-05	2200-1515-04 2200-1515-05	2200-3003-04 2200-3003-05	2200-3015-04 2200-3015-05	Ш	2100-2015-04 2100-2015-05	2100-2415-04 2100-2415-05	2100-4815-04 2100-4815-05
Yellow	2200-1503-05	2200-1515-06	2200-3003-05	2200-3015-05	┨╏	2100-2015-06	2100-2415-05	2100-4815-06
Silver Metallic	2200-1503-06	2200-1515-07	2200-3003-07	2200-3015-07	Ш	2100-2015-07	2100-2415-07	2100-4815-07
Brown	2200-1503-08	2200-1515-08	2200-3003-08	2200-3015-08		2100-2015-08	2100-2415-08	2100-4815-08
Dark Blue	2200-1503-11	2200-1515-11	2200-3003-11	2200-3015-11	Ш	2100-2015-11	2100-2415-11	2100-4815-11
Burgundy Tomato Red	2200-1503-12 2200-1503-14	2200-1515-12 2200-1515-14	2200-3003-12 2200-3003-14	2200-3015-12 2200-3015-14	Ш	2100-2015-12 2100-2015-14	2100-2415-12 2100-2415-14	2100-4815-12 2100-4815-14
Sapphire Blue	2200-1503-17	2200-1515-17	2200-3003-17	2200-3015-17	1	2100-2015-17	2100-2415-17	2100-4815-17
Olympic Blue	2200-1503-18	2200-1515-18	2200-3003-18	2200-3015-18	Ш	2100-2015-18	2100-2415-18	2100-4815-18
Smoke Metallic	2200-1503-21	2200-1515-21	2200-3003-21	2200-3015-21	┦┞	2100-2015-21	2100-2415-21	2100-4815-21
Charcoal Metallic Dark Green	2200-1503-23 2200-1503-24	2200-1515-23 2200-1515-24	2200-3003-23 2200-3003-24	2200-3015-23 2200-3015-24	Ш	2100-2015-23 2100-2015-24	2100-2415-23 2100-2415-24	2100-4815-23 2100-4815-24
Oyster	2200-1503-24	2200-1515-26	2200-3003-24	2200-3015-26	Ш	2100-2015-24	2100-2415-26	2100-4815-24
Fawn	2200-1503-27	2200-1515-27	2200-3003-27	2200-3015-27	1	2100-2015-27	2100-2415-27	2100-4815-27
Dove Gray	2200-1503-28	2200-1515-28	2200-3003-28	2200-3015-28	Ш	2100-2015-28	2100-2415-28	2100-4815-28
Dark Blue Metallic	2200-1503-30	2200-1515-30	2200-3003-30	2200-3015-30	┨╏	2100-2015-30	2100-2415-30	2100-4815-30
Ocean Blue Azure Blue	2200-1503-31 2200-1503-32	2200-1515-31 2200-1515-32	2200-3003-31 2200-3003-32	2200-3015-31 2200-3015-32	Ш	2100-2015-31 2100-2015-32	2100-2415-31 2100-2415-32	2100-4815-31 2100-4815-32
Brown Metallic	2200-1503-35	2200-1515-35	2200-3003-35	2200-3015-35		2100-2015-35	2100-2415-35	2100-4815-35
Med. Blue Metallic	2200-1503-37	2200-1515-37	2200-3003-37	2200-3015-37	Ш	2100-2015-37	2100-2415-37	2100-4815-37
Burgundy Metallic Matte Black	2200-1503-39 2200-1503-40	2200-1515-39 2200-1515-40	2200-3003-39 2200-3003-40	2200-3015-39 2200-3015-40	Ш	2100-2015-39 2100-2015-40	2100-2415-39 2100-2415-40	2100-4815-39 2100-4815-40
Cardinal Red	2200-1503-42	2200-1515-42	2200-3003-42	2200-3015-42	┧┟	2100-2015-42	2100-2415-42	2100-4815-42
Camel Beige	2200-1503-48	2200-1515-48	2200-3003-48	2200-3015-48	Ш	2100-2015-48	2100-2415-48	2100-4815-48
Matte White	2200-1503-49	2200-1515-49	2200-3003-49	2200-3015-49	┦┞	2100-2015-49	2100-2415-49	2100-4815-49
Medium Gray	2200-1503-50	2200-1515-50 2200-1515-51	2200-3003-50 2200-3003-51	2200-3015-50	Ш	2100-2015-50 2100-2015-51	2100-2415-50 2100-2415-51	2100-4815-50
Aruba Blue Dark Gray	2200-1503-51 2200-1503-52	2200-1515-51	2200-3003-51	2200-3015-51 2200-3015-52	Ш	2100-2015-51	2100-2415-51	2100-4815-51 2100-4815-52
Dark Bahama Blue	2200-1503-53	2200-1515-53	2200-3003-53	2200-3015-53	1	2100-2015-53	2100-2415-53	2100-4815-53
Hot Pink	2200-1503-56	2200-1515-56	2200-3003-56	2200-3015-56		2100-2015-56	2100-2415-56	2100-4815-56
Dark Magenta	2200-1503-58	2200-1515-58	2200-3003-58	2200-3015-58	┨╏	2100-2015-58	2100-2415-58	2100-4815-58
Imitation Gold Lemon Yellow	2200-1503-59 2200-1503105	2200-1515-59 2200-1515105	2200-3003-59 2200-3003105	2200-3015-59 2200-3015105		2100-2015-59 2100-2015105	2100-2415-59 2100-2415105	2100-4815-59 2100-4815105
Perfect Match Red	2200-1503220	2200-1515103	2200-3003103	2200-3015103	] [	2100-2015103	2100-2415103	2100-4815220
Geranium	2200-1503221	2200-1515221	2200-3003221	2200-3015221		2100-2015221	2100-2415221	2100-4815221
Peacock Red	2200-1503223	2200-1515223	2200-3003223	2200-3015223		2100-2015223	2100-2415223	2100-4815223







## **SERIES 2200 & 2100 HIGH PERFORMANCE FILM cont.**



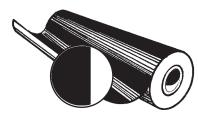
	Perforated Rolls					
Color	15" x 10 yd	15" x 50 yd	30" x 10 yd	30" x 50 yd		
Bright Cardinal Red	2200-1503-60	2200-1515-60	2200-3003-60	2200-3015-60		
Kelly Green	2200-1503-61	2200-1515-61	2200-3003-61	2200-3015-61		
Purple	2200-1503-62	2200-1515-62	2200-3003-62	2200-3015-62		
Violet	2200-1503-63	2200-1515-63	2200-3003-63	2200-3015-63		
Midnight Blue	2200-1503-65	2200-1515-65	2200-3003-65	2200-3015-65		
Med. Blue	2200-1503-66	2200-1515-66	2200-3003-66	2200-3015-66		
Primrose Yellow	2200-1503-67	2200-1515-67	2200-3003-67	2200-3015-67		
Beige	2200-1503-68	2200-1515-68	2200-3003-68	2200-3015-68		
Apple Green	2200-1503-69	2200-1515-69	2200-3003-69	2200-3015-69		
Palm Oyster Gray	2200-1503-70	2200-1515-70	2200-3003-70	2200-3015-70		
Teal	2200-1503-71	2200-1515-71	2200-3003-71	2200-3015-71		
Poppy	2200-1503-73	2200-1515-73	2200-3003-73	2200-3015-73		
Royal Purple	2200-1503-74	2200-1515-74	2200-3003-74	2200-3015-74		
Lavender	2200-1503-75	2200-1515-75	2200-3003-75	2200-3015-75		
Magenta	2200-1503-76	2200-1515-76	2200-3003-76	2200-3015-76		
Coral	2200-1503-78	2200-1515-78	2200-3003-78	2200-3015-78		
Kiwi	2200-1503-79	2200-1515-79	2200-3003-79	2200-3015-79		
Graphite	2200-1503-80	2200-1515-80	2200-3003-80	2200-3015-80		
Titanium	2200-1503-81	2200-1515-81	2200-3003-81	2200-3015-81		
Raspberry	2200-1503-82	2200-1515-82	2200-3003-82	2200-3015-82		
Bright Orange	2200-1503-83	2200-1515-83	2200-3003-83	2200-3015-83		
Eggshell	2200-1503-84	2200-1515-84	2200-3003-84	2200-3015-84		
Cocoa	2200-1503-85	2200-1515-85	2200-3003-85	2200-3015-85		
Forest Green	2200-1503-86	2200-1515-86	2200-3003-86	2200-3015-86		
Aqua Green	2200-1503-87	2200-1515-87	2200-3003-87	2200-3015-87		
Mint Green	2200-1503-88	2200-1515-88	2200-3003-88	2200-3015-88		
Aqua Blue	2200-1503-89	2200-1515-89	2200-3003-89	2200-3015-89		
Wedgewood Blue	2200-1503-92	2200-1515-92	2200-3003-92	2200-3015-92		
Light Navy	2200-1503-93	2200-1515-93	2200-3003-93	2200-3015-93		
Sandust Clay	2200-1503-94	2200-1515-94	2200-3003-94	2200-3015-94		
Tangerine	2200-1503-96	2200-1515-96	2200-3003-96	2200-3015-96		
Light Orange	2200-1503-97	2200-1515-97	2200-3003-97	2200-3015-97		
Slate Green	2200-1503-98	2200-1515-98	2200-3003-98	2200-3015-98		
Bright Purple	2200-1503-99	2200-1515-99	2200-3003-99	2200-3015-99		
Medium Green	2200-1503106	2200-1515106	2200-3003106	2200-3015106		
Pearl	2200-1503120	2200-1515120	2200-3003120	2200-3015120		
Bottle Green	2200-1503230	2200-1515230	2200-3003230	2200-3015230		
Intense Blue	2200-1503250	2200-1515250	2200-3003250	2200-3015250		
Terra Cotta	2200-1503280	2200-1515280	2200-3003280	2200-3015280		

20" x 50 yd	Non-Perforated Rolls 24" x 50 yd	48" x 50 yd
2100-2015-60	2100-2415-60	2100-4815-60
2100-2015-61	2100-2415-61	2100-4815-61
2100-2015-62	2100-2415-62	2100-4815-62
2100-2015-63	2100-2415-63	2100-4815-63
2100-2015-65	2100-2415-65	2100-4815-65
2100-2015-66	2100-2415-66	2100-4815-66
2100-2015-67	2100-2415-67	2100-4815-67
2100-2015-68 2100-2015-69	2100-2415-68 2100-2415-69	2100-4815-68 2100-4815-69
2100-2015-70	2100-2415-70	2100-4815-70
2100-2015-70	2100-2415-70	2100-4815-71
2100-2015-73	2100-2415-73	2100-4815-73
2100-2015-74	2100-2415-74	2100-4815-74
2100-2015-75	2100-2415-75	2100-4815-75
2100-2015-76	2100-2415-76	2100-4815-76
2100-2015-78	2100-2415-78	2100-4815-78
2100-2015-79	2100-2415-79	2100-4815-79
2100-2015-80	2100-2415-80	2100-4815-80
2100-2015-81	2100-2415-81	2100-4815-81
2100-2015-82	2100-2415-82	2100-4815-82
2100-2015-83	2100-2415-83	2100-4815-83
2100-2015-84	2100-2415-84	2100-4815-84
2100-2015-85 2100-2015-86	2100-2415-85 2100-2415-86	2100-4815-85 2100-4815-86
	2100-2415-87	
2100-2015-87 2100-2015-88	2100-2415-88	2100-4815-87 2100-4815-88
2100-2015-89	2100-2415-89	2100-4815-89
2100-2015-92	2100-2415-92	2100-4815-92
2100-2015-93	2100-2415-93	2100-4815-93
2100-2015-94	2100-2415-94	2100-4815-94
2100-2015-96	2100-2415-96	2100-4815-96
2100-2015-97	2100-2415-97	2100-4815-97
2100-2015-98	2100-2415-98	2100-4815-98
2100-2015-99	2100-2415-99	2100-4815-99
2100-2015106 2100-2015120	2100-2415106 2100-2415120	2100-4815106 2100-4815120
2100-2015230 2100-2015250	2100-2415230 2100-2415250	2100-4815230 2100-4815250
2100-2015280	2100-2415280	2100-4815280

## ASLON



## SERIES 4550, 4570 & 4500 **CAL PLUS FILM**



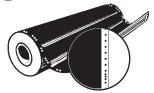
Cal-Plus is a 3 mil calendered vinyl. Its Calon II adhesive system is compatible with the most popular PVC banners and rigid sign faces and is dimensionally stable to resist shrinkage. An excellent value for cost-sensitive projects with an outdoor durability of five years. Also available in 48" width non-perforated rolls. Gloss finish also available in selected colors

		ted Rolls	Perforated (1)			Non-Perforated Roll		
Color	15" x 50 yd	30" x 50 yd	30" x 50 yd	15" x 50 yd	20" x 50 yd	24" x 50 yd	30" x 50 yd	60" x 50 yd
Red	4550-1515-01	4550-3015-01	4570-3015-01	4500-1515-01		4500-2415-01	4500-3015-01	
White	4550-1515-02	4550-3015-02	4570-3015-02		4500-2015-02 4500-2015-03	4500-2415-02 4500-2415-03		4500-6015-02 4500-6015-03
Black	4550-1515-03	4550-3015-03	4570-3015-03					
Gold Medal Blue	4550-1515-04 4550-1515-05	4550-3015-04 4550-3015-05	4570-3015-04 4570-3015-05	4500-1515-04 4500-1515-05	4500-2015-04 4500-2015-05	4500-2415-04 4500-2415-05		4500-6015-04 4500-6015-05
Yellow	4550-1515-06	4550-3015-06	4570-3015-06		4500-2015-06	4500-2415-06		4500-6015-06
Silver	4550-1515-07	4550-3015-07	4570-3015-07	4500-1515-07	4500-2015-07	4500-2415-07	4500-3015-07	4500-6015-07
Brown	4550-1515-08	4550-3015-08	4570-3015-08	4500-1515-08	4500-2015-08	4500-2415-08		4500-6015-08
Orange	4550-1515-09	4550-3015-09	4570-3015-09	4500-1515-09	4500-2015-09	4500-2415-09		4500-6015-09
Purple Green	4550-1515-10 4550-1515-11	4550-3015-10 4550-3015-11	4570-3015-10 4570-3015-11	4500-1515-10 4500-1515-11	4500-2015-10	4500-2415-10 4500-2415-11		4500-6015-10 4500-6015-11
Burgundy	4550-1515-11	4550-3015-11	4570-3015-11		4500-2015-11	4500-2415-11		4500-6015-11
Dark Blue	4550-1515-30	4550-3015-30	4570-3015-30	4500-1515-30	4500-2015-30	4500-2415-30		4500-6015-30
Rose	4550-1515-31	4550-3015-31	4570-3015-31	4500-1515-31	4500-2015-31	4500-2415-31	4500-3015-31	4500-6015-31
Cotton Candy	4550-1515-32	4550-3015-32	4570-3015-32	4500-1515-32	4500-2015-32	4500-2415-32	4500-3015-32	4500-6015-32
Fire Red	4550-1515-33	4550-3015-33	4570-3015-33	4500-1515-33	4500-2015-33	4500-2415-33		4500-6015-33
Cloud Gray Imperial Green	4550-1515-34 4550-1515-35	4550-3015-34 4550-3015-35	4570-3015-34 4570-3015-35		4500-2015-34 4500-2015-35	4500-2415-34 4500-2415-35		4500-6015-34 4500-6015-35
Mission Blue	4550-1515-36	4550-3015-36	4570-3015-36	4500-1515-36	4500-2015-36	4500-2415-36		4500-6015-36
Blueberry	4550-1515-36	4550-3015-36	4570-3015-36		4500-2015-37	4500-2415-37		4500-6015-37
Evening Blue	4550-1515-38	4550-3015-38	4570-3015-38		4500-2015-38	4500-2415-38	4500-3015-38	4500-6015-38
Lt. Wedgewood Blue	4550-1515-39	4550-3015-39	4570-3015-39	4500-1515-39	4500-2015-39	4500-2415-39		4500-6015-39
Matte Black	4550-1515-40	4550-3015-40	4570-3015-40		4500-2015-40	4500-2415-40		4500-6015-40
Tusk	4550-1515-41	4550-3015-41	4570-3015-41	-	4500-2015-41	4500-2415-41		4500-6015-41
Mint Fluorite Green	4550-1515-42 4550-1515-43	4550-3015-42 4550-3015-43	4570-3015-42 4570-3015-43	4500-1515-42 4500-1515-43	4500-2015-42 4500-2015-43	4500-2415-42 4500-2415-43		4500-6015-42 4500-6015-43
Billiard	4550-1515-45	4550-3015-45	4570-3015-45		4500-2015-45	4500-2415-45		4500-6015-45
Persian Melon	4550-1515-46	4550-3015-46	4570-3015-46	4500-1515-46	4500-2015-46	4500-2415-46	4500-3015-46	4500-6015-46
Matte White	4550-1515-49	4550-3015-49	4570-3015-49		4500-2015-49	4500-2415-49		4500-6015-49
Royal Blue	4550-1515-50	4550-3015-50	4570-3015-50		4500-2015-50	4500-2415-50		4500-6015-50
Spring Green	4550-1515-60	4550-3015-60	4570-3015-60	4500-1515-60 4500-1515-61	4500-2015-60 4500-2015-61	4500-2415-60 4500-2415-61	4500-3015-60 4500-3015-61	4500-6015-60 4500-6015-61
Medium Green Daisy Yellow	4550-1515-61 4550-1515-68	4550-3015-61 4550-3015-68	4570-3015-61 4570-3015-68	4500-1515-61	4500-2015-68	4500-2415-68		4500-6015-68
Teal	4550-1515-71	4550-3015-71	4570-3015-71	4500-1515-71	4500-2015-71	4500-2415-71	4500-3015-71	
	" Parforated pattern	1	13/0 3013 / 1	1300 131371	1500 2015 71	1500 2715 / 1	1500 0015 71	1.550 0015 71

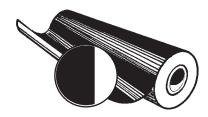
**NOTE:** (1) 1/2" Perforated pattern.







## **SERIES 1950 & 1900** PROMOCAL GLOSS FILM



PromoCal Gloss is a 3 mil calendered polymeric PVC vinyl applicable for general substrates, banners and interior graphics with superior cutting and weeding for improved productivity. Recommended for interior use with durability of three to five years. Non-perforated 20", 24", 48" and 60" rolls also available.

	Perforated Rolls					
Color	15" x 50 yd	30" x 50 yd				
Red	1950-1515101	1950-3015101				
White	1950-1515102	1950-3015102				
Black	1950-1515103	1950-3015103				
Gold	1950-1515104	1950-3015104				
Blue	1950-1515105	1950-3015105				
Yellow	1950-1515106	1950-3015106				
Silver	1950-1515107	1950-3015107				
Brown	1950-1515108	1950-3015108				
Orange	1950-1515109	1950-3015109				
Royal Purple	1950-1515110	1950-3015110				
Green	1950-1515111	1950-3015111				
Burgundy	1950-1515112	1950-3015112				
Tomato Red	1950-1515114	1950-3015114				

	Perforated Rolls					
Color	15" x 50 yd	30" x 50 vd				
Fire Red	1950-1515118	1950-3015118				
Light Blue	1950-1515122	1950-3015122				
Sapphire Blue	1950-1515124	1950-3015124				
Light Navy	1950-1515125	1950-3015125				
Navy Blue	1950-1515126	1950-3015126				
Emerald Green	1950-1515132	1950-3015132				
Bright Green	1950-1515136	1950-3015136				
Daisy Yellow	1950-1515140	1950-3015140				
Dark Pink	1950-1515150	1950-3015150				
Light Gray	1950-1515160	1950-3015160				
Sunflower	1950-1515164	1950-3015164				
Medium Gray	1950-1515168	1950-3015168				
Teal	1950-1515171	1950-3015171				

#### SPECIALTY FILMS

#### FLUORESCENT VINYL FILM

Multi-laminated cast vinyl with high-intensity color for signs, graphics and displays. UV stabilized surface protects against sunlight fading. Outdoor durability of one year.

	Perforated Rolls				
Color	15" x 10 yd	15" x 50 yd			
Green Red Orange Yellow Pink	2750-1503-92 2750-1503-93 2750-1503-94 2750-1503-95 2750-1503-97	2750-1515-92 2750-1515-93 2750-1515-94 2750-1515-95 2750-1515-97			

#### **METALLIZED POLYESTER FILM**

Brilliant gold and lustrous silver metalized polyester mirror or brushed finished film designed for indoor applications. Easy to handle with the workability of vinyl. Metalized film has a clear and permanent adhesive.

	Perforated Rolls					
	Mirror	Brushe	d Finish			
Color	15" x 10 yd	15" x 50 yd	15" x 10 yd	15" x 50 yd		
Gold	2850-1503-04	2850-1515-04	3950-1503-04	3950-1515-04		
Silver	2850-1503-07	2850-1515-07	3950-1503-07	3950-1515-07		

#### DRAWING AND POUNCING PAPER

20# bright white, resists perforated hole tearing.

Color	15" x 500 ft	Perforated Rolls 19" x 300 ft	30" x 300 ft
White	3050-1550-02	3050-1930-02	3050-3030-02

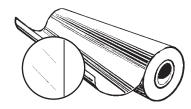
#### **CAL-MASK STENCIL FILM**

Specially formulated white calendered vinyl for cut-out stenciling.

	Perforated Rolls				
Color	15" x 50 yd	30" x 50 yd			
White	2950-1515-02	2950-3015-02			



## **SERIES 2550 & 2500** TRANSLUCENT FILM

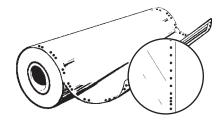


Translucent 2 mil cast vinyl. Its unique Calon II adhesive system ensures that the translucent vinyls remain bonded to outdoor illuminated sign faces. Uniformity of color within roll and from lot to lot and non-directional sensitivity allows character nesting which saves time and materials. Other specialty colors also available in limited sizes. Outdoor durability of seven years.

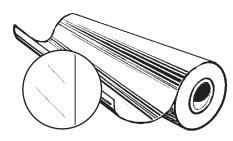
			ed Rolls				Non-Perfo	rated Rolls	
Color	15" x 10 yd	15" x 50 yd	30" x 10 yd	30" x 50 yd		24" x 10 yd	24" x 50 yd	48" x 10 yd	48" x 50 yd
lvory	2550-1503-05	2550-1515-05	2550-3003-05	2550-3015-05		2500-2403-05	2500-2415-05	2500-4803-05	2500-4815-05
Yellow	2550-1503-15	2550-1515-15	2550-3003-15	2550-3015-15		2500-2403-15	2500-2415-15	2500-4803-15	2500-4815-15
White	2550-1503-20	2550-1515-20	2550-3003-20	2550-3015-20		2500-2403-20	2500-2415-20	2500-4803-20	2500-4815-20
Black <sup>(2)</sup>	2550-1503-22	2550-1515-22	2550-3003-22	2550-3015-22		2500-2403-22	2500-2415-22	2500-4803-22	2500-4815-22
Sunflower	2550-1503-25	2550-1515-25	2550-3003-25	2550-3015-25		2500-2403-25	2500-2415-25	2500-4803-25	2500-4815-25
Green	2550-1503-26	2550-1515-26	2550-3003-26	2550-3015-26		2500-2403-26	2500-2415-26	2500-4803-26	2500-4815-26
Red	2550-1503-33	2550-1515-33	2550-3003-33	2550-3015-33		2500-2403-33	2500-2415-33	2500-4803-33	2500-4815-33
Dark Blue	2550-1503-36	2550-1515-36	2550-3003-36	2550-3015-36		2500-2403-36	2500-2415-36	2500-4803-36	2500-4815-36
Lt. Tomato Red	2550-1503-43	2550-1515-43	2550-3003-43	2550-3015-43		2500-2403-43	2500-2415-43	2500-4803-43	2500-4815-43
Orange	2550-1503-44	2550-1515-44	2550-3003-44	2550-3015-44		2500-2403-44	2500-2415-44	2500-4803-44	2500-4815-44
Burgundy	2550-1503-49	2550-1515-49	2550-3003-49	2550-3015-49		2500-2403-49	2500-2415-49	2500-4803-49	2500-4815-49
Silver Gray	2550-1503-51	2550-1515-51	2550-3003-51	2550-3015-51		2500-2403-51	2500-2415-51	2500-4803-51	2500-4815-51
Cardinal Red (1) Olympic Blue Dark Brown	2550-1503253 2550-1503-57 2550-1503-59	2550-1515253 2550-1515-57 2550-1515-59	2550-3003253 2550-3003-57 2550-3003-59	2550-3015253 2550-3015-57 2550-3015-59		2500-2403253 2500-2403-57 2500-2403-59	2500-2415253 2500-2415-57 2500-2415-59	2500-4803253 2500-4803-57 2500-4803-59	2500-4815253 2500-4815-57 2500-4815-59
Rust Brown Bright Blue Duranodic (2)	2550-1503-63 2550-1503-67 2550-1503-69	2550-1515-63 2550-1515-67 2550-1515-69	2550-3003-63 2550-3003-67 2550-3003-69	2550-3015-63 2550-3015-67 2550-3015-69		2500-2403-63 2500-2403-67 2500-2403-69	2500-2415-63 2500-2415-67 2500-2415-69	2500-4803-63 2500-4803-67 2500-4803-69	2500-4815-63 2500-4815-67 2500-4815-69
Shadow Gray	2550-1503-71	2550-1515-71	2550-3003-71	2550-3015-71		2500-2403-71	2500-2415-71	2500-4803-71	2500-4815-71
Dark Red	2550-1503-73	2550-1515-73	2550-3003-73	2550-3015-73		2500-2403-73	2500-2415-73	2500-4803-73	2500-4815-73
Holly Green	2550-1503-76	2550-1515-76	2550-3003-76	2550-3015-76		2500-2403-76	2500-2415-76	2500-4803-76	2500-4815-76
Vivid Rose	2550-1503-78	2550-1515-78	2550-3003-78	2550-3015-78	٠	2500-2403-78	2500-2415-78	2500-4803-78	2500-4815-78
Regal Red	2550-1503-83	2550-1515-83	2550-3003-83	2550-3015-83		2500-2403-83	2500-2415-83	2500-4803-83	2500-4815-83
Tangerine	2550-1503-84	2550-1515-84	2550-3003-84	2550-3015-84		2500-2403-84	2500-2415-84	2500-4803-84	2500-4815-84
Royal Blue	2550-1503-87	2550-1515-87	2550-3003-87	2550-3015-87		2500-2403-87	2500-2415-87	2500-4803-87	2500-4815-87
Bristol Blue	2550-1503-97	2550-1515-97	2550-3003-97	2550-3015-97		2500-2403-97	2500-2415-97	2500-4803-97	2500-4815-97
Brilliant Green	2550-1503106	2550-1515106	2550-3003106	2550-3015106		2500-2403106	2500-2415106	2500-4803106	2500-4815106
Golden Yellow	2550-1503125	2550-1515125	2550-3003125	2550-3015125		2500-2403125	2500-2415125	2500-4803125	2500-4815125
Intense Blue	2550-1503127	2550-1515127	2550-3003127	2550-3015127		2500-2403127	2500-2415127	2500-4803127	2500-4815127
Plum	2550-1503128	2550-1515128	2550-3003128	2550-3015128		2500-2403128	2500-2415128	2500-4803128	2500-4815128
Gold Metallic	2550-1503131	2550-1515131	2550-3003131	2550-3015131		2500-2403131	2500-2415131	2500-4803131	2500-4815131
Raspberry	2550-1503133	2550-1515133	2550-3003133	2550-3015133		2500-2403133	2500-2415133	2500-4803133	2500-4815133
Poppy Red	2550-1503143	2550-1515143	2550-3003143	2550-3015143		2500-2403143	2500-2415143	2500-4803143	2500-4815143
Lt. Kelly Green	2550-1503146	2550-1515146	2550-3003146	2550-3015146		2500-2403146	2500-2415146	2500-4803146	2500-4815146
Vivid Green	2550-1503156	2550-1515156	2550-3003156	2550-3015156		2500-2403156	2500-2415156	2500-4803156	2500-4815156

**NOTE:** (1) Cardinal Red #53 has been replaced by Cardinal Red #253. (2) Opaque Film, Non Translucent



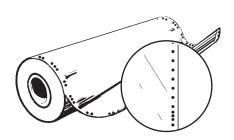


## **SERIES 2550 & 2500** TRANSLUCENT FILM cont.

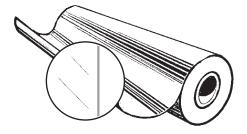


	Perforated Rolls					
Color	15" x 10 yd	15" x 50 yd	30" x 10 yd	30" x 50 yd		
Turquoise	2550-1503236	2550-1515236	2550-3003236	2550-3015236		
Teal	2550-1503246	2550-1515246	2550-3003246	2550-3015246		
Dark Aqua	2550-1503307	2550-1515307	2550-3003307	2550-3015307		
Process Blue Fire Red	2550-1503337 2550-1503415	2550-1515337 2550-1515415	2550-3003337 2550-3003415	2550-3015337 2550-3015415		
Bright Yellow	2550-1503525	2550-1515525	2550-3003525	2550-3015525		
Imperial Blue	2550-1503557	2550-1515557	2550-3003557	2550-3015557		

	Non-Perforated Rolls							
24" x 10 yd	24" x 50 yd	48" x 10 yd	48" x 50 yd					
0500 040000/	0500 041500/	0500 400000/	0500 401500/					
2500-2403236	2500-2415236	2500-4803236	2500-4815236					
2500-2403246	2500-2415246	2500-4803246	2500-4815246					
2500-2403307	2500-2415307	2500-4803307	2500-4815307					
2500-2403337	2500-2415337	2500-4803337	2500-4815337					
2500-2403415	2500-2415415	2500-4803415	2500-4815415					
2500-2403525	2500-2415525	2500-4803525	2500-4815525					
2500-2403557	2500-2415557	2500-4803557	2500-4815557					



## **SERIES 2450 & 2400 REFLECTA-CAL FILM**

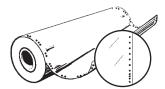


Reflective 6.7 mil cast vinyl. An extremely flexible film that cuts and weeds as well as other reflective films with excellent dimensional stability. Ideal for lettering, striping, die cut logos, highway signage and marine or RV markings. Meets standard specifications such as DOT specification FP-85 - section 718, federal specification L-S-300C and ASTM-D4956-89. Outdoor durability of seven years on flat surfaces and five years on irregular surfaces.

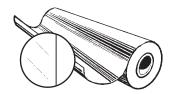
	Perforated Rolls						
Color	15" x 10 yd	15" x 50 yd	30" x 10 yd	30" x 50 yd			
Red	2450-1503-01	2450-1515-01	2450-3003-01	2450-3015-01			
White	2450-1503-02	2450-1515-02	2450-3003-02	2450-3015-02			
Black	2450-1503-03	2450-1515-03	2450-3003-03	2450-3015-03			
Gold	2450-1503-04	2450-1515-04	2450-3003-04	2450-3015-04			
Blue	2450-1503-05	2450-1515-05	2450-3003-05	2450-3015-05			
Yellow	2450-1503-06	2450-1515-06	2450-3003-06	2450-3015-06			
Dark Orange	2450-1503-10	2450-1515-10	2450-3003-10	2450-3015-10			
Green	2450-1503-11	2450-1515-11	2450-3003-11	2450-3015-11			

	Non-Perforated Rolls					
24" x 10 yd	24" x 50 yd	48" x 10 yd	48" x 50 yd			
2400-2403-01	2400-2415-01	2400-4803-01	2400-4815-01			
2400-2403-02	2400-2415-02		2400-4815-02			
2400-2403-03	2400-2415-03		2400-4815-03			
2400-2403-04	2400-2415-04	2400-4803-04	2400-4815-04			
2400-2403-05	2400-2415-05	2400-4803-05	2400-4815-05			
2400-2403-06	2400-2415-06	2400-4803-06	2400-4815-06			
2400-2403-10	2400-2415-10	2400-4803-10	2400-4815-10			
2400-2403-11	2400-2415-11	2400-4803-11	2400-4815-11			





# NESCHEN PRO-GLOSS FILM



Pro Gloss is a high-gloss 3 mil polished polymeric flexible calendared film that features superior weeding and transfer characteristics over competitive economical brands. Recommended for use where a high quality marking film requiring flexibility, durability and resistance to sunlight is essential. Can be used for architectural signage, commercial/real estate signage, point-of-purchase graphics and decals. 5 year durability under normal exposure. Available in other widths up to 60". Sold by the roll.

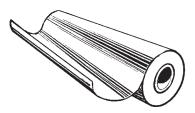
Other types of Neschen vinyl film also available.

Color	Perforated Rolls 15" x 50 yd	30" x 50 yd
White	1550P-5100	3050P-5100
Black	1550P-5101	3050P-5101
Clear	1550P-5102	3050P-5102
Gray	1550P-5103	3050P-5103
Midnight Blue	1550P-5104	3050P-5104
Sapphire Blue	1550P-5105	3050P-5105
Vivid Blue	1550P-5106	3050P-5106
Ocean Blue	1550P-5107	3050P-5107
Dark Green	1550P-5108	3050P-5108
Green	1550P-5109	3050P-5109
Kelly Green	1550P-5110	3050P-5110
Dark Yellow	1550P-5111	3050P-5111
Lemon	1550P-5112	3050P-5112
Daffodil	1550P-5113	3050P-5113
Brown	1550P-5114	3050P-5114
Beige	1550P-5115	3050P-5115
Burgundy	1550P-5116	3050P-5116
Cranberry	1550P-5117	3050P-5117
Cherry	1550P-5118	3050P-5118
Tomato Red	1550P-5119	3050P-5119
Orange	1550P-5120	3050P-5120
Purple	1550P-5121	3050P-5121
Gold	1550P-5122	3050P-5122
Silver	1550P-5123	3050P-5123

Non-Perforated Rolls			
20" x 50 yd	24" x 50 yd	30" x 50 yd	
2050N-5100	2450N-5100	3050N-5100	
2050N-5100 2050N-5101	2450N-5100 2450N-5101	3050N-5100	
2050N-5101 2050N-5102	2450N-5101 2450N-5102	3050N-5101	
2030N-3102	2430N-3102	3030N-3102	
2050N-5103	2450N-5103	3050N-5103	
2050N-5104	2450N-5104	3050N-5104	
2050N-5105	2450N-5105	3050N-5105	
2050N-5106	2450N-5106	3050N-5106	
2050N-5107	2450N-5107	3050N-5107	
2050N-5108	2450N-5108	3050N-5108	
2050N-5109	2450N-5109	3050N-5109	
2050N-5110	2450N-5110	3050N-5110	
2050N-5111	2450N-5111	3050N-5111	
2050N-5112	2450N-5112	3050N-5112	
2050N-5113	2450N-5113	3050N-5113	
2050N-5114	2450N-5114	3050N-5114	
0050N 5115	0450N 5115	2050N 5115	
2050N-5115	2450N-5115	3050N-5115	
2050N-5116	2450N-5116	3050N-5116	
2050N-5117	2450N-5117	3050N-5117	
2050N-5118	2450N-5118	3050N-5118	
2050N-5119	2450N-5119	3050N-5119	
2050N-5120	2450N-5120	3050N-5120	
2050N-5121	2450N-5121	3050N-5121	
2050N-5122	2450N-5122	3050N-5122	
2050N-5123	2450N-5123	3050N-5123	
203011 3120	243011 3123	303011 3123	



## **SERIES 3630 3M SCOTCHCAL TRANSLUCENT FILM**



Durable, dimensionally stable translucent films designed for internally illuminated sign faces, window graphics or on white substrates. Films are uniform in color with a low surface gloss in either reflected or transmitted light. Intended for flat acrylic, polycarbonate, butyrate, fiberglass, glass, Panaflex series 945 and other prepared substrates. Can be applied to interior or exterior surfaces of substrates listed. Over-laminating with series 3640 products enhances cleaning and durability. Five year outdoor performance can be expected, four years in hot sunny areas.

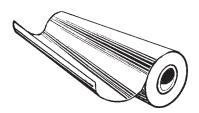
	Non-Perforated Rolls			
Color	24" x 10 yd	24" x 50 yd	48" x 10 yd	48" x 50 yd
lvory Yellow White	3630-05-2410 3630-15-2410 3630-20-2410	3630-05-2450 3630-15-2450 3630-20-2450	3630-05-4810 3630-15-4810 3630-20-4810	3630-05-4850 3630-15-4850 3630-20-4850
Black Sunflower Green	3630-22-2410 3630-25-2410 3630-26-2410	3630-22-2450 3630-25-2450 3630-26-2450	3630-22-4810 3630-25-4810 3630-26-4810	3630-22-4850 3630-25-4850 3630-26-4850
Red Blue Lt. Tomato Red	3630-33-2410 3630-36-2410 3630-43-2410	3630-33-2450 3630-36-2450 3630-43-2450	3630-33-4810 3630-36-4810 3630-43-4810	3630-33-4850 3630-36-4850 3630-43-4850
Orange Burgundy Silver Grey	3630-44-2410 3630-49-2410 3630-51-2410	3630-44-2450 3630-49-2450 3630-51-2450	3630-44-4810 3630-49-4810 3630-51-4810	3630-44-4850 3630-49-4850 3630-51-4850
Cardinal Red Olympic Blue Dark Brown	3630-53-2410 3630-57-2410 3630-59-2410	3630-53-2450 3630-57-2450 3630-59-2450	3630-53-4810 3630-57-4810 3630-59-4810	3630-53-4850 3630-57-4850 3630-59-4850
Slate Grey	3630-61-2410	3630-61-2450	3630-61-4810	3630-61-4850
Rust Brown	3630-63-2410	3630-63-2450	3630-63-4810	3630-63-4850
Rose Mauve	3630-68-2410	3630-68-2450	3630-68-4810	3630-68-4850
Duranodic	3630-69-2410	3630-69-2450	3630-69-4810	3630-69-4850
Shadow Gray	3630-71-2410	3630-71-2450	3630-71-4810	3630-71-4850
Dark Red	3630-73-2410	3630-73-2450	3630-73-4810	3630-73-4850
Kumquat Oranae	3630-74-2410	3630-74-2450	3630-74-4810	3630-74-4850
Marigold	3630-75-2410	3630-75-2450	3630-75-4810	3630-75-4850
Holly Green	3630-76-2410	3630-76-2450	3630-76-4810	3630-76-4850
Vivid Rose	3630-78-2410	3630-78-2450	3630-78-4810	3630-78-4850
Regal Red	3630-83-2410	3630-83-2450	3630-83-4810	3630-83-4850
Tangerine	3630-84-2410	3630-84-2450	3630-84-4810	3630-84-4850
Royal Blue	3630-87-2410	3630-87-2450	3630-87-4810	3630-87-4850
Bristol Blue	3630-97-2410	3630-97-2450	3630-97-4810	3630-97-4850
טווטוטו טווטט	0300 // LTIU	5555 // ETJU	0300 // 1010	5550 // TOJU

	Non-Perforated Rolls			
Color	24" x 10 yd	24" x 50 yd	48" x 10 yd	48" x 50 yd
	3630108-2410 3630109-2410 ow3630115-241	3630109-2450		3630109-4850
Brt. Jade Green Intense Mage Silver <sup>(1)</sup>	nta <b>3630118-241</b>	03630118-2450	3630116-4810 3630118-4810 3630121-4810	3630118-4850
Golden Yellow Dk. Emerald Green Intense Blue	3630125-2410 3630126-2410 3630127-2410	3630126-2450	3630125-4810 3630126-4810 3630127-4810	3630126-4850
Plum Purple Bronze Gold Metallic (1)	3630128-2410 3630129-2410 3630131-2410	3630129-2450	3630128-4810 3630129-4810 3630131-4810	
Raspberry Lime Green European Blue	3630133-2410 3630136-2410 3630137-2410	3630136-2450	3630133-4810 3630136-4810 3630137-4810	3630136-4850
Gold Nugget Poppy Red Lt. Kelly Green	3630141-2410 3630143-2410 3630146-2410	3630143-2450	3630141-4810 3630143-4810 3630146-4810	3630143-4850
Lt. European Blue Lt. Beige Vivid Green		3630149-2450	3630147-4810 3630149-4810 3630156-4810	3630149-4850
Sultan Blue Bright Blue Turquoise	3630157-2410 3630167-2410 3630236-2410	3630167-2450	3630157-4810 3630167-4810 3630236-4810	3630167-4850
Teal Green Evening Blue Process Blue	3630317-2410	3630317-2450	3630246-4810 3630317-4810 3630337-4810	3630317-4850

**NOTE:** (1) 3 years expected life.

## **3M**

# SERIES 7725 3M SCOTCHCAL ELECTROCUT FILM



These are durable, stable, glossy (except matte) vinyl films for the production of electronically cut graphics. Recommended for flat and simple curved surfaces. Colorless adhesive is suitable for application to glass surfaces. Expected outdoor performance is five years.

Series 7725 SE Dusted and Frosted Crystal films are designed for window graphics and internally illuminated displays. Films have uniformed color in both reflected and transmitted light with low gloss to eliminate glare. These films are intended for use on flat clear substrates such as glass, acrylic or polycarbonates. Dusted Crystal has an acid-etched look where Frosted colors have a sand-blasted appearence. Application of Dusted Crystal between two sheets of glass is not recommended. Screen printing is not recommended nor warranted. Expected outdoor performance is three years.

Non-Perforated Rolls				lice is illiee yeurs
Color	Color 24" x 10 yd		48" x 10 yd	48" x 50 yd
White Pearl Grey Black	7725-10-2410 7725-11-2410 7725-12-2410	24" x 50 yd 7725-10-2450 7725-11-2450 7725-12-2450	7725-10-4810 7725-11-4810 7725-12-4810	7725-10-4850 7725-11-4850 7725-12-4850
Tomato Red	7725-13-2410	7725-13-2450	7725-13-4810	7725-13-4850
Bright Orange	7725-14-2410	7725-14-2450	7725-14-4810	7725-14-4850
Bright Yellow	7725-15-2410	7725-15-2450	7725-15-4810	7725-15-4850
Vivid Blue	7725-17-2410	7725-17-2450	7725-17-4810	7725-17-4850
DeepMahag.Brn.	7725-19-2410	7725-19-2450	7725-19-4810	7725-19-4850
Matte White	7725-20-2410	7725-20-2450	7725-20-4810	7725-20-4850
Matte Black	7725-22-2410	7725-22-2450	7725-22-4810	7725-22-4850
Terra Cotta	7725-24-2410	7725-24-2450	7725-24-4810	7725-24-4850
Sunflower	7725-25-2410	7725-25-2450	7725-25-4810	7725-25-4850
Indigo	7725-27-2410	7725-27-2450	7725-27-4810	7725-27-4850
Russet Brown	7725-29-2410	7725-29-2450	7725-29-4810	7725-29-4850
Medium Grey	7725-31-2410	7725-31-2450	7725-31-4810	7725-31-4850
Sapphire Blue	7725-37-2410	7725-37-2450	7725-37-4810	7725-37-4850
Royal Purple	7725-38-2410	7725-38-2450	7725-38-4810	7725-38-4850
Tan	7725-39-2410	7725-39-2450	7725-39-4810	7725-39-4850
Dark Grey	7725-41-2410	7725-41-2450	7725-41-4810	7725-41-4850
Kelly Green	7725-46-2410	7725-46-2450	7725-46-4810	7725-46-4850
Intense Blue	7725-47-2410	7725-47-2450	7725-47-4810	7725-47-4850
Purple	7725-48-2410	7725-48-2450	7725-48-4810	7725-48-4850
Beige	7725-49-2410	7725-49-2450	7725-49-4810	7725-49-4850
Cardinal Red	7725-53-2410	7725-53-2450	7725-53-4810	7725-53-4850
Light Orange	7725-54-2410	7725-54-2450	7725-54-4810	7725-54-4850
Dark Green	7725-56-2410	7725-56-2450	7725-56-4810	7725-56-4850
Olympic Blue	7725-57-2410	7725-57-2450	7725-57-4810	7725-57-4850
Burgundy	7725-58-2410	7725-58-2450	7725-58-4810	7725-58-4850
Putty	7725-59-2410	7725-59-2450	7725-59-4810	7725-59-4850
Geranium	7725-63-2410	7725-63-2450	7725-63-4810	7725-63-4850
Apricot	7725-64-2410	7725-64-2450	7725-64-4810	7725-64-4850
Forest Green	7725-66-2410	7725-66-2450	7725-66-4810	7725-66-4850
Peacock Blue	7725-77-2410	7725-77-2450	7725-77-4810	7725-77-4850
Vista Yellow	7725-85-2410	7725-85-2450	7725-85-4810	7725-85-4850

		Non-Perfo		
Color	24" x 10 yd	24" x 50 yd	48" x 10 yd	48" x 50 yd
Robin Egg Blue Violet Sandstone	7725-86-2410 7725-88-2410 7725-89-2410	7725-86-2450 7725-88-2450 7725-89-2450	7725-86-4810 7725-88-4810 7725-89-4810	7725-86-4850 7725-88-4850 7725-89-4850
Antique White Teal Dark Violet	7725-90-2410 7725-96-2410 7725-98-2410	7725-90-2450 7725-96-2450 7725-98-2450	7725-90-4810 7725-96-4810 7725-98-4810	7725-90-4850 7725-96-4850 7725-98-4850
Fawn Magenta Harvest Gold	7725-99-2410 7725103-2410 7725105-2410			7725-99-4850 7725103-4850 7725105-4850
Transparent Satin Aluminum Egg Shell	7725114-2410 7725120-2410 7725130-2410	7725120-2450	7725114-4810 7725120-4810 7725130-4810	7725120-4850
Satin Gold Saddle Brown Salmon Pink		7725139-2450	7725131-4810 7725139-4810 7725173-4810	7725139-4850
Aqua Shadow Blue Bright Green	7725176-2410 7725177-2410 7725186-2410		7725176-4810 7725177-4810 7725186-4810	
WedgewoodBlue Mauve Apple Green	7725193-2410	7725193-2450	7725187-4810 7725193-4810 7725196-4810	7725193-4850
Light Navy Perf. Match Red Proc. Magento	7725197-2410 7725263-2410 7725273-2410	7725263-2450	7725197-4810 7725263-4810 7725273-4810	7725263-4850
Bottle Green Dark Aqua Bermuda Blue	7725276-2410 7725307-2410 7725357-2410	7725307-2450	7725276-4810 7725307-4810 7725357-4810	7725307-4850

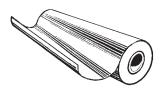
#### **SERIES 7725 SE**

	Non-Perforated Rolls			
Color	24" x 10 yd	24" x 50 yd	48" x 10 yd	48" x 50 yd
Dusted Crystal	7725314-2410	7725314-2450	7725314-4810	7725314-4850
Frosted Rose	7725323-2410	7725323-2450	7725323-4810	7725323-4850
			7725324-4810	
Frosted Mint	7725326-2410	7725326-2450	7725326-4810	7725326-4850
Frosted Blue Mist	7725327-2410		7725327-4810	
Frosted Gold	7725331-2410	7725331-2450	7725331-4810	7725331-4850









Controltac Plus series films are durable and dimensionally stable glossy vinyl films which may be screen printed on for attractive multicolored signs, labels, markings, striping and emblems for commercial and industrial use which must withstand severe weather and handling. Intended for use on flat surfaces with or without rivets and corrugated surfaces. Not intended where markings may be subjected to petrochemical spillage. These films have excellent hiding power.

3M developed a technology which allows positioning and repositioning of Controltac Plus film. It is a mechanical rather than an adhesive feature that is activated when pressure is applied to the film surface by a squeegee. Performance of five to seven years can be expected. Other widths also available.

Color	24" x 10 yd	Non-Perforated Rolls			48" x 50 yd
		24" x 50 yd	36" x 50 yd	48" x 10 yd	
White	180-10-2410	180-10-2450	180-10-3650	180-10-4810	180-10-4850
Black Tomato Red	180-12-2410 180-13-2410	180-12-2450 180-13-2450	180-12-3650 180-13-3650	180-12-4810 180-13-4810	180-12-4850 180-13-4850
Bright Orange Bright Yellow (1)	180-14-2410 180-15-2410	180-14-2450 180-15-2450	180-14-3650 180-15-3650	180-14-4810 180-15-4810	180-14-4850 180-15-4850
Vivid Blue	180-13-2410	180-13-2450	180-17-3650	180-13-4810	180-17-4850
Deep/Mahog, Bin.	180-19-2410	180-19-2450	180-19-3650	180-19-4810	180-19-4850
Matte Black	180-22-2410	180-22-2450	180-22-3650	180-22-4810	180-22-4850
Deep Red	180-23-2410	180-23-2450	180-23-3650	180-23-4810	180-23-4850
Sunflower (1)	180-25-2410	180-25-2450	180-25-3650	180-25-4810	180-25-4850
Indigo	180-27-2410	180-27-2450	180-27-3650	180-27-4810	180-27-4850
Russet Brown	180-29-2410	180-29-2450	180-29-3650	180-29-4810	180-29-4850
Medium Grey	180-31-2410	180-31-2450	180-31-3650	180-31-4810	180-31-4850
Sapphire Blue		180-37-2450	180-37-3650	180-37-4810	180-37-4850
Royal Purple	180-38-2410	180-38-2450	180-38-3650	180-38-4810	180-38-4850
Tan	180-39-2410	180-39-2450	180-39-3650	180-39-4810	180-39-4850
Dark Grey Kelly Green	180-41-2410 180-46-2410	180-41-2450 180-46-2450	180-41-3650 180-46-3650	180-41-4810 180-46-4810	180-41-4850 180-46-4850
,					
Intense Blue Beige	180-47-2410 180-49-2410	180-47-2450 180-49-2450	180-47-3650 180-49-3650	180-47-4810 180-49-4810	180-47-4850 180-49-4850
Cardinal Red	180-53-2410	180-53-2450	180-53-3650	180-53-4810	180-53-4850
Light Orange	180-54-2410	180-54-2450	180-54-3650	180-54-4810	180-54-4850
Dark Green	180-54-2410	180-54-2450	180-54-3650	180-54-4810	180-54-4850
Olympic Blue	180-57-2410	180-57-2450	180-57-3650	180-57-4810	180-57-4850
Burgundy	180-58-2410	180-58-2450	180-58-3650	180-58-4810	180-58-4850
Geranium	180-63-2410	180-63-2450	180-63-3650	180-63-4810	180-63-4850
Peacock Blue	180-77-2410	180-77-2450	180-77-3650	180-77-4810	180-77-4850
NOTE: (1)	NOTE: (1) Significantly less opacity than others.				

	Non-Perforated Rolls			
Color	24" x 10 yd	48" x 10 yd	48" x 50 yd	
Violet	180-88-2410	180-88-4810	180-88-4850	
Teal	180-96-2410	180-96-4810	180-96-4850	
Dark Violet	180-98-2410	180-98-4810	180-98-4850	
Magenta	180-103-2410	180-103-4810	180-103-4850	
Transparent	180-114-2410	180-114-4810	180-114-4850	
Satin Aluminum	180-120-2410	180-120-4810	180-120-4850	
Satin Gold	180-131-2410	180-131-4810	180-131-4850	
Salmon Pink	180-173-2410	180-173-4810	180-173-4850	
Aqua	180-176-2410	180-176-4810	180-176-4850	
Bright Green	180-186-2410	180-186-4810	180-186-4850	
Mauve	180-193-2410	180-193-4810	180-193-4850	
Apple Green	180-196-2410	180-196-4810	180-196-4850	
Slate Mtl.	180-201-2410	180-201-4810	180-201-4850	
Red Mtl.	180-203-2410	180-203-4810	180-203-4850	
Charcoal Mtl.	180-211-2410	180-211-4810	180-211-4850	
Sage Green Mtl.	180-216-2410	180-216-4810	180-216-4850	
Dark Blue Mtl.	180-217-2410	180-217-4810	180-217-4850	
Lt. Silver Mtl.	180-220-2410	180-220-4810	180-220-4850	
Grey Mtl.	180-221-2410	180-221-4810	180-221-4850	
Brt. Blue Mtl.	180-227-2410	180-227-4810	180-227-4850	
Dk. Burg. Mtl.	180-228-2410	180-228-4810	180-228-4850	
Copper Mtl.	180-229-2410	180-229-4810	180-229-4850	
Silver Blue Mtl.	180-237-2410	180-237-4810	180-237-4850	
Choc. Brn. Mtl.	180-239-2410	180-239-4810	180-239-4850	
Gold Mtl.	180-241-2410	180-241-4810	180-241-4850	
Dark Aqua	180-307-2410	180-307-4810	180-307-4850	

# SERIES 160 3M SCOTCHCAL CONTROLTAC PLUS FILM

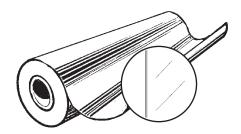
160-30/32 film is tough, permanent and scuff resistant which will withstand severe weather and handling. Because a black pigmented adhesive is used, this film has excellent hiding power. Adhesive allows for removal with heat for up to five years with little or no residue from most surfaces. Performance of five years can be expected.

160-80 film is white, tough, ink and enamel receptive and permanent scuff resistant. It may be screened, letterpress printed on or hand brushed.

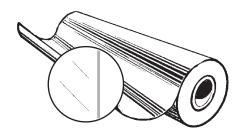
Performance of four years can be expected.

	Non-Perforated Rolls		
Color	Color 24" x 50 yd		
White Black Translucent Frost White Enamel Receptive	160-30-2450 160-32-2450 160-60-2450 160-80-2450	160-30-4850 160-32-4850 160-60-4850 160-80-4850	

#### 3M



#### 3M SCOTCHCAL FILM



#### **SERIES 3635 LIGHT CONTROL FILM**

Series 3635-10/12 films are designed for blocking out light when applied to internally illuminated signs. These opaque films are intended for application on flat acrylic and polycarbonate. 3635-10 is white on the face side and black on the adhesive side. 3635-12 is black on the face side and white on the adhesive side.

Series 3635-30/70 films are designed for use as light diffusers when applied to the second surface of internally illuminated signs. 3635-30 has 30% light transmission while 3635-70 has 60% light transmission. These films are uniformly white in both reflective and transmitted light and are intended for application on flat acrylic and polycarbonate. Not intended nor warranted for application to the first (front) surface of sign faces.

Series 3635-91 Day/Night film is an exterior, medium term durability film with a nominal light transmission of 47% used to produce the appearance of dark graphics in daylight while producing white or colored graphics at night on internally illuminated signs. Can be applied to a flat first or second rivet free surface. Can also be applied to most sign related substrates. See 3M literature for detailed recommendations.

	Non-Perforated Rolls	
Color	48" x 10 yd	48" x 50 yd
White Blockout Black Blockout Matte White Blockout Matte Black Blockout	3635-10-4810 3635-12-4810 363520B-4810 363522B-4810	3635-10-4850 3635-12-4850 363520B-4850 363522B-4850
Diffused White 30% Diffused White 60%	3635-30-4810 3635-70-4810	3635-30-4850 3635-70-4850
Day/Night	3635-91-4810	3635-91-4850
Light Enhancement Film	3635100-4810	3635100-4850

### SERIES 3640 & 3642 OVERLAY FILM

Series 3640 and 3642 films are durable, dimensionally stable translucent films which are designed for the protection of graphics used on internally illuminated or window graphics applications. These films are intended for application to 3M Scotchcal films which are applied to flat acrylic, butyrate, fiberglass, glass and Panaflex series 945 substrates.

Series 3640 has a high gloss surface while series 3642 has a matte surface. When properly applied to the substrates listed above, these products impart outstanding resistance to dirt and other environmental factors including many strong solvents. Expected outdoor performance is 9 years on vertical applications (6 years in very hot areas) and 5 years on non-vertical applications (4 years in very hot areas).

	Non-Perforated Rolls			
Color	48" x 10 yd 48" x 50 yd			
High Gloss	3640114-4810	3640114-4850		
Matte	3642114-4810	3642114-4850		

#### **DUAL-COLOR FILM**

Also available in a variety of colors.

#### **SERIES 3470 PLUS MARKING FILM**

Tough permanent scuff resistant films for the production of markings and POP displays for exterior and interior use on flat surfaces with or without rivets. Not intended for irregular surfaces or petroleum markings. Adhesive allows removal up to two years with little adhesive residue.

		Non-Perforated Rolls				
Color	24" x 50 yd	36" x 50 yd	48" x 10 yd	48" x 50 yd		
White Black	3470-2450 3475-2450	3470-3650 3475-3650	3470-4810 3475-4810	3470-4850 3475-4850		

#### **SERIES 3690 MARKING FILM**

These durable, glossy, vinyl films are intended for markings and striping that must withstand severe weather and handling. Films have a black aggressive pressure sensitive adhesive which adheres to moderately rough surfaces and provides good hiding power. Not recommended for corrugated surfaces, rivets or use where markings may be subjected to petro-chemical spillage. Performance of five years can be expected.

	Non-Perforated Rolls			
Color	24" x 50 yd 48" x 50 yd			
White Black	3690-10-2450 3690-12-2450	3690-10-4850 3690-12-4850		



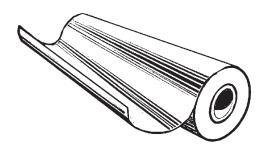


## **SERIES 3650 3M SCOTCHCAL GRAPHIC MARKING FILM**

Durable, dimensionally stable glossy vinyl films intended for the production of attractive signs, labels, markings, striping and emblems for commercial and industrial applications which must withstand severe handling and weather conditions as well as occasional spills of petroleum products. These films are intended for use on flat surfaces with and without rivets. Applications to corrugated surfaces is not recommended.

3M has developed a technology which allows Scotchcal Plus series 3650 to be both positionable and repositionable. This technology is a mechanical feature rather than an adhesive property. It allows for pressure activated adhesion when pressure is applied to the film surface by a squeegee. Seven year warranty.

	Non-Perforated Rolls				
Color	24" x 10 yd	24" x 50 yd	36" x 50 yd	48" x 10 yd	48" x 50 yd
White	3650-10-2410	3650-10-2450	3650-10-3650	3650-10-4810	3650-10-4850
Black	3650-12-2410	3650-12-2450	3650-12-3650	3650-12-4810	3650-12-4850
Transparent	3650114-2410	3650114-2450	3650114-3650	3650114-4810	3650114-4850



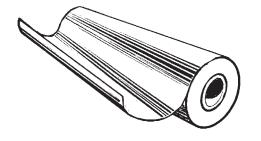


## **3M SCOTCHLITE** REFLECTIVE FILM

#### SERIES 580 SCOTCHLITE REFLECTIVE FILM

A durable, flexible, enclosed lens reflective sheeting for the production of multicolored markings, displays, signs, truck markings and other markings which have the same appearance in the daytime and at night even when viewed at wide angles. Intended for application to flat surfaces with and without rivets. Not intended for corrugated surfaces or compound curvatures. Expected performance of five to seven years.

	Non-Perforated Rolls					
Color	24" x 10 yd	24" x 50 yd	36" x 50 yd	48" x 10 yd	48" x 50 yd	
White	580-10U-2410	580-10U-2450	580-10U-3650	580-10U-4810	580-10U-4850	
Orange	580-14-2410	580-14-2450	580-14-3650	580-14-4810	580-14-4850	
Gold	580-64-2410	580-64-2450	580-64-3650	580-64-4810	580-64-4850	
Yellow	580-71-2410	580-71-2450	580-71-3650	580-71-4810	580-71-4850	
Red	580-72-2410	580-72-2450	580-72-3650	580-72-4810	580-72-4850	
Blue	580-75-2410	580-75-2450	580-75-3650	580-75-4810	580-75-4850	
Light Blue	580-76-2410	580-76-2450	580-76-3650	580-76-4810	580-76-4850	
Green	580-77-2410	580-77-2450	580-77-3650	580-77-4810	580-77-4850	
Lemon Yellow	580-81-2410	580-81-2450	580-81-3650	580-81-4810	580-81-4850	
Ruby Red	580-82-2410	580-82-2450	580-82-3650	580-82-4810	580-82-4850	
Charcoal Black	580-85-2410	580-85-2450	580-85-3650	580-85-4810	580-85-4850	



#### **SERIES 550 SCOTCHLITE REFLECTIVE SHEETING**

Durable enclosed lens reflective sheeting for the production of multicolor emblems and markings. Remains reflective even when totally wet and retains its reflectivity when viewed at wide angles. Intended for application to irregular surfaces such as rivet heads. This sheeting in not recommended for use on corrugated surfaces. Performance of four years can be expected. Other widths also available.

Non-Perforated Rolls					
Color	24" x 10 yd 24" x 50 yd 48" x 10 yd 48" x 50 yd				
White	550-10U-2410	550-10U-2450	550-10U-4810	550-10U-4850	

#### **3**M

#### **SERIES 639 SCOTCHCAL FILM**

This transparent film is intended for the production of attractive labels, markings and nameplates with maximum eye appeal and advertising effectiveness for both interior and exterior applications. Performance of three years can be expected.

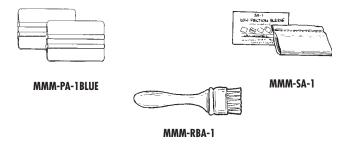
Non-Perforated Rolls					
24" x 10 yd	24" x 50 yd	48" x 10 yd	48" x 50 yd		
639-2410	639-2450	639-4810	639-4850		



#### **FILM APPLICATORS AND TOOLS**

Film applicators for burnishing vinyl materials. Brush is used to work around items such as rivets. Applicators (squeegees) are available in regular duty blue and heavy duty gold (heavy duty applicators last considerably longer). Low friction sleeve slides over squeegee for faster and smoother travel and to protect film surfaces.

Catalog Number	Description	Put Up
MMM-RBA-1 MMM-PA-1BLUE MMM-PA-1GOLD MMM-SA-1	Rivet Brush Applicator Blue Applicator (Squeegee) Gold Heavy Duty Applicator (Squeegee) Low Friction Applicator Sleeve	1 25 25 5/100
MMM-391X MMM-392X	Air Release Tool for Vinyl Film Replacement Point for Release Tool	1



#### **SERIES 3900 PRINTING INKS**

These silk screening inks are used for decorating Scotchcal and Controltac films. Detailed instruction bulletins on use are available upon request. These inks are for use with Scotchcal series: 160, 180, 181, 3470, 3480, 3630, 3670, 3690, 7725 and 7750 films. Sold by the gallon.

Color/	Catalog
Description	Number
Yellow White Black Lt. Chrome Yellow Dark Green Lt. Cadmium Red Blue Dark Cadmium Red Gold Metallic Blue-Violet Orange Red-Violet Red-Toned Blue Bright Red	MMM-3902G MMM-3903G MMM-3905G MMM-3912G MMM-3914G MMM-3915G MMM-3917G MMM-3927G MMM-3927G MMM-3933G MMM-3937G MMM-3970G MMM-3971G MMM-3971G
Toner/Reducer	MMM-9710G
Overprint Clear-Gloss	MMM-3920G
Overprint Clear-Matte	MMM-3930G
Overprint UV Gloss	MMM-9720G
Thinner for 4430R	MMM-CGS-30G
Thinner for Ink	MMM-CGS-60G
Slow Thinner for Ink	MMM-CGS-65G
Edge Sealer	MMM-3950



## COBURN/R TAPE SPECIAL EFFECT PVC FILMS

Coburn Graphic Films designs and manufactures unique metallized plastic films in a wide variety of eye-catching holographic, diffraction, phosphorescent, mirrored, glitter, prism and other illusionary patterns. For over 30 years, Coburn special effect films have created distinctive signage, decals, packaging, labels, exhibits, toys and novelties.

This 3mil metallized PVC film has a .9mil general purpose clear permanent adhesive on a heavyweight lay flat liner. Indoor durability is long term for most applications. Outdoor durability is limited typically to six to twelve months, depending on application. Exceptionally harsh UV and wet conditions can shorten exterior life. Exterior life can be extended by using a UV protective clear coating and edge sealer. Long-Term exterior versions may also be available.

The following are several popular descriptions of the types of product:

MULTI LENS: Metallized PVC films with continual repeat patterns of "three-dimensional" concave or convex lenses. Based on the Fresnel Lens principal, the effect is that of metallic spheres. Available in different lens sizes and colors.

DIFFRACTO-LITE: Metallized holographic and prismatic PVC films. Available in a broad range of light-diffracting patterns.





#### **GOLD LEAF FILM**



**SIGNGOLD SIGNGOLD** 

SignGold® is an ultrathin, 1 mil, 22 karat gold leaf film with a permanent self-adhesive for computer-aided sign making. SignGold® signage costs approximately 50% less than labor intensive "hand-guilded" gold leaf and eliminates costly re-gilding every few years. SignGold® may be used outdoors on glass, metal, painted wood, plastic and other commonly used sign making substrates. SignGold® cuts, weeds and applies easier. It also conforms to irregular surfaces and won't curl, crack, fade or peel. Performance of 10 years can be expected. Also available in other widths and patterns.

Catalog	Description/Pattern	Width	Roll Length	Application	Perforated or
Number		Inches	Yards	Surface	Un-Perforated
SIG-BRNISH22	Burnished Glass Gold	15"	2	2nd	Perforated
SIG-BRNISH25	Burnished Glass Gold	15"	5	2nd	Perforated
SIG-BRNISH30	Burnished Glass Gold	15"	10	2nd	Perforated
SIG-SG1FS-02	Florentine Swirl Gold	15"	2	lst	Perforated
SIG-SG1FS-05	Florentine Swirl Gold	15"	5	lst	Perforated
SIG-SG1FS-10	Florentine Swirl Gold	15"	10	lst	Perforated
SIG-SG1LET-02	Large Engine Turned Gold	15"	2	lst	Perforated
SIG-SG1LET-05	Large Engine Turned Gold	15"	5	lst	Perforated
SIG-SG1LET-45	Large Engine Turned Gold	24"	5	lst	Un-Perforated
SIG-SG1SET-02	Small Engine Turned Gold	15"	2	1st	Perforated
SIG-SG1SET-05	Small Engine Turned Gold	15"	5	1st	Perforated
SIG-SG1SS-02	Satin Gold	15"	2	1st	Perforated
SIG-SG1SS-05	Satin Gold	15"	5	1st	Perforated
SIG-SURFCE22	Surface Matte Gold	15"	2	2nd	Perforated
SIG-SURFCE25	Surface Matte Gold	15"	5	1st	Perforated
SIG-SNGDI550	Release Liner for SignGold	15"	50	-	Perforated





**Burnished Glass Gold** 

Florentine Swirl Gold





**Large Engine Turned Gold** 

**Small Engine Turned Gold** 





**Surface Matte Gold** 

#### **COBURN TMP FILM SERIES**

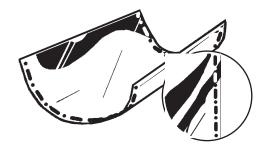
TMP films consist of a 3mil metalized PVC with a .9mil general purpose, clear permanent adhesive on a heavy weight lay flat liner. Smooth and textured metalized plastic (TMP) films offer an array of mirrored, brushed, leaf and other interesting patterns in both gold and silver. Available in 15" x 25' perforated or 24" non-perforated sizes. Sold by the roll.

An ODS Series with 5 year outdoor UV durability is also available.

#### ROYAL LEAF SIMULATED GOLDLEAF FILM

These perforated sheets are a very realistic imitation of gold leaf. Cuts just as easy as vinyl film. For indoor use only.

Catalog Number	Dimensions	Put Up
REF-GOLDLEAF	15" x 27"	5 Sheets









#### "R" APPLICATION TAPE

An economical white, translucent, standard weight saturated paper with high-tack adhesive for clean pick up and transfer of small and medium size lettering and graphics. Sold by the 100 yard roll.

Catalog Number	Description	Width (Inches)
Number 4075-1.25 4075-2.25 4075-3.25 4075-4.25 4075-5.25 4075-6.5 4075-8.5 4075-10.5	Description  White Paper	(Inches)  1.25 2.25 3.25 4.25 5.25 6.5 8.5 10.5 12.0
4075-14 4075-14.5 4075-15 4075-16	White Paper White Paper White Paper	14.0 14.5 15.0
4075-16 4075-18 4075-20 4075-24 4075-30	White Paper White Paper White Paper White Paper White Paper	16.0 18.0 20.0 24.0 30.0
4075-36 4075-48	White Paper White Paper	36.0 48.0

#### **E-Z TEAR APPLICATION TAPE**

AT42 series E-Z Tear application tape is a transparent, heavy guage, embossed, non-static polyethylene film with a medium-tack natural rubber adhesive. It is exceptionally easy to snap and tear. Handles like paper. Does not wrinkle or stretch. Its matte, non-glare surface enables perfect registration. Controlled adhesion sticks only when pressure is applied, with no build up of tack level. Sold by the 100 yard roll.

Catalog Number	Description	Width (Inches)
AT42RLA-1.25	Matte Clear	1.25
AT42RLA-2.25	Matte Clear	2.25
AT42RLA-3.25	Matte Clear	3.25
AT42RLA-4.25	Matte Clear	4.25
AT42RLA-5.25	Matte Clear	5.25
AT42RLA-6.5	Matte Clear	6.5
AT42RLA-8.5	Matte Clear	8.5
AT42RLA-10.5	Matte Clear	10.5
AT42RLA-12	Matte Clear	12.0
AT42RLA-14	Matte Clear	14.0
AT42RLA-15	Matte Clear	15.0
AT42RLA-16	Matte Clear	16.0
AT42RLA-18	Matte Clear	18.0
AT42RLA-20	Matte Clear	20.0
AT42RLA-24	Matte Clear	24.0
AT42RLA-30	Matte Clear	30.0
AT42RLA-36	Matte Clear	36.0
AT42RLA-48	Matte Clear	48.0



#### "R" CONFORM APPLICATION TAPE

Conform series application tape has an advanced release liner adhesion (RLA) technology designed with superior lay flat and conformability to resist tunneling, wrinkling and edge curling on rolled or stacked cut and printed vinyl graphics.

Sold by the 100 yard roll.

Catalog Number	Description	Width (Inches)
4075RLA-1.25	White Paper	1.25
4075RLA 1.25	White Paper	2.25
4075RLA-3.25	White Paper	3.25
4075RLA-4.25	White Paper	4.25
4075RLA-5.25	White Paper	5.25
4075RLA-6.5	White Paper	6.5
4075RLA-8.5	White Paper	8.5
4075RLA-10.5	White Paper	10.5
4075RLA-12	White Paper	12.0
4075RLA-14	White Paper	14.0
4075RLA-15	White Paper	15.0
4075RLA-16	White Paper	16.0
4075RLA-18	White Paper	18.0
4075RLA-20	White Paper	20.0
4075RLA-24	White Paper	24.0
4075RLA-30	White Paper	30.0
4075RLA-36	White Paper	36.0
4075RLA-48	White Paper	48.0
4075RLA-60	White Paper	60.0
		13.0

#### **CLEAR CHOICE APPLICATION TAPE**

AT-60 Clear Choice application tape is high quality, economical and it's exceptional clarity facilitates precise registration of graphics. A "Quick-Stick" adhesive system provides the necessary power to transfer stubborn vinyl graphics while it's rigid facestock provides excellent layflat to resist curling. Additional features include; non-stretching facestock, which minimizes misalignment problems, easily pulls apart without adhesive delamination if the adhesive side comes in contact with itself, easily unwinds and adhesive will not build or yellow over time. Sold by the 100 yard roll.

Catalog Number	Description	Width (Inches)
AT60-1.25	Clear	1.25
AT60-2.25	Clear	2.25
AT60-3.25	Clear	3.25
AT60-4.25	Clear	4.25
AT60-5.25	Clear	5.25
AT60-6.5	Clear	6.5
AT60-8.5	Clear	8.5
AT60-10.5	Clear	10.5
AT60-12	Clear	12.0
AT60-13	Clear	13.0
AT60-14	Clear	14.0
AT60-15	Clear	15.0
AT60-16	Clear	16.0
AT60-18	Clear	18.0
AT60-20	Clear	20.0
AT60-24	Clear	24.0
AT60-30	Clear	30.0
AT60-36	Clear	36.0
AT60-48	Clear	48.0

#### PREMIUM TAPES AND FILMS

Many other high performance tapes and films also available.





#### TransferRite



## **TRANSFER-RITE APPLICATION TAPE**

Transfer-Rite application tape has the proper adhesive tack to lift and transfer intricate graphics from vinyl film. 4.2 mil tape is available in 100 yard rolls.

Catalog	Width
Number	(Inches)
592U-1.25	1.25
592U-2.25	2.25
592U-2.5	2.5
592U-3.25	3.25
592U-4.25	4.25
592U-4.5	4.5
592U-5.5	5.5
592U-6	6.0
592U-6.5	6.5
592U-7	7.0
592U-8	8.0
592U-9	9.0
592U-10.5	10.5
592U-12	12.0
592U-12.5	12.5
592U-14	14.0
592U-14.5	14.5
592U-16	16.0
592U-18	18.0
592U-20	20.0
592U-24	24.0
592U-30	30.0
592U-33.5	33.5
592U-36	36.0
592U-48	48.0

#### **GERBER APPLICATION TAPE**

Standard tack application tape has a special tack adhesive to lift and transfer most graphics from vinyl film. High tack tape is useful when working with small copy. Clear application tape has grid lines that are useful when alining copy with existing reference. Available in 100 yard rolls.

Catalog Number	Description	Width (Inches)
P26517A P26518A P26519A P27961A P27962A P27963A P27964A P27965A P27966A	High Tack High Tack High Tack High Tack High Tack High Tack High Tack High Tack	.625 1.25 2.25 3.25 4.25 6.5 8.5 10.5 12.5
P26520A P26521A P26523A P26524A P26525A P26526A	Standard Tack	3.25 4.25 6.5 8.5 10.5 12.5
P37099A P26685A P26686A P26687A P26688A P26689A P26690A	Clear with Grid Clear with Grid Clear with Grid Clear with Grid Clear with Grid Clear with Grid Clear with Grid	1.25 2.25 3.25 4.25 6.5 8.5 10.5

#### **3M APPLICATION TAPE**

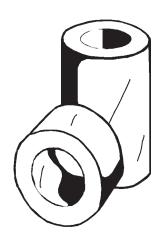
Series SCMPM3 tape is for general premasking, prespacing and application. Series SCPM44 is for preprinted or large graphics. Series SCPS2 is also for prespacing and application. Tape is sold in 100 yard rolls. 250 yard rolls also available.

Catalog	Width	Length
Number	Inches	(Yards)
MMM-SCPM3-24	24"	100
MMM-SCPM3-36	36"	100
MMM-SCPM3-48	48"	100
MMM-SCPM4424	24"	100
MMM-SCPM4436	36"	100
MMM-SCPM4448	48"	100
MMM-SCPS2-24	24"	100
MMM-SCPS2-36	36"	100
MMM-SCPS2-48	48"	100

#### **3M Application Tape Recommendations**

Product	Application	Pre-spaced
Unprinted 3M Scotchcal Film 3M Controltac Film 3M ScotchLite Sheeting	SCPM - 3	SCPM - 3 or SCPS - 2
7725SE Dusted Crystal and Fluorescent Frosted Crystal	SCPM - 3 SCPS - 2	SCPS - 2 SCPS - 53X





#### **3M THERMAL INK JET • TIJ**

#### Wide Format Media

#### **WEATHERABLE TIJ MEDIA**

Two weatherable products are available from 3M™; an opaque media for posters and signs and a translucent media for backlit graphics. Three overlaminates that provide additional UV and physical protection are also available. Overlaminates give graphics a lustre, matte or high-gloss finish and have a pressure sensitive clear adhesive for hot or cold lamination. Both medias can be used on flat or curved applications requiring up to 18 months weatherability outdoors, five years indoors. Graphics made by 3M™ TIJ Graphics Certified Fabricators using 3M™ components are both UV stable and water-fast. These graphics are covered by the 3M™ MCS™ (Matched Component System) warranty for a period of 1 year for exterior applications and 5 years for interior applications. Media can be stored up to one year without deterioration. For best performance store media in the original packaging in a relative humidity of 20% to 80% and a temperature of 40° to 80° F (4-27° C). A wide range of additional TIL media also available. wide range of additional TIJ media also available.

Catalog Number	Description	Thickness	Roll Width	Roll Length (Yards)
3637-20-3610	Translucent Imaging Media, Cast Vinyl	2mil	36"	10
3637-20-3625	Translucent Imaging Media, Cast Vinyl	2mil	36"	25
3637-20-4910	Translucent Imaging Media, Cast Vinyl	2mil	49"	10
3637-20-4925	Translucent Imaging Media, Cast Vinyl	2mil	49"	25
3657-10-4910	Opaque Imaging Media, Cast Vinyl	2mil	49"	10
3657-10-4925	Opaque Imaging Media, Cast Vinyl	2mil	49"	25
8522CP-3615	Opaque Imaging Media	7mil	36"	15
8522CP-5415	Opaque Imaging Media	7mil	54"	15
8519CP-3625	Lustre Overlaminate	2mil	36"	25
8519CP-5425	Lustre Overlaminate	2mil	54"	25
8520CP-5425	Matte Overlaminate	2mil	54"	25



#### **SHORT TERM TIJ MEDIA**

For indoor flat or curved applications. Media provides handling durability and gloss level control. Can be hot or cold laminated. A wide range of additional TIJ media also available.

Catalog Number	Description	For Plotters <sup>(1)</sup>	Thickness Inches	Roll Width	Roll Length (Yards)
8501-3625 8501H-3625	Clear Imaging Media, Polyester Clear Imaging Media, Polyester	N2, N3, LM, SG, HP, EP, HP750C/HP755C	4mil 4mil	36" 36"	25 25
8501CP-3610 8501CP-3625 8501CP-4910 8501CP-4925	Clear Imaging Media Clear Imaging Media Clear Imaging Media Clear Imaging Media	HP2000, HP2500, HP3000, HP3500	4mil 4mil 4mil 4mil	36" 36" 49" 49"	10 25 10 25
8504CP-3620 8504CP-5420	Changeable Opaque Imaging Media Changeable Opaque Imaging Media	HP3000, HP3500 HP3000, HP3500	4mil 4mil	36" 54"	20 20
8510-3625	Lustre Protective Finish, Vinyl Overlaminate w/PSA	-	2mil	36"	25
8511-3625	Matte Protective Finish, Vinyl Overlaminate w/PSA	-	2mil	36"	25
8512-3625	Hi-Gloss Protective Finish, Polyester Overlaminate w/PSA	-	2mil	36"	25
8572-3625 8572-4925	Translucent Backing Translucent Backing		2mil 2mil	36" 49"	25 25
8560-3525	Clear Application Adhesive		-	35"	25
NOTE: (1) Consult manufacturer's information before using.					



## AAZON

#### **AZON COLOR MEDIA**

AzonColor® Inkjet Media is designed for use in inkjet printers. Available in a wide variety of widths and types. AzonColor® Media is suitable for use in display graphics, signs, trade show graphics, banners, murals, point-of-purchase and backlit signage. Other uses include posters, framed art, overlays and wall hangings. The following pages represent many of the Azon products most commonly used and stocked. Most products are an ideal match with most printers. Some product series numbers are followed by an "HP" or "N" suffix. In most cases an "HP" suffix notes the product is an ideal match for Hewlett Packard printers and a few others. In most cases, an "N" suffix notes the product is an ideal match for Encad printers and a few others. Items that do not have a suffix after the series number are an ideal match or are recommended for CAD line-work and/or light ink coverage for most all printers. Consult the Azon compatibility chart in the Azon catalog prior to use. Other widths and types also available.

#### **POWER PAPER • 735**

The combination of a water-resistant inkjet coating along with the high quality of this specially formulated wet strength base paper provides a broad range of applications. Perfect for outdoor posters and a great product for uses that require added handling characteristics.

Catalog Number	Description	Width	Length (Feet)
AZ-735-36100	Power Paper	36"	100
AZ-735-50100	Power Paper	50"	100
AZ-735-54100	Power Paper	54"	100

#### **POWER PAPER FAUX ARTIST CANVAS • 736**

The combination of a proprietary water-resistant inkjet coating along with the high quality of this specially formulated wet strength base paper provides for a broad range of applications and uses. Perfect for faux fine art.

Catalog Number	Description	Width	Length (Feet)
AZ-736-3660	Power Paper Faux Artist Canvas	36"	60
AZ-736-5060	Power Paper Faux Artist Canvas	50"	60
AZ-736-5460	Power Paper Faux Artist Canvas	54"	60

#### **ADVANTAGE COLOR PAPER • 717**

A water resistant, color paper that offers exceptional image resolution. Its bright white base is perfect for economical, everyday color printing. Its special backcoat makes for a flatter sheet and its 24lb. base is ideally suited for all types of graphic and CAD applications.

#### PREMIUM COLOR PAPER • 747

This specially formulated bond is perfect for applications that require extremely high resolutions. Its low dot gain allows for a broader color spectrum and produces crisper, cleaner finished prints. Its 27lb. weight reduces bleed through or cockling and prevents head crashing, normally associated with heavy ink lay down.

#### **ECONOMICAL HEAVY WEIGHT PAPER • 749**

A lighter weight version of 746 except coated on one side. Weighs in at 36lb. and offers an economical choice for wide format color printing.

#### **HEAVY WEIGHT PREMIUM 2 SIDED PAPER • 746**

Because both sides are printable, this premium coated paper is perfect for proofing applications. Its coating provides brilliant, crisp images and the heavy weight of the product eliminates show-through. Even when two-sided printing is not the requirement, this double-coated paper will provide a durable output capable of handling volume ink saturation.

#### **CLEAR FILM • 787N**

A 4mil clear film with an opaque, white paper interleaved to ensure printer recognition. Designed for all types of multi-layered imaging, signage and overlays. Interleaf also reduces registration problems and slippage.

#### **POWER PAPER ADHESIVE BACK • 737**

Power Paper Series 735 combined with a permanent adhesive coating. This great product could prove to be the most important item in the Azon product line as its uses are endless.

Catalog Number	Description	Width	Length (Feet)
AZ-737-3660 AZ-737-4260 AZ-737-5060 AZ-737-5460	Power Paper Adhesive Back Power Paper Adhesive Back Power Paper Adhesive Back Power Paper Adhesive Back	36" 42" 50" 54"	60 60 60

#### **ALTERNATIVE PHOTO BASE • SATIN • 755N**

Alternative Photo Base (APB) produces the same high-quality look of glossy or matte photo base after lamination at a more economical and affordable price. Another benefit is that the waiting time to take the image to a laminator is eliminated. APB needs only minutes to dry, not hours and it's ready to laminate.

Catalog Number	Description	Width	Length (Feet)
AZ-755N36100	Alternative Photo Base Paper, Satin	36"	100
AZ-755N54100	Alternative Photo Base Paper, Satin	54"	100

## **AAZON**

#### AZON COLOR MEDIA cont.

#### **SEMI-MATTE PHOTOGRAPHIC • 756N**

Semi-Matte Photographic Paper produces deep, rich colors of incredible density. The semi-matte surface offers an expanded viewing angle without the reflections and glare found with a glossy surface.

Catalog Number	Description	Width	Length (Feet)
AZ-756N24100	Photographic Paper, Semi-Matte	24"	100
AZ-756N36100	Photographic Paper, Semi-Matte	36"	100
AZ-756N50100	Photographic Paper, Semi-Matte	50"	100
AZ-756N54100	Photographic Paper, Semi-Matte	54"	100
AZ-756N60100	Photographic Paper, Semi-Matte	60"	100

#### **GLOSSY PHOTOGRAPHIC • 758N**

Glossy Photographic is perfect for presentations and graphic applications. Inks that are applied take on a glossy sheen that makes them leap off the paper.

Catalog Number	Description	Width	Length (Feet)
AZ-758N36100	Glossy Photographic Paper	36"	100
AZ-758N54100	Glossy Photographic Paper	54"	100

#### DISPLAY GRAPHICS FILM • 766HP & 766N

AZONcolor 10 mil Polycarbonate Film eliminates a step and saves time and money in the process. For large display graphics, most output vendors overlaminate graphic output with heavyweight, scuff-resistant polycarbonate film for protection and glare reduction. With this film, graphics can be printed in reverse, then turned over for mounting without overlamination. Applications for such a versatile and durable product are endless. Recommended for use with dye-based inks only.

Catalog Number	Description	Width	Length (Feet)
AZ-766HP3660	Display Graphics Film	36"	60
AZ-766HP5460	Display Graphics Film	54"	60
AZ-766N3660	Display Graphics Film	36"	60
AZ-766N5060	Display Graphics Film	50"	60

#### **ADHESIVE BACKED VINYL • 770N**

Adhesive Backed Vinyl adds design flexibility to inkjet media. It has the same look and superior imaging quality found in AZON's Glossy Photographic Paper Series 750N, with an adhesive backing that allows for many mounting options. Adhesive Backed Vinyl is normally used for indoor applications. For outdoor applications it is recommended that this product be overlaminated for protection against abrasion, moisture and image fade from UV light exposure.

Catalog Number	Description	Width	Length (Feet)
AZ-770N2460	Adhesive Backed Vinyl	24"	60
AZ-770N3660	Adhesive Backed Vinyl	36"	60
AZ-770N5060	Adhesive Backed Vinyl	50"	60
AZ-770N5460	Adhesive Backed Vinyl	54"	60

#### **VIEW THRU FILM • 777N**

AZONcolor View Thru Film is among the most popular products for inkjet output today. This patented semi-opaque film is designed specifically for backlit applications and offers extremely high color fidelity with all types of backlit fixtures. Because this film is semi-matte, there is no need to add a diffuser between the output and light source. The new "instant dry" coating allows immediate handling of the print. Recommended for use with dye-based inks only. Also available in HP version. Consult compatibility chart in Azon catalog.

Catalog Number	Description	Width	Length (Feet)
AZ-777N36100	View Thru Film	36"	100
AZ-777N50100	View Thru Film	50"	100
AZ-777N54100	View Thru Film	54"	100

#### WHITE OPAQUE FILM • 797N

AZONcolor White Opaque Film is an extremely durable, glossy, high-resolution, color inkjet film offering superb brilliance. Reverse side show-through is totally eliminated because this film does not break down during heavy ink application. An ideal product for presentation imaging as well as large format display/poster printing.

Catalog Number	Description	Width	Length (Feet)
AZ-797N36100	Opaque Film	36"	100
AZ-797N42100	Opaque Film	42"	100
AZ-797N50100	Opaque Film	50"	100



## **AAZON**

#### **AZON OUTDOOR MEDIA**

#### **POLYETHYLENE BANNER • 810**

AZONcolor Polyethylene Banner material is durable and water resistant. An ultra smooth surface provides excellent imaging results. Pigmented inks are recommended for outdoor applications, however, dye-based inks may be used for indoor applications.

Catalog Number	Description	Width	Length (Feet)
AZ-810-3650	Banner Material	36"	50
AZ-810-5350	Banner Material	53"	50

#### MATTE ADHESIVE-BACKED VINYL • 850

This adhesive-backed matte vinyl material has a water-resistant coating that allows for vibrant, beautiful imaging with a matte surface which allows for a wide viewing angle. It has a repositionable adhesive layer for flexibility and multiple use applications.

Catalog Number	Description	Width	Length (Feet)
AZ-850-3640	Adhesive-Backed Vinyl, Matte	36"	40
AZ-850-4240	Adhesive-Backed Vinyl, Matte	42"	40
AZ-850-5040	Adhesive-Backed Vinyl, Matte	50"	40
AZ-850-5440	Adhesive-Backed Vinyl, Matte	54"	40
AZ-850-6040	Adhesive-Backed Vinyl, Matte	60"	40

#### **SCRIM VINYL • 820**

Premium Scrim Vinyl material provides a great deal of opacity for banner applications. Its opacity minimizes show-through from sunlight and other factors. Reinforced layer provides excellent durability for both indoor and outdoor applications and the inkiet coating allows for high-end, water-resistant imaging.

Catalog Number	Description	Width	Length (Feet)
AZ-820-2440	Scrim Vinyl	24"	40
AZ-820-3640	Scrim Vinyl	36"	40
AZ-820-5040	Scrim Vinyl	50"	40
AZ-820-6040	Scrim Vinyl	60"	40

#### **REINFORCED POSTER PAPER • 830**

Combining wet strength paper with nylon reinforcement, this paper becomes a very durable outdoor poster material. An economical alternative to high-end banner materials, especially for short-term indoor or outdoor use.

Catalog Number	Description	Width	Length (Feet)
AZ-830-3675	Reinforced Poster Paper	36"	75
AZ-830-5475	Reinforced Poster Paper	50"	75

#### **TYVEK BANNER • 840**

Tyvek Banner media is designed for both indoor and outdoor applications. The water resistant and tear resistant surface, combined with pigmented inks provides the fade resistance, longevity and durability needed for outdoor banner applications.

Catalog Number	Description	Width	Length (Feet)
AZ-840-3650	Tyvek Banner Material	36"	50
AZ-840-5450	Tyvek Banner Material	50"	50

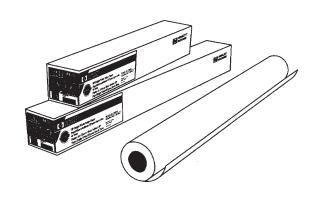


### **HEWLETT PACKARD DESIGNJET PRINTER SUPPLIES**

#### **HP DESIGNJET PAPERS**

Works with HP DesignJet CP Ink systems and HP DesignJet 2500CP/2000CP printers as a total printing solution for clear, sharp results. Excellent image quality on a wide variety of new HP DesignJet papers and film. HP coated paper for exceptional quality everyday prints. HP heavyweight coated papers for final presentations and displays. HP High-Gloss photo paper for high impact, photo-realistic images and graphics. HP semi-gloss paper for vivid, photo-realistic images and graphics. HP high-gloss white film for brilliant color, ultra-high gloss, extra fade-resistant images and graphics. All other Hewlett Packard imaging materials also available.

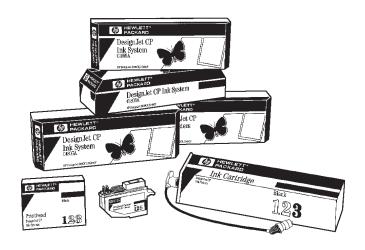
Catalog	Description	Roll	Roll
Number		Width	Length
HEW-C6019A	Coated Paper	24"	150'
HEW-C6020A	Coated Paper	36"	150'
HEW-C6560B	Coated Paper	54"	150'
HEW-C6021A	Heavyweight Coated Paper	24"	100'
HEW-C6030C	Heavyweight Coated Paper	36"	100'
HEW-C6652B	Heavyweight Coated Paper	54"	100'
HEW-C6023A	Semi-Gloss Photo Paper	24"	100'
HEW-C6024A	Semi-Gloss Photo Paper	36"	100'
HEW-C6564A	Semi-Gloss Photo Paper	54"	100'
HEW-C6025A	High-Gloss Photo Paper	24"	100'
HEW-C6026A	High-Gloss Photo Paper	36"	100'
HEW-C6566A	High-Gloss Photo Paper	54"	100'
HEW-C1861A	Bright White 24lb.	36"	150'
HEW-C3885A	High-Gloss White	36"	70'



#### **HP DESIGNJET CP INK SYSTEMS**

Water soluble and UV inks.

Catalog Number	Color
HEW-C1806A	Black
HEW-C1807A	Cyan
HEW-C1808A	Magenta
HEW-C1809A	Yellow
HEW-C1892A	Black (UV)
HEW-C1893A	Cyan (UV)
HEW-C1894A	Magenta (UV)
HEW-C1895A	Yellow (UV)
HEW-C4844A	Black (Series 500)
HEW-C4911A	Cyan (Series 500)
HEW-C4912A	Magenta (Series 500)
HEW-C4913A	Yellow (Series 500)





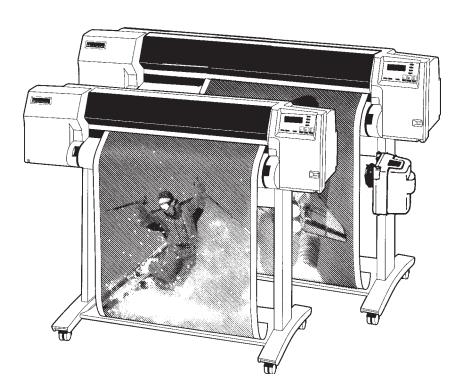


#### **HEWLETT PACKARD DESIGNJET GRAPHIC PRINTERS**

Hewlett Packard has a full range of large format printers. Available in 36" or 54" widths, the HP 54" DesignJet 3000CP and 3500CP printers combine low operating cost, hassle-free use and outstanding image quality. A menu-driven control panel reduces training time and operator error. Built-in temperature and humidity sensors automatically adjust drying time so there is no need for constant supervision. Ink delivery system detects and bypasses clogged nozzles to ensure consistently reliable operation. HP DesignJet 2000CP (8 MB RAM) and 3000CP (12 MB RAM) printers require an external RIP or the supplied Microsoft Windows or AutoCAD drivers. HP DesignJet 2500CP (20 MB RAM) and 3500CP (36 MB RAM) come with built-in Adobe PostScript 3 RIP and ethernet connectivity. The HP 3000CP and 3500CP printers come standard with a take-up reel.

Produce photo-quality images with brilliant, accurate colors and smooth, subtle skin tones. HP DesignJet printers, ink systems and media are designed together for optimum image quality. Supports two ink sets; dye-based inks for photo-quality images and pigment-based UV inks for enhanced light-fastness with 3M MCS warranty. Auto-replenishment ink delivery system makes ink replacement clean and easy. Prints up to 400, 2' x 3' prints per dye-based ink system. Accepts a wide range of media including coated papers, glossy photo papers, vinyl and more. One year warranty with free on-site service and preventative maintenance if needed for high-volume users. Includes custom drivers for AutoCAD and Windows.

Many other Hewlett Packard printers and accesories also available.



#### HARTCO SANDMASK STENCIL MATERIAL

Hartco Sandmask is a polyvinylchloride product. Resists sandblasting over applied areas on wood, glass, polyurethane foam, fiberglass and other similar substrates. HAR-135 is used primarily for hand cut operations. HAR-425 is used with plotters. Sold by the roll.

Catalog Number	Width	Roll Length	Thickness	Blade Angle	Perforated or Non-Perforated
HAR-135-S15	15"	10 Yards	35 mil	60°	Non-Perforated
HAR-135-S30	30"	10 Yards	35 mil	60°	Non-Perforated
HAR-310-S25	25"	20 Yards	10 mil	60°	Non-Perforated
HAR-310-S30	30"	20 Yards	10 mil	60°	Non-Perforated
HAR-S425-S15 HAR-425-SP15 HAR-425-S25 HAR-425-S30	15" 15" 25" 30"	10 Yards 10 Yards 10 Yards 10 Yards	25 mil 25 mil 25 mil 25 mil	60° 60° 60°	Non-Perforated Perforated Non-Perforated Non-Perforated



#### ANCHOR SIGNBLAST STENCIL MATERIAL

Anchor stencil products offer super tough blast resistance, clean precise reproductions of even the most intricate designs, cutting ease and is available in a variety of sizes to fit all plotters. Many other Anchor brand materials also available. Sold by the roll.

Style 111: A medium-tack stencil for use on prepainted or soft wood surfaces. Designed specifically for easy hand-cutting. White release liner is easily removed.

Style 116: A high-tack computer stencil for use on raw wood surfaces and urethane foamboard. Features trimmed edges and a strong, clear film liner that offers easy alignment and smooth, precise running on computerized signmaking machines. CAUTION: This stencil has a very aggressive adhesive and is not recommended for use on some woods without first testing a sample piece. Do not use on prepainted. pretreated or glass surfaces.

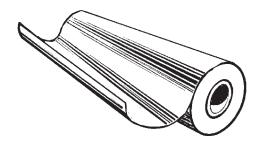
Style 117: Medium-tack version of style #116, specially designed for pretreated and prepainted surfaces. Excellent for soft woods without the risk of surface lift. Can also be used safely on glass, tile and pretreated urethane foamboard. Trimmed edges allow smooth, accurate tracking through computerized signmaking machines. A strong, clear film liner provides extra rigidity.

Style 125: A high-tack stencil designed for sandblasting on raw wood and urethane foamboard. Has easy-release orange liner. The strength of the adhesive eliminates the need for filler or spray adhesives. CAUTION: This stencil has a very aggressive adhesive and is not recommended for use on some woods without first testing a sample piece. Do not use on prepainted, pretreated or glass surfaces.

Style 157: Same construction as medium-tack #117 compuer stencil, except that the hole pattern is for use on standard 1/2" center sprocket system machines. NOTE: style #157 will not work on large pin 30" plotters: style #117 is recommended for this use.

Catalog Number	Width	Roll Length	Tack	Perforated or Non-Perforated
ANC-111-2510	25"	10 Yards	Low	Non-Perforated
ANC-116-1510 ANC-116-3010	15" 30"	10 Yards 10 Yards	High High	Non-Perforated Non-Perforated
ANC-117-1510 ANC-117-3010	15" 30"	10 Yards 10 Yards	Medium Medium	Non-Perforated Non-Perforated
ANC-125-2510	25"	10 Yards	High	Non-Perforated
ANC-157-3010	30"	10 Yards	Medium	1/2" Perforated



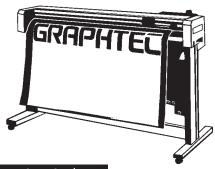






#### **GRAPHTEC CUTTING PRO SERIES HIGH PERFORMANCE CUTTER/PLOTTERS**

Every Graphtec plotter is capable of cutting vinyl, adhesive film, reflective film, film for illuminated signs, rubyliths and sandblast rubber. In addition, Cutting Pro plotters are fully compatible with over 50 sign systems and software packages. High performance Cutting Pro series features 56ips top speed and intelligent tangential control with 500g of cutting force that suits the heaviest of sign production needs, yet offers smooth and precise cutting of the most detailed of graphics. With its user-friendly Accuload media alignment, multi-job-ready configuration for plot, cut and pounce operations, eight programmable user settings for instantaneous recall and setup, the FC5100 series is one of the most sophisticated and dependable sign making tools for the versatility required in todys diversified sign crafting environment.



Catalog Number	Dimensions/ Movement	<b>Dimensions</b> W x D x H	Max. Cutting Width / Length	Material Width	Cutting Speed Axial / Diagonal
GRAFC510075	30" Friction Feed	44.7" x19.1" x 13.8"	29.8" / 164'	6.3" to 36"	39.4ips / 55.7ips
GRAFC5100100	42" Friction Feed	56.7" x 26.8" x 46.3"	42" / 164'	6.3" to 48"	39.4ips / 55.7ips
GRAFC5100130	54" Friction Feed	66.9" x 26.8" x 46.3"	54" / 164'	6.3" to 59"	39.4ips / 55.7ips

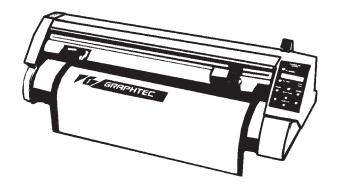
#### **GRAPHTEC CUTTING PRO SUPPLIES & ACCESSORIES**

Catalog Number	Description	Put Up
GRA-CB09UA-5	Blade, Supersteel, .9mm, All Purpose	1/5
GRA-CB15U-5	Blade, Supersteel, 1.5mm, for Thick Material	Pkg. 5
GRACB15UAK30	Blade, Supersteel, 1.5mm, for Sandblast & Reflective Stencil	1/5
GRAPHP32CB09	Holder for .9mm Blade	1
GRAPHP32CB15	Holder for 1.5mm Blade	1
PHP32-CB15N1	Holder for Sandblast & Reflective Stencil 1.5mm Blade	1
GRA-KF552BK	Black Fiber Tip Pen, Disposable Water-Based	1/5
GRA-KF552RD	Red Fiber Tip Pen, Disposable Water-Based	1/5
GRA-KF562BK	Black Fiber Tip Pen, Disposable Solvent-Based	1/5
GRA-KB542BK	Black Roller-Ball Pen, 3mm Wide, Water Based Ink	1/5
GRA58000017T GRA58000018T GRA58000019T GRA58000020T	Stand for 30" GRAFC5100-75 Plotter Media catch basket for 30" GRAFC5100-75 Plotter Media catch basket for 42" GRAFC5100-100 Plotter Media catch basket for 54" GRAFC5100-130 Plotter	1 1 1

#### **GRAPHTEC CE2000 SERIES CUTTER/PLOTTER**

The CE2000 is an entry level low cost cutter/plotter that retains many of the features that make the FC Cutting Pro series so popular: Interactive LCD panel for intuitive operation, copy function for repeat jobs, 2 MB buffer, precision media supply system and an optional floor stand. Its advanced digital servo drive system engineered with Graphtec's technology provides the same level of cutting quality as the company's high-end FC Cutting Pro series plotter. Cutting speed remains a fast 24" per second for the CE2000-60 and 40" per second for the CE2000-120.

Catalog Number	Description
GRA-CE200060 GRACE2000120	Max. Cutting Area 23.0" x 164', Cutting Speed 24ips Max. Cutting Area 48" x 164', Cutting Speed 40ips
GRA-CE2K60FS	Floor Stand for 24" CE2000-60 Plotter



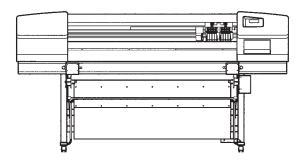


#### GRAPHTEC SIGNJET PRO SERIES COMBINATION PRINTER/CUTTER/PLOTTERS

By adapting wide-format inkjet technology to Graphtec cutting plotters, SignJet Pro prints photo-realistic images onto a variety of media allowing on-demand contour cutting of the printed design. SignJet Pro also functions as a professional cutting plotter at speeds and reliability comparable to Graphtec's Cutting Pro series. Graphtec's SignJet Pro is extremely versatile and capable of printing with UV-resistant inks to create vibrant outdoor signage with color that lasts.

SignJet Pro is available in 42" and 60" widths and features Graphtec's proprietary dual-head configuration that enables fast 600dpi resolution printing via 512 nozzles per color. In addition to inkjet imaging vinyl, SignJet Pro can print on photo gloss, semi-gloss, clear or ultra white film, specialty or premium matte, backlit display film, canvas and self adhesive vinyl. SignJet Pro is compatible with Raster/Print Mode-HP-RTL and Vector/Cutting Mode-HP-GL and GP-GL command formats.

Catalog Number	Dimensions W x D x H	Max. Loadabl Film Width	e Max. Printing Cutting Area (1)	Cutting Speed	Stand
GRA-JX2150	106" x 29" x 55"	60"	(Cutting) 60" x 165' (Printing) 60" x 99'	Axial: 36ips	Included
GRA-JX2100	89" x 29" x 55"	42"	(Cutting) 42" x 165' (Printing) 42" x 99'	Axial: 36ips	Included
NOTE: (1) Expand Mode.					



#### **GRAPHTEC SIGNJET STARTER SUPPLY KITS**

Catalog Number	Description	
GRA-JX2ST-1 GRA-JX2ST-2	UV Ink System CMYK Set Dye Ink System CMYK Set	
GRA-JX2ST-3 GRA-JX2ST-4 GRA-JX2ST-5 GRA-JX2ST-6	UV Ink CMYK Set & 1 Roll of 42" x 50' DuraVinyl Matte Vinyl UV Ink CMYK Set & 1 Roll of 36" x 40' Water Resistant Matte Vinyl Dye Ink CMYK Set & 1 Roll of 42" x 100' Premium Photo Gloss Paper Dye Ink CMYK Set & 1 Roll of 42" x 100' Premium Photo Satin Paper	

#### **GRAPHTEC SIGNJET ACCESSORIES**

Catalog Number	Description
GRA-RSK0003 GRA-RSK0004	Stand-mounted Roll Media Supply System for Vinyl Cutting for the GRA-JX2150 Stand-mounted Roll Media Supply System for Vinyl Cutting for the GRA-JX2100
GRA-PG0008 GRA-PG0009	Front and Rear Media Catch Basket for the GRA-JX2150 <sup>(1)</sup> Front and Rear Media Catch Basket for the GRA-JX2100 <sup>(1)</sup>
GRA-TU0001 Replacement Tubing System for Quick Ink Type Switch-over (8 lines per system) for the GRA-JX2150 Replacement Tubing System for Quick Ink Type Switch-over (8 lines per system) for the GRA-JX2100	
NOTE: (1) Media basket c	an only be used when the GRA-RSK0003 or GRA-RSK0004 roll stocker has been mounted.





#### FLEXI 7 SOFTWARE



The Flexi Family 7 consists of five products which cater to specific user levels and production goals. Scanvec Amiable offers benefits such as increasing user productivity, providing for quicker upgrades and language conversions and producing an easy-to-use, intuitive interface that will be comfortable for new and existing Flexi 7 users. All products in the Flexi Family 7 are available for Windows 95/98, Windows NT/2000/XP and Macintosh. Highlights of each software products are as follows:

#### FLEXISIGN-PRO • SCA-FLEX-PRO

FlexiSign-Pro is designed and engineered to be the total solution for any signmaking business. It features OLE, advanced bitmap filters and editing, RIPing tools, all special effects along with full vinyl cutting and color printing features including Adobe PostScript 3, ICC color profile support, Pantone® and vinyl color libraries. Includes direct drivers for popular inkiet, thermal transfer and print/cut devices, and vinyl cutters.

#### FLEXIEXPERT • SCA-FLXPRT

FlexiExpert is packaged for the professional signmaker who requires advanced vinyl cutting and bitmap editing tools, but does not need all the advanced color printing features. FlexiExpert features full design, scanning, and tracing functions, along with special effects, vinyl cutting and basic large-format color printing features. Also includes Job Estimator for accurate project management, design templates for faster production, direct drivers for popular inkjet, thermal color transfer and print/cut devices as well as drivers for vinyl cutters.

#### **FLEXISIGN • SCA-FLXSIGN**

FlexiSign, the signmaking software of choice offers all of the necessities for any sign business. Included in this complete design and cutting program are such features as import/export files, scanning and grayscale tracing, full text manipulation, vinyl libraries, multiple un-dos and re-dos, drag and drop color and stroke support. It also includes direct drivers for the industry's popular cutters and plotters.

#### FLEXILETTER • SCA-FLXLETTR

FlexiLetter is an entry-level design and cutting software that features import/export of files, full text manipulation, and direct drivers for the industry's most popular vinyl cutters.

#### **FLEXIDESIGNER • SCA-FLXDSGNR**

FlexiDesigner is a pure software design program that is used in a second design-only or sales station in which layouts can be shown to customers without tying up the production line. It has all of the advanced design, layout and image editing features of FlexiSign-Pro to prepare files for output on another FlexiSign-Pro station.

#### PARALLEL INTERFACE ADAPTER • SCA-PIACABLE

For Macintosh serial to parallel port connection.



#### MATSER DESIGNS BY BERGEN



#### **MASTER DESIGNS SIGN LAYOUT COLLECTION • SCA-MD-SLC**

The Master Designs by Bergen Sign Layout Collection contains sixty-four sample designs with many changeable layouts to choose from. This collection includes a dynamic array of eleven color backgrounds with twenty-seven different color combinations in each. Can be used to easily produce designs by changing the layout, text, fonts, size, shape or distortion with choice of color background. Additional features and capabilities include custom gradient fills and advanced color samples.

#### **MASTER DESIGNS CUSTOM FILLS COLLECTION • SCA-MD-CFC**

The Master Designs by Bergen Custom Fills Collection is used to add texture fills such as Diamond Plate, Gold Diamond Plate, Carbon Fiber and Custom Flame to text or graphics. Also includes examples of eight different custom flames and ten color layouts. Additionally, it is designed to use CMYK inks and foils, eliminating the need to use special materials or proofing to premium media.

#### MASTER DESIGNS METAL MANIA COLLECTION • SCA-MD-MMC

The Master Designs by Bergen Metal Mania Collection allows the addition of custom metal fills into any text or graphic. Metal Mania has forty-two custom fills that include realistic Gold Leaf, Engine Turn, Brushed Cylinder and Plated. Every metal effect can be given an extra boost by choosing a variety of colors such as gold, bronze, blue, green, purple, silver, orange and red. Designed to use CMYK inks and foils therefore special materials are not needed and a desktop printer can be used for proofing.



#### PHOTOPRINT 3



Scanvec Amiable PhotoPrint 3 is a family of professional digital printing and RIP software that offers versatility, productivity and quality output to meet diverse industry requirements. PhotoPrint 3 includes all of the latest technologies such as certified Adobe PostScript 3, ICC technology and direct drivers for all major output devices.

#### PHOTOPRINT SE • SCA-PP-SE

PhotoPrint SE is an entry-level single printer and single workstation RIP package for the Mac and PC platform. PhotoPrint SE works seamlessly through popular design software such as Adobe Photshop, Illustrator, QuarkXepress, CorelDraw and all major CAD/AEC/GIS engineering solutions.

#### PHOTOPRINT DX • SCA-PP-DX

PhotoPrint DX includes all of the features of PhotoPRINT SE plus image editing and layout tools and the ability to produce output for contour cutting on a vinyl cutter.

#### PHOTOPRINT SERVER • SCA-PP-SRVR

PhotoPrint Server is a client-server RIP designed for networked and large production environments. PhotoPrint DX is included as the client software.

#### PHOTOPRINT SERVER-PRO • SCA-PP-SP

PhotoPrint Server-Pro has all of the features of PhotoPrint Server and includes the addition of PhotoPrint Editor. PhotoPrint Editor, which is only available with PhotoPrint Server-Pro, provides the added capabilities such as color calibration, auto serialization and templating.





#### **WORKFLOW AND RIP SOFTWARE**

Workflow and RIP software from Onyx takes the mystery out of color printing making it possible for graphics professionals to produce large format output from popular inkjet printers quickly and accurately the first time, every time.

#### ONYX RIPCENTER • OCE-ONYX-RC

Onyx RIPCenter is an economical, stand alone entry level software package that features ease of use and the ability to achieve professional color "out of the box". RIPCenter includes a PostScript RIP, Raster RIP, automatic tiling, job thumbnail and print nesting previews and support for one active printer with multiple "hot folders".

#### **ONYX POSTERSHOP • OCE-ONYX-XT**

Onyx PosterShop includes all of the features of RIPCenter with the addition of PreFlight and Media Manager. PreFlight features interactive sizing, cropping, custom tiling and pan and zoom. Media Manager is used to recalibrate the printer to print media as needed to meet changing print conditions. Media Manager also allows for the import and application of custom ICC profiles as well as creating and editing density calibration tables and controling ink restrictions.

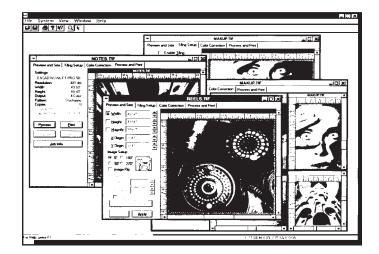
#### ONYX PRODUCTIONHOUSE • OCE-ONYX-PH

Onyx ProductionHouse includes all the features of PosterShop with the added ability to control three or more printers and Step & Repeater. Additionally, ProductionHouse software can concurrently execute two PostScript RIPs while sending output to multiple printers. Step & Repeater adds the ability to do seamless pattern tiling

ProductionHouse includes two PostScript RIPs, one raster RIP and support for four active printers with multiple "hot folders". Also included are media management, calibration, pre-flight preview, custom tiling and color correction, and Step & Repeater.

#### **ONYX UPGRADES**

Software upgrades from one level to another and from older versions are also available. Call for more information.



### **COMPUTER SYSTEMS**



### For Computer Aided Sign Making

A computer system can be configured for computerized sign making environments ranging from the smallest of shops to the most demanding design and production operations. We can also custom configure a system from our large selection of processors, memory, drives and monitors. Additionally we offer a number of system accessories such as scanners, modems, tape drives, sound cards, networking hardware and production hardware.



Computer graphics systems can be customized to any specification or configured by recommendation.

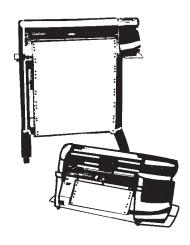




#### **PLOTTERS**

All Gerber plotters are open architecture. Plotters will plot and cut text and graphics using many popular design software packages with HPGL drivers as well as with the Graphix Advantage systems.

All 15" sprocket-driven plotters are fully compatible with the Gerber Edge for cutting printed graphics.



#### **GERBER ENVISION 375 PLOTTER**

Servo motor-driven, sprocket plotter that uses 15" (381mm) punched materials. Plots and cuts graphics up to 13.25" (337mm) in height at high speeds with a maximum of 36" per second on axis (50" per second on diagonal) and accelerations up to 3g's. Utilizes a swivel knife for optimal cutting of all Gerber materials and many others. Includes a knife tool holder and 45 degree blade, two additional 45° blades and 4 rollerball pens.

P66141A

#### GERBER ENVISION 750 PLOTTER • P65509A

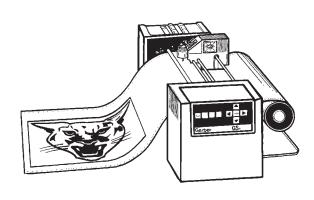
Servo motor-driven, sprocket plotter that uses 30" (762mm) punched materials. Plots and cuts graphics up to 27.25" (692mm) in height at high speeds with a maximum of 36" per second on axis (50" per second on diagonal) and accelerations up to 3g's. Utilizes a swivel knife for optimal cutting of all Gerber materials and many others. Includes an accessory kit, knife tool holder and 45° blade, two additional 45° blades, plotter stand and 4 rollerball pens.

P65509A

#### **GSX PLUS PLOTTER**

Stepper motor-driven, sprocket plotter that uses 15" (381mm) perforated materials. Plots and cuts text and graphics up to 13.25" (337mm) in height utilizing a swivel knife only. Includes an accessory kit, knife blade holder and blade, pen and material roll holder.

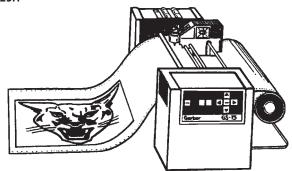
#### P55161A



#### **GS15-PLUS PLOTTER**

Stepper motor-driven, sprocket plotter that uses 15" (381mm) perforated materials. Plots and cuts text and graphics up to 13.25" (337mm) in height. Features "KMS" Knife Mode Switching<sup>TM</sup> technology which utilizes either a tangential-steered blade or a swivel knife for optimal cutting of all Gerber material and many others. Includes an accessory kit, knife blade holder and blade, pen, pounce wheel and material roll holder.

#### P55225A





### **PLOTTER ACCESSORIES**

# GS15<sup>Plus</sup>, HS15<sup>Plus</sup>, GS750<sup>Plus</sup>, HS750<sup>Plus</sup>, GS15, HS15, GS750, HS750, SPRINT IIB & SUPERSPRINT PLOTTERS

Ball Point Pen, Black Ball Point Pen, Blue Ball Point Pen, Red	P32433A P32432A P32431A	Job Card, 100/Package Knife Holder w/30° SuperSharp Blade	P38074B P56734A	
Pen Holder w/Black Pen	P66925A	Knife Holder w/30°	P26660B	
Pen Holder w/o Pen	P32434B	SuperSharp Blade, Gua	rded	
Carbide Knife Blade, 30°	P17156B	Material Roll Holder, 15"	P26381D	
Carbide Knife Blade, 45°	P33489B	PC-to-Plotter Cable, 30 ft.	P61415C	
Carbide Knife Blade, 60°	P37311B	PC-to-Plotter Cable, 50 ft.	P61414C	
Fine Pounce Wheel,	P25032B	Pen Height Adjustment Tool	P28842B	
11 Teeth 1/4" Diameter	r	Pounce Wheel Holder	P29508B	
Fuse, 3-Amp, 3AG, 250V GS15	P38643B	w/Fine Pitch Wheel, 11 Teeth, 1/4" Dia.		
Fuse, 5-Amp, 3AG, 250V HS1	15 <b>P32356B</b>	Squeegee	P23541C	
GS Drag Knife Assembly <b>P56518B</b>		SuperSharp Carbide	P30033B	
w/Shoe and Drag Knife	Blade	Knife Blade, 30°		
GS Drag Knife Blade	P44985B	Tool Cap	P17189B	
Hex Allen Wrench, .062"	P25934A	Tool Inserts	P29506B	
HS Swivel Knife Assembly	P56530B	Tweezers	P25933A	
w/Shoe and 2 Blades		Film Stripping Tool	P73983A	
HS Swivel Knife Blade	P56928B	Rivet Brush Applicator	P42887A	

### S750, SIGNMAKER/750, GRAPHIX/750 & GSP SPRINT/750

ex Allen Wrench, .062" <b>P25934</b>
ob Card, 100/Package <b>P38074E</b>
nife Holder w/30° <b>P26660E</b>
SuperSharp Blade
en Height Adjustment Tool P28842E
ounce Wheel Holder P25032E
//Fine Pitch Wheel, 11 Teeth, 1/4" Dia.
ivet Brush Applicator <b>P42887</b>
queegee P235410
uperSharp Carbide P30033E
Knife Blade, 30°
heta Knife Lift Washer P27081E
ool Cap <b>P17189E</b>
ool Weight #1 <b>P17486E</b>
ool Weight #2 <b>P17487E</b>
ool Weight #3 <b>P17179E</b>
ool Weight #4 <b>P17609E</b>
ool Weight #5 <b>P17610E</b>
weezers P25933A
ilm Stripping Tool P73983A
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### **GSxPLUS & GSx PLOTTERS**

Ball Point Pen, Black Ball Point Pen, Blue	P32433A P32432A	Job Card, 100/Package Material Roll Holder, 15"	P38074B P26381D
Ball Point Pen, Red	_P32431A	Pen Height Adjustment Tool	P28842B
Pen Holder w/Black Pen	P66925A	Rivet Brush Applicator	P42887A
Pen Holder w/o Pen	P32434B	Squeegee	P23541C
Fuse, 3 Amp, 3AG, 250V	P38643B	Tool Cap	P17189B
GS Drag Knife	P56518B	Tool Inserts	P29506B
w/Shoe and 2 Blades		Tweezers	P25933A
GS Drag Knife Assembly	P44985B	Film Stripping Tool	P73983A
Hex Allen Wrench, .062"	P25934A		

#### **SPRINT & SIGNMAKER IVB**

JI KIIII & JIOHIMAI	VEIV 14D		
Pen Holder w/Black Med. Pen Pen Holder w/o Pen Ball Point Pen, Fine, Black	P66925A P32434A P26177A	Fine Pounce Wheel, 11 Teeth 1/4" Diamete Fuse, 4 Amp, 3AG, 250V	P25032B er P26704A
Ball Point Pen, Med., Black	P25927A	Hex Allen Wrench, .062"	P25934A
Ball Point Pen, Fine, Blue Ball Point Pen, Med., Blue	P26180A P25439A	Knife Holder w/30° SuperSharp Blade	P56734A
Ball Point Pen, Fine, Red Ball Point Pen, Med., Red	P26178A P25926A	Knife Holder w/30° SuperSharp Blade, Guar	<b>P26660B</b> ded
Carbide Knife Blade, 30° Carbide Knife Blade, 45°	P17156B P33489B	Pen Height Adjustment Tool Pounce Wheel Holder	P28842B P29508B
Carbide Knife Blade, 60°	P37311B	w/Fine Pitch Wheel, 11 Teeth	
Felt Tip Pen Holder w/Blue Boldliner Pen	P21734A	Rivet Brush Applicator Squeegee	P42887A P23541C
Felt Tip Pen Holder w/o Boldliner Pen	P21730B	SuperSharp Carbide Knife Blade, 30°	P30033B
Felt Tip Boldliner Pen, Black Felt Tip Boldliner Pen, Blue Felt Tip Boldliner Pen, Red	P26174A P26179A P51918A	Tweezers Film Stripping Tool Tool Inserts, Black	P25933A P73983B P29506B





#### **FASTRACK 650 PLOTTER**

Servo motor-driven, friction-feed plotter that uses perforated or non-perforated materials from 3.9" to 33.5" (99mm to 851 mm) wide when using a sheet. Utilizes swivel-knife technology to plot and cut text and graphics up to 24" (610mm) in height at high speed with a maximum of 39" per second on axis (55" per second on diagonal). Features pouncing capabilities, accurate alignment up to 32 feet, automatic material cut-off, key pad adjustable tool parameters and the ability to store parameters for each of the four tools for quick material change. Includes knife holder with 45° blade, two additional 45° knife blades, two felt tip pens, material roller support system, spare cutting pad and stand.

#### P70383A

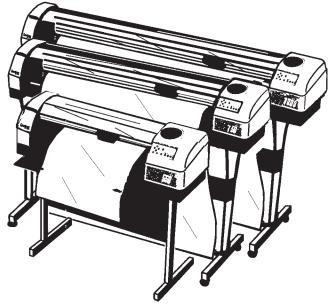
#### **FASTRACK 1300 PLOTTER**

Servo motor-driven, friction-feed plotter that uses perforated or non-perforated materials from 3.9" to 52" (99mm to 1320mm) wide when using a roll and from 3.9" to 56" (99mm to 1420mm) wide when using a sheet. Utilizes swivel-knife technology to plot and cut text and graphics up to 48" (1200mm) in height at high speed with a maximum of 39" per second on axis (55" per second on diagonal). Features a third pinch wheel for positive material tracking, pouncing capabilities, accurate alignment up to 32 feet, automatic material cut-off, key pad adjustable tool parameters and the ability to store parameters for each of the four tools for quick material change. Includes knife holder with 45° blade, two additional 45° knife blades, two felt pens, material roller support system, spare cutting pad and stand.

#### P70386A

#### **FASTRACK ACCESSORIES**

Cutting Mat	P62751A	Felt Tip Pens, Red (5)	P59257A
Knife Blades, 30° (2)	P61638A	Rollerball Pens, Black (4)	P61643A
Knife Blades, 45° (2)	P61639A	Rollerball Pens, Blue (4)	P61644A
Knife Blades, 60° (2)	P61640A	Rollerball Pens, Red (4)	P61645A
Knife Holder w/o Depth	P61637A	Rollerball Pens, Green (4)	P61646A
Sheet-off Knife Blade Assy.	P63053A	Pouncing Mats (3)	P63054A
Felt Tip Pens, Black, (5)	P59259A	Pounce Assy., Complete	P61702A
Felt Tip Pens, Blue, (5)	P59258A	Pounce Tool Pin	P59184A





#### **GERBER OMEGA GRAPHICS DESIGN & PRODUCTION SOFTWARE**

Omega offers the best way to take design through to high quality output using cut vinyl or digital imaging. Omega uses the power of state-of-the-art, 32-bit Windows computing to speed through the creative process. Once finished with a design, that same processing power is combined with Gerber's expertise in cutting and printing techniques to efficiently drive Gerber's devices and many third party plotters.

Omega is available in three different configurations to suit various needs. Omega CL provides basic tools for vinyl cutting. Omega CS adds enhanced cut-vinyl design tools. Omega CP has all of the Omega CS features, plus digital imaging design tools and the ability to drive the Gerber Edge, Edge II and Maxx 2 thermal printers. ImageRIP software option to Omega CP adds the ability to drive large-format inkjet printers. Separate ART Path software can add toolpaths to Omega artwork in order to drive Gerber routers.

#### **OMEGA CP SOFTWARE**

Omega CP provides a state-of-the-art set of software tools for graphics design and production, using cut-vinyl plus digital imaging. Omega CP drives the Gerber Edge, Edge II and Maxx 2 providing for virtually unlimited output possibilities.

Import and export images in popular formats, while retaining their vector and fill characteristics for further editing. Work with text and shapes using advanced design tools on an unlimited vertical work surface. Apply stoke and fill colors with click-and-drag ease from on-screen foil palettes. A wide spot color selection is available using GerberColor Spectratone color assignments. Pantone® approved simulations of solid Pantone® colors and multiple tint spot color gradients. Integrated color management ensures consistent color representation from scanned input through to finished production. A fast, multi-tasking plot program sends files to imaging devices and plotters without interfering with work and other jobs at the same time. Omega's plot program also supports automated paneling, repeats, both local and remote output and optional ImageRIP software for large-format inkjets.

#### P72319A (PAR) / P72631A (USB)

#### Additional options available separately:

- $\bullet$  Gerber ColorID  $^{\!\scriptscriptstyle\mathsf{TM}}$  Digital color matching software and optional handheld scanner
- ImageRIP software for output to large format inkjet printers
- Additional specialty fonts and graphics libraries
- PostScript file import software option

#### **OMEGA CS SOFTWARE**

Omega CS provides a suite of complete software tools for graphics design and production using cut-vinyl. Omega CS drives most Gerber and third-party plotters. All the features of Omega CP are included with the exception of those used for digital imaging. From the raster-to-vector conversion to the customizable Warp Distortion Tool, Omega CS provides the means to explore all the creative possibilities available with vinyl design.

#### P72324A (PAR) / P72638A (USB)

#### Additional options available separately:

- Gerber ColorID™ digital color matching software and optional handheld scanner
- Additional specialty fonts and graphics libraries
- Upgrade to Omega CP

#### **OMEGA CL SOFTWARE**

Omega CL is an excellent way to start out with computerized specialty graphics design. All the essential features are included, from scanning capability to detail editing tools and tablet support. Powerful, affordable and easy to use, Omega CL is the vinyl shape design and output software that is perfect for computer design beginners. If there is ever a desire to tackle more complex jobs, upgrades are available to add additional functionality.

#### P72328A (PAR) / P72642A (USB)

#### Additional options available separately:

- Gerber ColorID™ Digital color matching software and optional handheld scanner
- Additional specialty fonts and libraries
- Upgrade to Omega CS or Omega CP level software

#### **Software Configurations**

Detailed software configurations and specifications can be found in the Gerber Catalog available upon request.





#### **GERBER OMEGA MIP SOFTWARE PACKAGES & UPGRADES**

Multiple Installation Program (MIP) software packages are available to Omega CP or Omega CS software users. Omega MIP software products are available at substantial savings when compared to purchasing new, single software products. Three variations are available to allow one to outfit the shop with appropriate design and output capabilities. A customer supplied, peer-to-peer network is required to get the full benefit of Omega software products. Gerber will custom-serialize additional Omega MIP software kits to match the serialization of the shop's original Omega. This allows the shop with multiple Omega systems to share fonts, libraries and most software options providing all are at the same software release. Omega also offers the capability of network output support, enabling printing to remote plotters and the Gerber Edge, Edge II or Maxx 2. The original System ID and Omega serial number must be provided at time of order. A hardware security device must be installed for the system to operate and must be specified when ordering as being either parallel port or USB port connected. MIP's are not available for Omega CL users.

#### **OMEGA CP MIP**

Omega CP MIP software package is for users with at least one full Omega CP or Omega CS system that want to add additional Omega CP software packages at a substantial discount. Omega CP MIP kit consists of software on CD-ROM, security block and a "Getting Started" manual & Composer Reference Chart.

P72332A (PAR) / P72688A (USB)

#### **OMEGA CS MIP**

Omega CS MIP software package is for users with at least one full Omega CP or Omega CS system that want to add additional Omega CS software packages at a substantial discount. Omega CS MIP kit consists of software on CD-ROM, security block and a "Getting Started" manual & Composer Reference Chart.

P72337A (PAR) / P72693A (USB)

#### OMEGA PS (PLOT STATION™) MIP

Omega PS Plot Station MIP is intended for use as a production only, vinyl output, Gerber Edge, Edge II, Maxx 2 and large format inkjet rendering workstation. It has all software output tools required to manufacture vinyl only and Gerber Edge designs on the appropriate hardware. To output to large format inkjet printers, ImageRIP must be added as an option. With the Gerber Plot and Spooler programs active, this Plot Station becomes an effective network-output server waiting for an Edge job to be spooled to the local Edge, inkjet or plotter.

WITH ArtPath: P72507A (PAR) / P72703A (USB) WITHOUT ArtPath: P72342A (PAR) / P72698A (USB)

#### GERBER GRAPHIX ADVANTAGE (GA) TO OMEGA UPGRADES

#### **GA RELEASE 4.X THROUGH 6.X TO OMEGA UPGRADE**

Includes Omega password CD-ROM and a full set of manuals. P72463A (PAR) / P72725A (USB)

#### **GA RELEASE 4.0 OR EARLIER TO OMEGA UPGRADE**

GA 4.0 or earlier to Omega with ROS GSP-Configured. **P72457A (PAR) / P72721A (USB)** 

#### **OMEGA MANUAL LITERATURE KIT**

This manual set includes all Omega CP, CS and CL level manuals (including ArtPath) and distortion chart. The above manual sets are not appropriate for Omega PS.

P72447A

#### **OMEGA UPGRADES**

Omega Upgrades are "Smart Upgrades". Software automatically identifies the resident Gerber software package and upgrades that software with it's appropriate level and option set to the new Omega features. Omega users with multiple systems are strongly encouraged to upgrade all systems at the same time to allow for seamless file sharing and to take advantage of network functionality. Software upgrades must be purchased for each Graphix Advantage or Omega system being upgraded, including MIP systems.

#### **OMEGA LEVEL-TO-LEVEL UPGRADES**

Omega level-to-level upgrades are provided to allow users with previously purchased Omega CS or Omega CL software packages to move up to a higher level of Omega software. GA users can benefit in this program because the movement from level-to-level also includes an Omega upgrade; there is no need to order one separately.

Catalog Number	Level-to-Level Upgrades
P72580A	GA ELITE to OMEGA CP, Parallel Security Block GSP Configured
P72735A	GA ELITE to OMEGA CP, USB Security Block GSP Configured
P72582A	GA SELECT to OMEGA CP, Parallel Security Block GSP Configured
P72737A	GA SELECT to OMEGA CP, USB Security Block GSP Configured
P72584A	GA SELECT to OMEGA CS, Parallel Security Block GSP Configured
P72739A	GA SELECT to OMEGA CS, USB Security Block GSP Configured
P72588A	OMEGA CL to OMEGA CP, Parallel Security Block GSP Configured
P72743A	OMEGA CL to OMEGA CP, USB Security Block GSP Configured
P72590A	OMEGA CL to OMEGA CS, Parallel Security Block GSP Configured
P72745A	OMEGA CL to OMEGA CS, USB Security Block GSP Configured
P72586A	OMEGA CS to OMEGA CP, Parallel Security Block GSP Configured



#### GERBER OMEGA OPTIONS FOR ALL LEVELS

#### GERBER COLOR ID SOFTWARE OPTION FOR OMEGA CP

This option allows the user to utilize the power of the Gerber ColorID software and resident color databases to obtain GerberColor Spectratone foil matches. Color measuring device hardware is not included with this software option. This option does not directly measure an object to obtain color matches, however, there are powerful ways to utilize it.

P68419A

# OMEGA LETTERING MACHINE KIT w/SMIVB/GX4 LMK PROGRAM MODULE

Allows Omega to output to an existing Gerber Lettering Machine. Interfaces with Signmaker IVB. Includes Job Save Recall to save lettering system job parameters. For use with all Omega systems. Turns SMI/VB/GX4 series lettering systems into output-only devices.

P55100D

#### OMEGA LETTERING MACHINE KIT w/GSP SPRINT™ LMK PROGRAM MODULE

Allows OMEGA to output to an existing Gerber Lettering Machine. Interfaces with GSP SPRINT II, GSP SPRINT IIB, SuperSprint™, SuperSprint model B. Includes Job Save Recall to save lettering system job parameters. For use with all Omega systems. Turns GSP Sprint series lettering systems into output-only devices. **P55101D** 

#### **OMEGA SERIAL PARALLEL BOARD OPTION KIT**

Hardware which adds two additional serial (com) ports and a second (LPT) parallel port; these ports are fully configurable to avoid hardware conflict common on today's computers. For interfaces to the Gerber Edge 2, Omega ECP Parallel Board option is required.

P53107D

#### **OMEGA ECP PARALLEL BOARD OPTION**

Required where an additional ECP parallel port is needed to connect to the Gerber Edge 2. Only compatible with PCs that have the appropriate ECP-compatible board slot. The parallel-port security device cannot be connected to an ECP port.

P71851C

#### **COLOR ID HARDWARE OPTION**

A complete digital color matching product for sign and screen professionals. Using the power of Omega software and the Gerber Edge, this amazing colorimeter measures almost any type of flat colored surface vinyl, paper, plastic or paint and selects the best match to GerberColor Spectratone and Pantone-approved color simulations.

P72445C (Portable) / P72597C (Fixed)

#### BRAILLE INTERPRETER SOFTWARE OPTION

Includes Braille Translation Program, an Omega U.S.A. Braille font and a U.S.A. Braille Relief font for use with GSP Routers.

P66627A

#### **OMEGA DICTIONARY OPTIONS**

Spellchecker for Composer Text Entry alerts the operator to misspelled words and provides alternatives.

Available for:

- American English (1)
- Brazilian Portuguese
- British English (ise)
- British English (ize)
- Danish
- DutchFrench
- Dutch Preferred Spelling
- German (Scharfes:B)
- German (Doppel:ss)
- Italian
- Iberian Portuguese
- · IIuliuli
- Norwegian
- Spanish
- Swedish

NOTE: (1) Standard with all Omega software products except Omega PS.





#### **GERBER SOFTWARE**

#### MACIMPRINT™ EDGE & PLOTTER OPTION

With MacImprint, Mac users can output to Gerber equipment. Automated settings for the Gerber Edge and plotters are available right from within Adobe® Illustrator®. Create "Gerber Ready" graphic files that print and cut, fast and accurately.

MacImprint driver software can print CMYK images to a Gerber Edge directly from applications such as QuarkXPress™, Macromedia Freehand™ and Adobe® Photoshop®. Individual spot colors can be printed as well. One can also cut graphics on a Gerber plotter using paths drawn on a "cut" layer for those applications that generate vector print commands.

#### Plug-In features include:

- GerberColor foil CMYK and true spot color swatches
- Automated sequencing of multiple spot color printing to the Gerber Edge
- Edge prompts for each foil cartridge
- Print and cut commands can be sent to an Edge and plotter to save time
- Control of foil color print order
- Assistance with setting separation lines and overlaps for large, paneled images
- Automatic print and cut repetition along the width and length of the material
- Automatic weed border generation

#### Driver features include:

- Automatic and adjustable settings for full range of materials
- Process & spot colors
- Selectable halftone/LPI
- Rewind after printing
- Reverse print order
- Backing white option
- Overprint option (over entire job)
- Image scaling, mirror image and orientation selection
- Foil conservation control
- Repeats along material path
- Image scaling, mirror image and orientation selections

#### MACIMPRINT™ DIRECT OUTPUT OPTION

Catalog Number	MacImprint Direct Output Option
P73733A	MacImprint™ 1.1 to 1.2 Upgrade Kit (Free to users registered prior to 4/17/00 only)
P72208A	MacImprint™ 1.2 with Plotter Cable
P73526A	MacImprint™ Gerber Edge USB Cable Option (Includes USB Driver and USB Edge Cable)
P70577C	MacImprint™ Option 1.2 with PCI Card and Plotter Cable

#### **CUSTOM IMAGERIP ICC PROFILES**

Custom color correction table for a printer/ink/media combination which is not currently supported by ImageRIP.

#### **IMAGERIP FOR OMEGA OPTION**

The best production-oriented large format inkjet Raster Image Processing (RIP) software on the market today. Accepts most image format files (JPG, TIF, BMP, PCX, etc.), Corel®. CMX files and .GAD files from Gerber and third-party developed software for printing on popular, large format inkjet printers such as Encad®, Graphtec®, Mimaki® and Hewlett-Packard®. ImageRIP provides spectacular color prints and has many powerful features, including support for small text, radial and linear fills, strokes and 24-bit color bitmap printing.

#### P722599A

#### Additional benefits include:

- High production throughput provided by Rip&Print™ which offers simultaneous job processing and printing
- Offers unlimited print size through continuous-length printing and job paneling
- Superior performance as a 32-bit Microsoft Windows application, including exceptional speed, multi tasking and more
- Decreased production output time through spool file creation for later use
- Increased productivity through batch-processing of multiple inkiet jobs
- Powerful networking capability and compatibility with industry standard ICC profiles

#### **FONTS & FONT LIBRARIES**

Gerber offers extensive selection of typefaces for any professional type challenge form decorative and classic styles, to casual and script. Gerber fonts are hand digitized to ensure superlative quality and conformance to architectural and industry standards.

#### Gerber Edge enhanced fonts:

Gerber's unique Gerber Edge enhanced fonts allows easy creation of signs and graphics of unmatched visual impact. Complete with computerized airbrush and dimensional effects, fades, fill... everything.



#### **SERVICE & SUPPORT**

Gerber's philosophy has been to engineer and produce the finest products for the industry. Gerber Service commits to keep all Gerber systems operating at maximum efficiency and to minimize downtime and costs that could negatively effect business.

#### Why purchase a Gerber Service Plan:

- Minimize equipment downtime so customer deadlines can be met
- Plans are less expensive than flat rate repair charges
- Always better to plan than to react under pressure

#### Support First<sup>™</sup> Acclaimed priority phone support

- Unlimited technical and application assistance by a Senior Technical Systems Support Specialist
- Toll-Free, members only assistance phone number
- Priority gueue/Express call back within one hour
- Free express shipment of support disks and media
- Automatic priority mailing of free updates
- National assistance hours of 8 a.m. to 8 p.m., EST, Monday thru Friday
- Special pre-release information on new and updated software
- Members only software upgrade purchase incentives as advertised
- Tech Talk, a periodic newsletter, which includes technical questions, helpful hints, latést company information and more

#### Gerber Service Partners Plan Hardware Service Plan

- Factory labor when equipment is returned to the factory
- Factory parts
- Toll-free priority phone support
- National assistance hours of 8 a.m. to 8 p.m., EST, Monday thru Friday

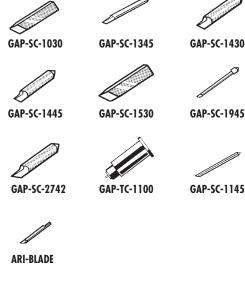


#### Since 1946

#### **AFTERMARKET PLOTTER ACCESSORIES**

Any accessory is available, please call for others.

Catalog Number	Description	Blade Angle	Put Up	Mfgr.
CAR-BLADE30 GAP-SC-1030 GAP-SC-1430 ARI-BLADE GAP-SC-2742 GAP-SC-1345 GAP-SC-13645 GAP-SC-1445 GAP-SC-1445 GAP-SC-1945 GAP-SC-1145	Blade, Carbide Technology Blade, Fits Gerber, Anagraph, Excell 1/1m Blade, Fits Ioline Studio 7 Blade, Aristo AR20 Blade, Fits Gerber GSX Blade, Fits All Roland Blade, Fits All Roland Blade, Fits Ioline Studio 7 Blade, Fits Western Graphtec FC Series Blade, Fits Anagraph Express, Elite Blade, Turbo-Cut Blade only. Fits TC1100	30° 30° 35° 42° 45° 60° 45° 45° 45° 45°	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	GAP GAP Aristo GAP GAP GAP GAP GAP
GAP-SP-9301 GAP-SP-9302 GAP-SP-9303 GAP-SP-9501 GAP-SP-9502 GAP-SP-9503	Black Pen, Fits Most Plotters Blue Pen, Fits Most Plotters Red Pen, Fits Most Plotters  Black Pen, Fits All Graphtec, etc.  Blue Pen, Fits All Graphtec, etc.  Red Pen, Fits All Graphtec, etc.		1 1 1 1 1	GAP GAP GAP GAP GAP GAP



#### PERFORATED PLOTTER PAPER

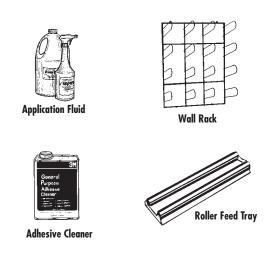
GAP tracing paper is a high quality 16lb. paper used to intergrade computer and non-computer information. GAP 20lb. bond paper is for standard rendering general purpose use. GAP white drawing paper is an extra white 2 sided clay coated litho stock which provides an improved image when plotting with felt or GAP Sure-Plot pens. GAP Frisket paper is used for masking surfaces to be painted and for die or hand cut spray mask stencils.

Catalog	Description	Width	Length	Perforation
Number		(Inches)	(Yards)	Pattern
GAP-GP-2100	20lb. Bond Paper	30	100	1/2" Pattern
GAP-GP-9000	White Drawing Paper	30	50	1/2" Pattern
GAP-GM200015	Frisket Paper	15	50	Gerber Pattern
GAP-GM200030	Frisket Paper	30	50	Gerber Pattern

#### **APPLICATION FLUID & VINYL ACCESORIES**

Wall mount rack GAP-WR1600 holds 16 rolls of film with 3" cores. Roller Tray GAP-RT2400 allows easy rolling of any size material (50lbs. max). GAP-AR-409Q is a natural citrus based solvent developed for the removal of oil and water based adhesives, wax, tar, oil, chewing gum and ink graffiti. MMM-8984Q is a general purpose adhesive cleaner for removing adhesives, silicone, grease, tar, wax and oil. Application fluids help eliminate bubbles and wrinkles when applying vinyl and allows repositioning.

Catalog Number	Description	Mfgr.	Put Up
RAP-TACG	Application Fluid, Gallon	Rapid Tac	]
RAP-TAC32	Application Fluid, 32oz. Spray Bottle	Rapid Tac	]
RAP-REMOVERG	Adhesive Remover, Gallon	Rapid Tac	]
GAP-WR1600	16 Roll Wall Rack	GAP	]
GAP-RT2400	Roller Feed Tray	GAP	]
GAP-AR-409G	"Orange Peel" Adhesive Remover, Gallon	GAP	]
GAP-AR-409Q	"Orange Peel" Adhesive Remover, Quart	GAP	]
MMM-8908-24	Vinyl Woodgrain and Stripe Adhesive Remover, 24oz.	3M	]
MMM-8984Q	Adhesive Cleaner, Quart	3M	]



#### **BELIN SOLID CARBIDE ROUTER BITS**

Belin high quality solid carbide cutting & milling bits consistently produce crisp lines and exact cuts. Belin bits are specially designed to quickly push chips up and away from the work area. These professional bits are the choice of high production sign shops and offer excellent output rates. Belin offers many different profiles that cut a wide range of materials from aluminum to wood.

Stocked are the most common bits for aluminum milling and for working with plastics, foam boards and wood. Most bits push chips up and away from the cut. See chip direction column below for more information.

Other blade profiles and sizes for other materials also available.

Catalog	Application	Cut Length	Shank Size	Overall Length	Chip
Number		(Inches)	(Inches)	(Inches)	Direction
BEL-33317A BEL-33317 BEL-33476A BEL-33476 BEL-33635	Aluminum Aluminum Aluminum Aluminum Aluminum	5/16 5/16 1/2 1/2 5/8	1/8 1/4 3/16 1/4 1/4	1-1/2 1-1/2 2 2 2	Uр Uр Uр Uр
BEL-13476A BEL-13476 BEL-12476 BEL-13317A BEL-13635 BEL-13635A	Plastic/Foam Board/Wood Plastic/Foam Board/Wood Plastic/Foam Board/Wood Plastic/Foam Board/Wood Plastic/Foam Board/Wood Plastic/Foam Board/Wood Plastic/Foam Board/Wood	5/8 5/8 5/8 1/2 1/2 3/4 1-1/2	3/16 1/4 1/4 1/8 1/4 1/4	2 2 2 2 1-1/2 2 3	Up Up Down Up Up Up
BEL-13635B <sup>(1)</sup>	Foam Board	2-1/4	1/4	3-3/4	Up
BEL-13952A <sup>(2)</sup>	Foam Board	3-3/16	3/8	5	Up

- **NOTE:** (1) Designed to rout/mill 1-1/2" to 2" Foam Board material ONLY. Reduce the RPM's and Feed Rates [IPM] by 35 to 50% to avoid breakage due to extra long cutting length.
  - Designed to rout/mill 2-1/2" to 3" Foam Board material ONLY.
    Reduce the RPM's and Feed Rates [IPM] by 35 to 50% to avoid breakage due to extra long cutting length.







#### **GERBER ROUTING & ENGRAVING BITS**

#### **GERBER GOLD ROUTING BITS**

Designed for performance and longer tool life. Made to the highest tolerances in the industry. Coated with titanium nitride for durability and superior edge quality for lower tooling cost. Can be used with all Gerber routers/engravers as well as other automated or manual routers.

#### **Two-Flute Spiral Bits**

The most versatile type of bit, used for the following materials:

Plate Aluminum, Brass, Bronze, Copper, Cast Acrylics, Solid Surface Materials, Particle Board, Plywood and Hardwood.

Foam Boards, Engraving Stock, P.V.C., Soft Plastics, Soft Woods and Similar Density Materials.

These bits provide excellent chip removal from the cut because of the upward spiral action and also assures excellent edge quality on these materials.

Catalog	Shank	Cutting	Cutting
Number	Dia.	Dia.	Edge Lgth.
P50521B P50525B P50522B P52819B P50526B P50523B P50528B P50527B P50524B P50524B P50529B	1/8" 1/8" 1/8" 1/4" 1/4" 1/4" 1/4" 1/4"	1/16" 1/8" 1/8" 1/8" 3/16" 3/16" 3/16" 1/4" 1/4"	3/16" 1/4" 1/2" 1-1/4" 3/8" 5/8" 1-1/8" 1/2" 3/4" 1-1/2" 2-1/4"



#### Single-Flute Radial Bits

Ideal for cutting sheet aluminum and brass with a thickness of .060" (1.5mm) or less, soft woods and soft alloy aluminum. Has a single straight cutting edge which doesn't pull up on the work piece. This allows the bit to shear the chip at the top edge of the material without leaving a burr.

Catalog	Shank	Cutting	Cutting
Number	Dia.	Dia.	Edge Lgth.
P50532B	1/4"	1/8"	1/2"
P50533B	1/4"	3/16"	5/8"
P50534B	1/4"	1/4"	3/4"
P50535B	1/4"	1/4"	1-1/2"



#### **GERBER ENGRAVING BITS**

High quality long and short type engraving bits. Ideal for applications using Dimension Plus™, Rowmark®, Acrylic, Polycarbonate and other plastic materials.

#### **Engraving Bits • Long Type**

For top-loading engraving spindles. Use with Gerber Engraving options.

Catalog	Shank	Cutting
Number	Dia.	Dia.
P47767A	1/4"	.010"
P47769A	1/4"	.020"
P47771A	1/4"	.030"
P47775A	1/4"	.060"
P47777A	1/4"	.090"



#### **Engraving Bits • Short Type**

For bottom-loading collet systems. Use with Router Motor or High Frequency Spindle options.

Catalog	Shank	Cutting
Number	Dia.	Dia.
P50536A	1/4"	.010"
P50537A	1/4"	.020"
P50538A	1/4"	.030"
P50539A	1/4"	.060"
P50540A	1/4"	.090"





#### **GERBER ROUTING & ENGRAVING BITS cont.**

#### THREE-FLUTE SPIRAL TAPERED BITS

Yields an angle on the edge of the material. Excellent for cutting vacuum form molds. Can be used to create a "halo" effect without adding additional cost.

Catalog	Shank	Cutting	Cutting	Degree
Number	Dia.	Dia.	Edge Lgth.	
P50531B	1/4"	1/8"	1/2"	7°
P50643B	1/4"	1/8"	1"	3°

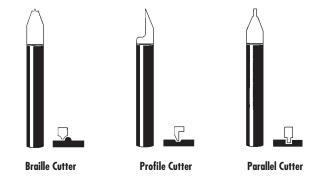


#### **BRAILLE/TACTILE BITS**

Used to create ADA (Americans with Disabilities Act) compliant signs. Shank diameter is 1/4" (6.4mm).

Long type bits are used with Dimension 200 and Advantage Router 600 Engraver Options. The short type have the same tip geometry, but are cut shorter for use with the Router Motor or High Frequency Spindle Option.

Cat. No. Long Type	Cat. No. Short Type	Description
P47763A	P47849A	Braille Cutter
		(used to cut Braille dots)
P50624A	P50622A	.015" Profile Cutter
		(used to cut ADA sign borders and surface-mounted text)
P50623A	P50625A	.060" Parallel Cutter (used for cutting both letter clean-out pockets in the sign face and matching male characters for Auto-Inlay™ method)



#### **SPECIAL BITS**

Table surfacing bit for use with a router motor or high frequency spindle. Its purpose is to mill the sacrificial table surface perfectly flat in respect to the Z axis and aid in precise depth control when cutting.

.750" round nose cutter has a full 3/8" (9.5mm) radius on the bottom for producing a rounded groove for specialty applications or can produce a negative radius on the edge of a piece to be cut out.

.875" V cutter has a 45 degree V-shape for putting a bevel on edges or it can be used for some engraving applications.

Catalog Number	Description	Shank Dia.
P56327A P50569A	For Advantage Router 600 For Dimension 200 Table	1/4" 1/4"
P26495A	.750" Round Nose Cutter	1/4"
P26496A	.875" V-Cutter	1/4"



**V** Cutter



**Round Nose Cutter** 



## **AUTO-CARVE 3D CARVING BITS**

Creates beautiful slopes and curves that traditional sign carvers produce. Designed for the highest cut quality, maximum cutting efficiency and longest tool life.

Catalog	Shank	Tool	Tool
Number	Dia.	Dia.	Degree
P56371A P56372A P56373A P56374A P56375A P56376A P56377A	1/4" 1/4" 1/4" 1/4" 1/4" 1/4"	1-1/4" 1-1/4" 1-1/4" 1-1/4" 1-1/4" 1-1/4"	90° 100° 110° 120° 130° 140° 150°



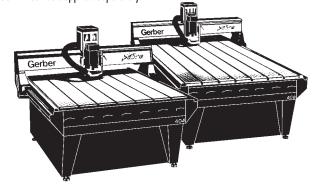


#### **SABRE ROUTERS**

Gerber Sabre series mid-sized routers represent state-of-the-art in dimensional sign-making technology. Sabre series technologically advanced routers are precise, fast, flexible and can be used with many different design programs. With a host of powerful manufacturing functions, Art Path™ quickly and accurately transforms two-dimensional designs into tool paths. Art Path™ file converter can import or export standard file formates such as Adobe Illustrator (.AI), Encapsulated Postscript (.EPS) and Drawing Interchange File format (.DXF) files. Hewlett Packard Graphic Language (.HPGL) files can also be imported. Gerber brand routers are known for premium quality components and a precise, solid machine that will stay "true" and last many years, unlike all other brands.

Sabre mid-sized router features include:

- Advanced technology allows for amazing speed and phenomenal productivity. Servo-driven with 32-bit microprocessor controls provides extraordinary speed, power
  and output. Anti-backlash lead screw-drives ensure accuracy, dependability, low maintenance and precise tolerances.
- Can be used with Graphix Advantage or other design software: 100' cable included.
- Art Path<sup>™</sup> software is provided at no charge with each Sabre router.
- Patented vacuum shroud/pressure foot assembly provides extremely accurate depth control, reduces clamping requirements and creates a cleaner working environment
  by removing waste chips. Includes all hoses and fittings. Heavy duty wet/dry shop vacuum must be supplied separately.
- Standard motorized Z-axis performs automatic multiple-depth cuts.
- Standard T-slot table with work clamps safely secures materials during cutting.
- Unique job-seamentation feature allows cutting signs of any length.
- Step resolution of .000078" (.0019mm) offers very high quality output.
- Also includes Accessory Kit, Table Slat Kit (installed) and Step Gage.



#### **SABRE 404**

Sabre 404 features an active cutting area of approximately 54" x 54" (1370mm x 1370mm).

P69356A

#### **SABRE 404 WITH T-VAC VACUUM TABLE OPTION**

Sabre 404 with T-Vac Vacuum Table incorporates all the features of the Sabre 404 with the addition of an installed vacuum table. T-Vac Table increases productivity by allowing the choice of either vacuum hold-down or mechanical clamps. Includes vacuum table slates, manifold, hoses and fittings. Vacuum pump, filter and control panel must be supplied separately.

P69357A

#### **SABRE 408**

Sabre 408 features an active cutting area of approximately 54" x 100" (1370mm x 2540mm).

P69358A

#### **SABRE 408 WITH T-VAC VACUUM TABLE OPTION**

Sabre 408 with T-Vac Vacuum Table incorporates all the features of the Sabre 408 with the addition of an installed vacuum table. T-Vac Table increases productivity by allowing the choice of either vacuum hold-down or mechanical clamps. Includes vacuum table slates, manifold, hoses and fittings. Vacuum pump, filter and control panel must be supplied separately.

P69359A



#### SABRE ROUTER OPTIONS

When selecting either the Sabre 404 or Sabre 408, either a Spindle Motor or Router Motor option must be selected.

#### PORTER CABLE MOTOR OPTION

3.25 Porter Cable motor. Includes router motor, wrenches and required mounting hardware. Motor Option includes the following accessory kit in addition to listed components:

- 3 cutting bits 1/8" x 1/4" LOC.
- 3 cutting bits 1/4" x 3/4" LOC.
- 1 .125" collet sleeve.
- 1 .250" collet.
- 1 .500" collet with nut.

#### P69360A

#### HIGH FREQUENCY SPINDLE OPTIONS

High frequency spindle options provide infinately variable speed control and provides quiet operation along with reduced maintenance. Spindle options include spindle, spindle controller, wrenches and required hardware. Refer to the High Frequency Spindle Option fact sheet for additional information. All spindle options also include the following accessory kit:

- 3 cutting bits 1/8" x 1/4" LOC.
- 3 cutting bits 1/4" x 3/4" LOC.
- 1 .125" collet sleeve.
- 1 .250" collet.
- 1 .500" collet with nut.

Catalog Number	Description
P63470A	High Frequency Spindle Option, 3Hp
P61332A	High Frequency Spindle Option, 7Hp 230V
P61337A	High Frequency Spindle Option, 7Hp 380V/460V

#### **SABRE SERIES ENGRAVER OPTION**

Adds engraving capabilities to the Sabre router. Improves accuracy for precise engraving work, ADA applications through quiet operation. Includes a belt-driven .250" engraving spindle and motor installed on the carriage in place of the router motor with 2 engraving bits (.030" and .060").

#### P61851A

#### **ENGRAVER VACUUM SYSTEM OPTION**

Chip pick-up system for use with the Engraver option. **P47822D** 

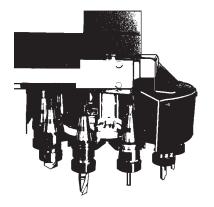
# **AUTOMATIC TOOL CHANGER OPTION FOR SABRE 404 &** 408

The automatic tool changer (ATC) is designed to increase efficiency and production output for multi-tool cutting applications for the Sabre 404 and Sabre 408 routers. Eliminates the need of manually changing the cutting tools and allows the operator to perform additional tasks during the cutting operation. Automatic Tool Changer option is as beneficial to a one person shop as it is to a large manufacturing facility. ATC system is comprised of a 10hp spindle, 10 tool indexing turret, ATC controller and a spindle controller. This option can be purchased factory installed on a new Sabre or field retro-fitted to existing Sabre routers. Also includes:

- 3 tool holders.
- 3 cutting bits, 1/8" x 1/4" LOC.
- 3 cutting bits, 1/4" x 3/4" LOC.
- 1 .125" collet.
- 1 .250" collet.
- 1 .500" collet.

Factory installed systems must be ordered with new Sabre routers at time of purchase.

Catal Numb	og er	Description
P6729		Sabre ATC 230V, Factory Installed Sabre ATC 380V/460V, Factory Installed
P6747		Sabre ATC 230V, Field Installed Sabre ATC 380V/460V, Field Installed



**Automatic Tool Changer Option (ATC)** 

#### SABRE 404/408 MIST COOLANT OPTION

An innovative coolant system that keeps metals and router bits at an optimum temperature for peak performance. Uses non-toxic GerberCool cutting fluid. Compressed air source must be supplied separately.

P66892A





#### **ADVANTAGE ROUTERS & OPTIONS**

#### **ADVANTAGE ROUTER 600**

Gerber Advantage Router 600 is designed for routing and engraving plastics, metals and wood. Can be used with many different design programs. With a host of powerful manufacturing functions, Art Path™ quickly and accurately transforms two-dimensional designs into tool paths. The Art Path™ file converter can import or export these industry standard file formates: Adobe Illustrator (.Al) files, Encapsulated Postscript (.EPS) files and Drawing Interchange File Format (.DXF). Hewlett Packard Graphic Language (.HPGL) files can also be imported. Features also include:

- Interfaces directly with the Graphix Advantage; Includes 100' (3.5 meter) cable.
- Art Path<sup>™</sup> software.
- 3.25Hp, variable-speed electric router motor and standard router bits.
- Equipped with twin mist coolant applicators and a chip pick-up system.
   Heavy duty wet/dry shop vacuum required and must be supplied separately.
- 8" (203mm) Z-axis travel, 3.5" (89mm) maximum material thickness.
- 6'-8" x 10' (2 x 3 meters) active cutting area.
- Advantage Router Controller (ARC) with slew keys, a 2-line LCD display and control keys.
   P69337A

# ADVANTAGE ROUTER 600 w/T-VAC VACUUM TABLE OPTION

Advantage Router 600 with T-Vac Vacuum Table incorporates all the features of the Advantage Router 600 with the addition of an installed vacuum table which increases productivity by allowing for either vacuum hold-down or mechanical clamps. Includes vacuum table slates, manifold, hoses and fittings. 12 individual zones can be separately turned on further, maximizing productivity. Vacuum pump, filter and control panel must be supplied separately.

#### P69342A



Advantage Router 600 Shown with T-Vac table option

#### **OPTIONS FOR ADVANTAGE ROUTER 600**

When selecting the Advantage Router 600 either the Spindle Motor or Router Motor option must be selected.

#### PORTER CABLE MOTOR OPTION

3.25 Porter Cable motor. Includes router motor, wrenches and required mounting hardware. Motor option includes the following accessory kit, in addition to listed components:

- 3 cutting bits 1/8" x 1/4" LOC.
- 3 cutting bits 1/4" x 3/4" LOC.
- 1 .125" collet sleeve.
- 1 .250" collet.
- 1 .500" collet with nut.

#### P69347A

#### **HIGH FREQUENCY SPINDLE OPTION**

Spindle options below includes the following accessory kit, in addition to listed components. Includes spindle, spindle controller, wrenches and required hardware. Refer to the High Frequency Spindle Option fact sheet for additional information.

High Frequency Spindle option includes spindle, spindle controller, wrenches and required hardware. Also includes:

- 3 cutting bits 1/8" x 1/4" LOC.
- 3 cutting bits 1/4" x 3/4" LOC.
- 1 .125" collet sleeve.
- 1 .250" collet.
- 1 .500" collet with nut.

Advantage Router 600 Engraver Option turns the Advantage Router 600 into an engraver as well with the capability to engrave down to 0.50" (12.7mm) letter height. Includes a belt-driven .250" engraving spindle and motor installed on the carriage in place of the router motor, 2 engraver cutters (.030" and .060"), mounting brackets and an engraving vacuum hose.

#### P53560A

Engraver Vacuum System Option is a chip pick-up system for the Engraver Option.

Catalog Number	Description
P53560A	High Frequency Spindle Option, 7Hp-230V
P52573A	Engraver Option
P47822D	Engraver Vacuum System Option



#### ADVANTAGE & SABRE ROUTER SOFTWARE OPTIONS

#### **ROUTER SOFTWARE**

#### Open Architecture Art Path™

For conforming non-Gerber front-end design and hardware packages. Art Path™ is an open architecture software program that makes it possible for shops that have not used an automated router before to start easily, quickly and proficiently.

Art Path™ takes Graphix Advantage/Omega jobs that might otherwise have been cut from vinyl or from standard file formats (.AI, .EPS, .DXF, .HPGL) and allows the addition of all sorts of creative dimensional treatment, right on the screen.

It enables the user to automatically generate tool paths for any PC-driven router from Gerber taking the guesswork out of routing and eliminating material waste. There's even a template function that enables the specification of the tool, depth of pass and router bit feed and plunge rates automatically for whatever material type and size about to be used.

P72507A (PAR) / P72703A (USB)

#### **AUTO-CARVE 3D SOFTWARE FOR ROUTERS**

A complete carving package for making traditional carved signs, POP displays, engraving applications, prototypes, personalized products, vacuum forming molds, die making, various signs and more.

Auto-Carve software offers the sign maker three types of carving styles:

- Incised carving for V-bevel shapes and letters.
- Chamfered carving for flat-bottomed shapes and letters.
- Prismatic caring for raised shapes and letters.

Auto-Carve 3D options include:

- 1 120° carving bit.
- Sign Carving training video.
- 12" x 12" Norboard material sample.

**NOTE:** Art Path<sup>™</sup> 6.2 or Omega must be running on the system prior to installation.

P72421A

#### **CUSTOM DIMENSIONAL SIGNAGE CD-ROM**

Offers an easy and exiting way to increase profitability and creativity. Jay Cooke, award-winning designer and founder of Vermont Sign School, has developed a one-of-a-kind resource using his more than 20 years of experience.

This interactive, multimedia CD-ROM is a near encyclopedia of information that allows one to search and learn in dozens of areas from traditional hand skills to automated routina.

Custom Dimensional Signage gives you access to photos, video, audio, charts and written content providing a step-by-step review.

P65927C

#### GERBER BRAILLE INTERPRETER

Translates text from PC's with Omega and Windows 95 (or higher) installed. Includes Braille Translation Program, an Omega U.S.A. Braille font and U.S.A. Braille Relief font.

P72415A









#### **DIMENSION 200 ROUTERS**

#### **DIMENSION 200**

The Dimension 200 is a small-bed routing system. Ideal for shops that need three-dimensional routing capabilities without the need for a full-sized Gerber routing system. Designed for routing and engraving plastics, metals and woods. Uses a 3.25Hp motor and standard router bits, vacuum shroud/pressure foot assembly and accessory kit. Provides approximately 35" x 31" (900 x 800mm) work area. (2.25" or 57mm maximum material thickness.) Interface cable included. ART Path™ software (serialized option) must be ordered separately, but is provided at no charge when ordered with a Dimension 200.

P53263A

#### **DIMENSION 200 WITH VACUUM TABLE**

Dimension 200 with T-Vac vacuum table option.

P53610A

#### **DIMENSION 200E**

The Dimension 200E includes all the features of the Dimension 200 with the addition of the engraving option, the engraver vacuum system and the stand assembly. Includes a belt-driven 0.25" engraving spindle and motor along with a standard router motor. This provides the dimension 200E with the capabilities of both an engraver and router.

P53266A

#### **DIMENSION 200E WITH VACUUM TABLE**

Dimension 200E with T-Vac vacuum table option.

P53613A

#### **DIMENSION 200X**

The Dimension 200X is Gerber's top-of-the-line router/engraver. It includes all the features of the Dimension 200 with the addition of a unique floating Z-axis carriage that allows precise routing and engraving without switching motors. Features also include:

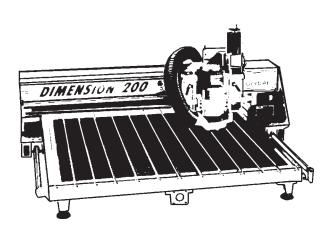
- High Frequency Spindle Option (replaces the standard router motor)
   Provides Quiet, Variable Speed Operation up to 28,000rpm.
- Stand Assembly
- 3.25Hp, Variable-speed, Electric Router Motor and Standard Router Bits
- Mist Coolant Option (compressed air source required)

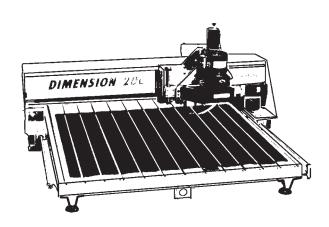
P53269A

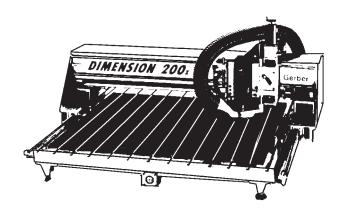
#### **DIMENSION 200X WITH VACUUM TABLE**

Dimension 200X with T-Vac vacuum table option.

P53616A









#### **DIMENSION 200 ROUTER OPTIONS & UPGRADES**

**High Frequency Spindle Option** 

Includes 1.35Hp spindle, spindle controller, cable and required hardware. P50131A

**Engraver Option** 

Includes belt driven 0.25" engraving spindle and engraving bits. For serial numbers above 703,500.

P53659A

**Engraver Option** 

Includes belt driven 0.25" engraving spindle and engraving bits. For serial numbers below 703,500.

P52575A

**Engraver Vacuum System Option**Includes belt driven 0.25" engraving spindle and engraving bits. For serial numbers below 703,500.

P47822D

Stand Assembly

Metal stand which supports the Dimension 200 at optimum working height. P46821S

GerberCool Mist Coolant Option

Uses non-toxic GerberCool fluid for metal cutting. Compressed air source must be supplied separately.

P51392D

GerberRouter III to Advantage Router 600 Upgrade

Includes ARC box, power supply, hardware, 100' (30.5m) interface cable and manuals. ART Path™ software is provided at no charge when ordering an Advantage Router 600 upgrade. Call for information regarding GA revision levels and conforming non-Graphix Advantage front-end systems.

P46930A

#### **BLOWER MOTOR PACKAGE**

Includes 3.4Hp three phase blower motor, air filter, relief valve and electrical control panel.

ATB1501AK32

#### **BLOWER MOTOR PACKAGE**

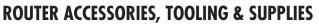
Includes 2.35Hp single phase blower motor, air filter, relief valve and electrical control panel.

ATB1501AV29Z











#### **SABRE 404 & 408 ACCESSORIES**

Collet Sleeve, .125"	_P75886B	Ball Point Pen, Red	P32431A
Collet Wrench, Open End Set_	_P41320A	Ball Point Pen, Blue	_P32432A
Collet, .250" with Nut	P48679A	Swivel Knife Assembly	_P42255A
Collet, .500" with Nut	_P48680A	Swivel Knife Blade Replacement_	_P42254A
De-burring Tool	_P50551A	Tool Height Gage	_P62836B
Pen Assembly	_P75044B	Work Clamp	_P62039B
Pen Assembly Spring	P26512A	Work Clamp Knob	P62041B
Ball Point Pen, Black	P32433A	Work Clamp T-Nut	_P62510B

#### **ROUTER 600 & GERBER ROUTER III ACCESSORIES**

Accessory Kit	_P53830A		
Clamp Knob	P40313B	Ball Point Pen, Blue	P32432A
Collet Sleeve, .125"	_P29460A	Ball Point Pen, Red	P32431A
Collet Wrench, Open End Set_	_P41320A	Swivel Knife Assembly	P42255A
Collet, .250" with Nut	_P48679A	.500" Diameter Shank	
Collet, .500" with Nut	_P48680A	Swivel Knife Blade	_P42254A
De-burring Tool	_P50551A	T-Nut Assembly	P26504A
Pen Assembly	_P75044B	Tool Height Gage	P22186B
Pen Assembly Spring	P26512A	Work Clamp	P21482B
Ball Point Pen, Black	P32433A_	Work Clamp Nut	P42378B

#### **DOUBLE-SIDED ROUTER TAPES**

Used to hold smaller work pieces to the router table. Also prevents small cut pieces such as the center of an "O", from being "kicked" from the table.

1" x 60 Yards	P71165A
2" x 60 Yards	P71166A
3" x 60 Yards	P71167A
4" x 60 Yards	P71168A

#### **MISCELLANEOUS**

#### Step Gage

Precise initialization tool for materials of varying thickness. Provides exclusive "cut-to-mask" accuracy when used with the Table Slat Kit.

#### P48560D

#### Mist Coolant, 1 Gallon

For Trico Mist Coolant Option only.

P50552A

#### GerberCool, 1 Gallon

For GerberCool Mist Coolant Option only.

#### P52101A

#### Serial Line Extender Kit

Extender kits allow distance greater than the standard PC-to-router communications cable length of 100' between the PC and router. Featuring low capacitance cable and serial communication signal boosters. Kits include: 1 ARC box-to-line extender cable, 1 line extender cable, 1 PC-to-line extender cable and 2 serial communication signal boosters.

200' (61 Meters)	P52621D
300' (91.5 Meters)	P52622D
400' (122 Meters)	P52623D
500' (152.5 Meters)	P52624D

GRAPHIX ADVANTAGE

#### **GRAPHIX ADVANTAGE ENGRAVING FONTS**

Cannot be used for cutting vinyl.

•	•		
E - Bauhaus Bold	P50093A	E - Harlow	P50737A
E - Burgess	P50738A	E - Helvetica	P39946A
E - Clarendon Bold	P50085A	E - Helvetica Medium	P50091A
E - Contemporary	P39943A	E - Optima Semi Bold	P50088A
E - Double Line Century	P39945A	E - Roman 4 Line	P39947A
E - Dynamo	P50094A	E - Single Line Cursive	P39951A
E - Full Block	P50086A	E - Single Line Helvetica_	P39949A
E - Futura Bold	P50087A	E - Western	P50739A
E - Handel Gothic	P50089A		

#### **BLOWER MOTOR PACKAGES**

Includes 10Hp, 3 phase motor, air filter, relief valve and control panel.

#### ATB3001AK12

Includes 7-1/2Hp, single phase motor, air filter, relief valve and control panel. ATB15031AY99



SECTION F: HARDWARE





#### **LEAD SHIELD ANCHORS FOR LAG BOLTS**

Catalog	Bolt	Shield	Drill	Put
Number	Diameter	Length	Size	Up
1815-00200	1/4"	1"	1/2"	50
1815-00300	1/4"	1-1/2"	1/2"	50
1825-00200	3/8"	1-3/4"	5/8"	50
1825-00300	3/8"	2-1/2"	5/8"	50
1835-00200	1/2"	2"	3/4"	25
1835-00300	1/2"	3"	3/4"	25



#### PLASTIC SCREW ANCHORS

Catalog	Screw	Anchor	Drill	Put
Number	Size	Length	Size	Up
0608-06000	6-8	3/4"	3/16"	100
0610-07000	8-10	7/8"	3/16"	100
0612-10000	10-12	1"	1/4"	100



#### **NYLON ANCHORS**

Catalog	Size	Head	Put
Number		Style	Up
2410-32010	3/16" x 1"	Truss	100
2410-48010	3/16" x 1-1/2"	Truss	100
2415-32010	1/4" x 1"	Truss	100
2415-48010	1/4" x 1-1/2"	Truss	100
2415-64010	1/4" x 2"	Truss	100



#### **BOLT STOCK**

Catalog Number	Description	Put Up
1/4BOLT	1/4-20 x 36" Steel, Plated	15'
3/8BOLT	3/8-16 x 36" Steel, Plated	15'
1/2BOLT	1/2-13 x 36" Steel, Plated	15'



#### **HEX LAG BOLTS**

Zinc plated.

Catalog	Lag Bolt	Put
Number	Size	Up
L-1/4X1	1/4 x 1"	100
L-1/4X2	1/4 x 2"	100
L-1/4X3	1/4 x 3"	100
L-1/4X4	1/4 x 4"	100
L-1/4X6	1/4 x 6"	100
L-3/8X2	3/8 x 2"	100
L-3/8X3	3/8 x 3"	50
L-3/8X4	3/8 x 4"	50
L-3/8X5	3/8 x 5"	50
L-1/2X2 L-1/2X3 L-1/2X3.5 L-1/2X4 L-1/2X5 L-1/2X6	1/2 x 2" 1/2 x 3" 1/2 x 3.5" 1/2 x 4" 1/2 x 5" 1/2 x 6"	50 50 25 25 25 25 25

#### **MACHINE BOLTS**

Zinc plated.

Catalog	Lag Bolt	Put
Number	Size	Up
M-3/8X1 M-3/8X1.5 M-3/8X2 M-3/8X3 M-3/8X4	3/8-16 x 1" 3/8-16 x 1.5" 3/8-16 x 2" 3/8-16 x 3" 3/8-16 x 4"	100 100 100 100 100 50
M-1/2X1	1/2-13 x 1"	50
M-1/2X1.5	1/2-13 x 1.5"	100
MFT-1/2X2	1/2-13 x 2" Full Thread	50
MFT-1/2X3	1/2-13 x 3" Full Thread	50
MFT-1/2X6	1/2-13 x 6" Full Thread	25





Machine Bolt



**Full Thread Machine Bolt** 

#### **ANGLE BRACKETS**

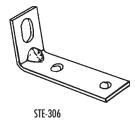
Steel-brite LTD.

Hot galvanized steel with 5/8" holes. Many other brackets also

Catalog	Lag Bolt	Put
Number	Size	Up
STE-301	2" x 2" x 2" 90°	50
STE-304	1-1/2" x 2" x 2" 45°	50
STE-306	1-1/2" x 2" x 5" 90°	50







#### **GUY CABLE**

Ductile galvanized seven strand guy cable. For use where exposed to weather.

Catalog	Cable	Put
Number	Thickness	Up
3/16X250	3/16"	250' Roll





#### **JACK CHAIN**

Zinc plated. Supplied in rolls.

Catalog	Size	Load	Put
Number		Limit	Up
INT-JC-16	#16	10 lbs.	250'
INT-JC-14	#14	16 lbs.	200'
INT-JC-12	#12	29 lbs.	100'



#### **STEEL PLATED WASHERS**

Catalog Number	Description	Washers per lb.	Min. Order (Pcs.)	Put Up (Pcs.)
Flat Washers FW-3/16 FW-1/4 FW-5/16 FW-3/8 FW-1/2 FW-5/8 FW-3/4	3/16" 1/4" 5/16" 3/8" 1/2" 5/8" 3/4"	225 156 100 68 26 13 10	100 100 100 100 50 50 50	1000/18050 1000/7450 500/4350 500/3350 50/1300 50/650 50/550
Lock Washers SLW-1/4 SLW-3/8 SLW-1/2 SLW-5/8 SLW-3/4	1/4" 3/8" 1/2" 5/8" 3/4"		100 100 100 100 100	100 100 100 100 100
Rivet Backup Wash SBUP-1/8 SBUP-3/16	ers 1/8" 3/16"	-	500 500	500 500



Flat Washer





Lock Washer

Backup Washer

#### HIGH SPEED TWIST DRILL BITS

Since 1946

Catalog Number	Reference Number	Lag Bolt Size	Put Up
R41C-*	135	Short, Numerical, Coated, 135° Point	12 Drills
R40C-**	135	Short, Fractional, Coated, 135° Point	12 Drills 1/8 to 19/64 6 Drills 5/16 to 1/2
R18-*	115	Jobber, Numerical, Coated, 118° Point	12 Drills
R10-**	115	Jobber, Fractional, Coated, 118° Point	12 Drills 1/8 to 19/64 6 Drills 5/16 to 1/2
R7-***	120	Short, 1/4" Shank, Fractional	6 Drills
140-30	-	#30 Double ended	12 Drills

#### R41C / R40C R18/R10 140-30 Short Length Jobber Length Short, 1/4" Shank **Double Ended**

**PRECISION** 

#### **Ordering Information**

Items with "\*" suffix indicates sizes desired: Substitute "\*" with 1 to 60 . Substitute "\*\*" with 1/8 to 1/2 by 64th. Substitute "\*\*\*" with 5/16, 3/8 or 1/2.

#### MASONRY DRILL BITS

Catalog Number	Reference Number	Hole Dia.	Depth	Shank	Put Up
1410-00 1415-00 1425-00 1435-00 1445-00 1455-00	215-3/16 215-1/4 215-3/8 215-1/2 215-5/8 215-3/4	3/16" 1/4" 3/8" 1/2" 5/8" 3/4"	2-1/2" 3-1/2" 4-1/2" 4-1/2" 4-1/2"	Round Round Round Round 1/2" Round 1/2" Round	10 10 10 10 10 10





#### **HEAT GUNS**

Ideal wherever a fast, portable, flameless heat is needed.

Catalog Number	Description
MAS-HG-751B	750°-1000°, 120V Heat Gun
MAS-043K	Replacement Element for HG-751B



#### **Brisk**Heat

#### **HEATING TAPES**

General purpose heating tapes used for bending sheet plastic. Supplied with a rugged 0-100% controller.

Catalog Number	Description
BRI-6	6'x1", 432 Watt w/Controller
BRI-8	8'x1", 576 Watt w/Controller

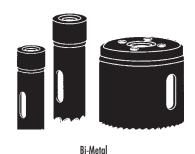


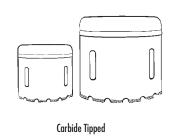
#### **HOLE SAWS**

Bi-metal hole saws are recommended for cutting woods, plastics, machinable metals, nail embedded wood, pipe, etc. Carbide hole saws are recommended for cutting abrasive materials such as fiberglass, particle board, formica and cast iron.

1-1/2" cutting depth. 1 per box.

Catalog Number	Catalog Number	Dia.	Dia.
Bi-Metal	Carbide Tipped	(Inches)	(mm)
BLU-509 BLU-510 BLU-512 BLU-514 BLU-516 BLU-518 BLU-520 BLU-521 BLU-522 BLU-522 BLU-524 BLU-532	BLU-C14 BLU-C16 - BLU-C20 - BLU-C22 BLU-C24	9/16 5/8 3/4 7/8 1 1-1-1/8 1-1/4 1-5/16 1-3/8 1-1/2	14 16 19 22 25 29 32 33 35 38





#### **HOLE SAW MANDRELS**

1 per box.

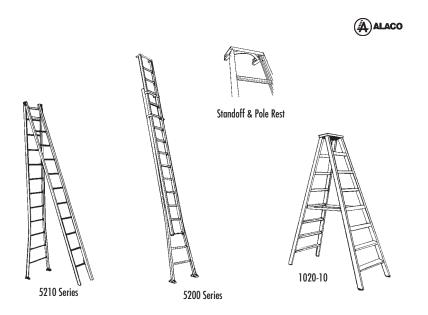
Catalog	Fits	Shank	Chuck
Number	Hole Saws	Size	Size
BLU-5514	9/16" to 1-1/2"	1/4 Round	1/4
BLU-5518	9/16" to 1-1/2"	7/16 Hex	1/2
BLU-5520	1-1/4" to 2-3/8"	7/16 Hex	1/2
BLU-5545	1-1/4" to 6"	7/16 Hex	1/2
<b>BLU-8535</b> R	eplacement Pilot Drill, 4"	' x 1/4", 3 Set Screw	Notches



#### **ALUMINUM LADDERS**

Alaco aluminum ladders are heavy duty industrial quality ladders. All aluminum construction guards against corrosion. 5200 series ladders are standard extension type. 5210 series ladders have a combination bracket that allows for use as an extension ladder or as an "A" frame ladder. Both are equipped with a stand off and pole rest. Step ladders are two-sided. Other models and sizes also available.

Catalog	Extended	Un-Extended	Weight
Number	Height	Height	(Lbs.)
5210-16-PRS	13' - 2"	8' - 3"	26
5210-24-PRS	21' - 2"	12' - 3"	36
5210-28-PRS	25' - 2"	14' - 3"	42
5210-32-PRS	29' - 2"	16' - 3"	47
5200-16-PRS	13' - 2"	8' - 3"	26
5200-24-PRS	21' - 2"	12' - 3"	36
5200-32-PRS	29' - 2"	16' - 3"	47
1020-10	Two-Sided Step Ladder, 112"		41
ALA-KH60	Replacement Shoe for 5210 Series & 5200 Series		





#### **HEX NUTS**

Zinc plated.

Catalog	Description	Put	Min.
Number		Up	Order
H-8-32 H-10-24 H-10-32 H-1/4 H-3/8 H-1/2 H-5/8 H-3/4	8-32 - Plated Steel 10-24 - Plated Steel 10-32 - Plated Steel 1/4-20 - Plated Steel 3/8-16 - Plated Steel 1/2-13 - Plated Steel 5/8-11 - Plated Steel 3/4-10 - Plated Steel	100/1000 100/1000 100/1000 100/1000 100/1000 50/500 50/500 50/500	100 100 100 100 100 - -





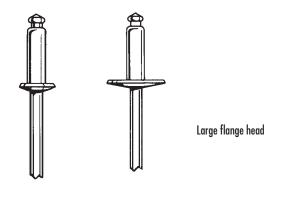
#### **BLIND RIVETS • OPEN END DOMED**

Catalog numbers ending with LF are large flange head rivets. Steel rivets are plated. Clearance hole drill bit sizes are #30 for 1/8" rivets and #11 for 3/16" rivets. Minimum order is 1000. Other sizes and types also available.

Catalog Number	Referance Number	Material	Rivet Dia.	Max. Grip	Case Qty.
SD42BS SD43BS SD44BS SD46BS SD46BS SD66BS SD68BS SD42BSLF SD44BSLF AD42ABS AD44ABS AD42ABSLF	SB4-2 SB4-3 SB4-6 SB4-6 SB6-6 SB6-8 SB14-2 SB14-4 AB4-2A AB4-4A AB14-2A	Steel Steel Steel Steel Steel Steel Steel Steel Steel Aluminum Aluminum	1/8 1/8 1/8 1/8 1/8 3/16 3/16 1/8 1/8 1/8 1/8	1/8 3/16 1/4 3/8 1/2 3/8 1/2 1/8 1/4 1/8	10,000 10,000 10,000 10,000 8,000 4,500 4,000 10,000 10,000 10,000 10,000







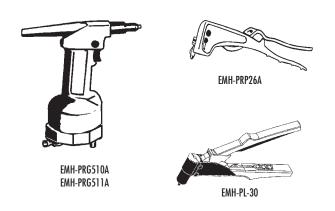
#### **RIVET TOOLS**

PRP26A is a heavy duty rivet tool. PL-30 is a newly designed rivet tool with a protruding nose. Other features include: hide away storage of extra nosepieces and wrench in the bottom of ergonomically designed contoured grips. A compact easy flip-lock and patented CAM link system which makes it easier to use. ROP-8000 has a two position nosepiece which can be set in-line or at 90°. PRG510A is a production quality pneumatic rivet gun. PRG511A comes equipped with an extended nosepiece. Guns are not supplied with an air line assembly. Order PRT5200-220 air line assembly if needed.

Catalog Number	Description	Max. Capacity	Mfgr.
EMH-PRP26A EMH-PL-30 ROP-8000 EMH-PRG510A EMH-PRG511A	PowerLink 30 Hand Riveter Dual Position Hand Riveter 10A Air Riveter		POP POP Roper POP POP
PRT5200-220 PRG511-003	Complete Air Line Assembly PRG-510A to PRG-511 Conversion Kit	-	POP POP







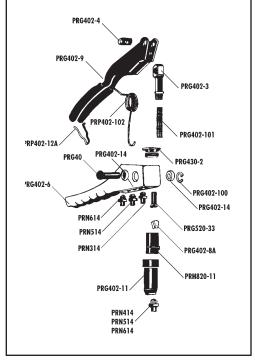




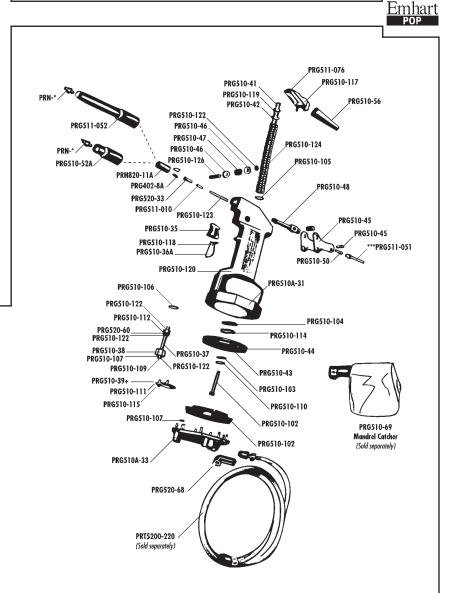
#### REPLACEMENT PARTS FOR EMH-PRP402HC RIVET TOOL

Parts normally stocked.

Catalog Number	Description
PRG402-8A PRG402-100 PRG402-101 PRG402-6 PRG402-11 PRN414 PRN514 PRN614 PRP40	Jaws Fulcrum Pin Retainer Jaw Pusher Spring Riveter Support Nose Housing Nosepiece for 1/8" Nosepiece for 5/32" Nosepiece for 3/16" Fulcrum Pin



#### REPLACEMENT PARTS FOR **EMH-PRP26A RIVET TOOL** Parts normally stocked. Catalog Number Description PRG402-100 Fulcrum Pin Retainer PRP11 PRP30 Jaws for 1/8" Rivets Jaw Pushér PRP32 Nosepiece for 1/8" Fulcrum Pin PRP40 PRG402-100 Collet Spring Screw Jaw Pusher Washer **PRP100** PRP101 PRP101 PRP32



# REPLACEMENT PARTS FOR EMH-PRG510A/511A AIR RIVET TOOLS

Parts normally stocked.

Catalog Number	Description
PRG402-8A PRG510-34 PRG510-46 PRG510-47 PRG510-50 PRG510-52A PRG510-117 PRG510-117 PRG510-122 PRG510-123 PRG510-126 PRG511-051 PRG520-68 PRH820-11A PRT5200-220	Jaws Nose Housing Insert Bell Crank Bushing, Outer Bell Crank Bushing, Center Mandrel Tube Nose Housing Valve Ring Seal (1) Housing Cap Screw Valve Ring Seal Retainer Jaws Pusher Spring Bell Crank Fulcrum Mandrel Guide Elbow Fitting Jaw Guide Air Line Assembly



#### **SHEET METAL SCREWS**

Plated steel. Minimum order is 100.

Catalog Number	Size	Put Up
Type A, Pan Head, Slo A7X3/8PS A7X1/2PS A7X3/4PS A7X1PS	tted 7 x 3/8" 7 x 1/2" 7 x 3/4" 7 x 1"	100, 1M, 5M 100, 1M, 5M 100, 1M, 5M 100
A8X3/8PS A8X1/2PS A8X3/4PS A8X1PS A8X1.25PS A8X1.5PS	8 x 3/8" 8 x 1/2" 8 x 3/4" 8 x 1" 8 x 1-1/4" 8 x 1-1/2"	100, 1M, 5M 100, 1M, 5M 100, 1M, 5M 100 100
A10X1/2PS A10X1PS A10X1.5PS	10 x 1/2" 10 x 1" 10 x 1-1/2"	100 100 100
Type A, Pan Head, Phi A7X1/2PP A7X3/8PP	llips   7 x 1/2"   7 x 3/8"	100, 1M, 5M 100, 1M, 5M
A8X3/8PP A8X1/2PP	8 x 3/8" 8 x 1/2"	100, 1M, 5M 100, 1M, 5M
A10X1/2PP A10X3/4PP A10X1PP A10X1.5PP A10X1.25PP	10 x 1/2" 10 x 3/4" 10 x 1" 10 x 1-1/2" 10 x 1-1/4"	100, 1M, 5M 100, 1M, 5M 100, 1M, 5M 100, 1M, 5M 100, 1M, 5M
Type A, Hex Head, Slo A8X1/2HS A8X3/4HS A8X1HS A10X1/2HS A10X3/4HS A10X1.25HS A10X2HS	tted 8 x 1/2" 8 x 3/4" 8 x 1" 10 x 1/2" 10 x 3/4" 10 x 1-1/4" 10 x 2"	100, 1M, 5M 100, 1M 100, 1M 100, 1M, 5M 100, 1M, 5M 100, 1M
Type F, Pan Head, Slot F8-32X1/2PS	ted   8-32 x 1/2"	100
Drillquick, Hex-Washer 1908-16024 1908-24024	Head 8-18 x 1/2" 8-18 x 3/4"	100/1M 100/1M
1909-16034 1909-24034 1909-32034 1909-40034 1909-48034	10-16 x 1/2" 10-16 x 3/4" 10-16 x 1" 10-16 x 1-1/4" 10-16 x 1-1/2"	100/1M 100/1M 100/1M 100/1M 100/1M



Pan Head Slotted Type A



**Pan Head Phillips** Type A



**Hex Head Slotted** Type A



Pan Head Slotted Type F



Drillquick Hex Washer Head

#### **MACHINE SCREWS**

Plated steel. Minimum order is 100. Catalog number suffix:  $R=\mbox{round}$  head and  $T=\mbox{truss}$  head.

Catalog	Length	Put
Number	Inches	Up
8-32X.5R	1/2"	100, 1M
8-32X.75R	3/4"	100, 1M
8-32X1R	1"	100, 1M
10-24X3R	3	100, 1M
10-24X4R	4	100, 1M
1/4X.5R	1/2	100, 1M
1/4X.75R	3/4	100, 1M
1/4X.75T	3/4	100, 1M
1/4X1R	1	100, 1M
1/4X1T	1	100, 1M
1/4X1.25R	1-1/4	100, 1M
1/4X1.5R	1-1/2	100, 1M
1/4X1.75R	1-3/4	100, 1M
1/4X2R 1/4X3R 1/4X4R	2 3 4	100, 1M 100, 1M 100, 1M



**Sheet Metal Screw** Round Head

#### **TOGGLE BOLTS**

Plated steel. All toggle bolts come complete with snap-in heads. Order appropriate round head machine screws for screws only.

Catalog	Size	Screw	Put
Number		Size	Up
3005-40100	1/8 x 4	8-32 x 4	50
3010-30000	3/16 x 3	10-24 x 3	50
3010-40000	3/16 x 4	10-24 x 4	50
3015-30000	1/4 x 3	1/4-20 x 3	50
3015-40000	1/4 x 4	1/4-20 x 4	50
3015-50000	1/4 x 5	1/4-20 x 5	50
3015-60000	1/4 x 6	1/4-20 x 6	50
3025-30000 3025-40000 3025-50000 3025-60000	3/8 x 3 3/8 x 4 3/8 x 5 3/8 x 6	3/8-16 x 3 3/8-16 x 4 3/8-16 x 5 3/8-16 x 6	25 25 25 25 25
3010-00600	1/4 Snap-	p-In Head Only	50
3015-00600		In Head Only	50
3025-00600		In Head Only	50



Toggle Screw w/Snap-In Head

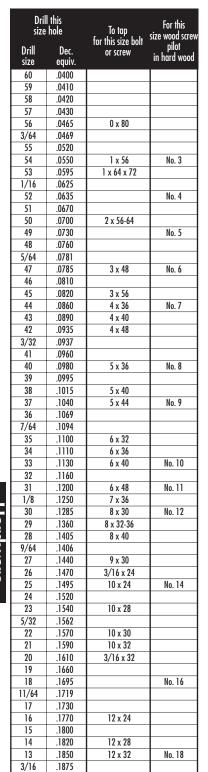
# Interstate Electric Co.

#### **FASTENER INFORMATION**

Where substitution is necessary, use next larger size drill bit.

All tap drill sizes represent 75% full thread except asterisked sizes which represent 60% full thread.









Drill this size hole			To tap	For this size wood scre	
	Drill size	Dec. equiv.	for this size bolt or screw	pilot in hard wood	
	12	.1890			
	11	.1910			
	10	.1935	14 x 20		
	9	.1960			
	8	.1990			
	7	.2010	1/4 x 20		
	13/64	.2031			
	6	.2040			
	5	.2055			
	4	.2090	1/4 x 24	No. 20	
	3	.2130	1/4 x 28		
	7/32	.2187	1/4 x 32		
	2	.2210			
	1	.2280		No. 24	
	A	.2340			
	15/64	.2344			
	В	.2380			
	C	.2420			
	D 1/4	.2460			
	1/4	.2500		-	
	E F	.2500 .2570	E /14 10		
	G		5/16 x 18		
	17/64	.2610 .2656	5/16 x 18*		
	H	.2660	J/ 10 X 10		
	"	.2720	5/16 x 24		
	j	.2770	J/ 10 X 24		
	K	.2810			
	9/32	.2812	5/16 x 24-32*		
	L	.2900	37 10 X 2 1 02		
	M	.2950			
	19/64	.2969			
	N	.3020			
	5/16	.3125	3/8 x 16-1/8		
	0	.3160			
	P	.3230			
	21/64	.3281	3/8 x 20-24		
	Q	.3332			
	R	.3390			
	11/32	.3437			
	S	.3480			
	T	.3580			
	23/64	.3594			
	U	.3680	7/1/		
	3/8	.3750	7/16 x 14		
	V	.3770			
	W	.3860	7/1/ 00		
	25/64	.3906	7/16 x 20		
	Υ	.3970			
	13/32	.4040 .4062			
	13/32 Z	.4062			
	27/64	.4219	1/2 x 12-13		
	7/16	.4375	1/2 x 12-13 1/4" Pipe		
	29/64	.4531	1/2 x 20-24		
	15/32	.4687	1/2 x 20-24 1/2 x 27		
	31/64	.4844	9/16 x 12		
	1/2	.5000	7, 10 1 12		
ı			1		



Type A

Type AB

Screw	Metal tl	nickness	Type A-AB sharp point		
size	Gage	Inches	Use drill		
No. 4 (.112")	28 26 24 22 20	.016 .019 .025 .031 .038	No. 44 No. 44 No. 42 No. 42 No. 40		
No. 6 (.138")	28 26 24 22 20	.016 .019 .025 .031 .038	No. 39 No. 39 No. 39 No. 38 No. 36		
No. 7 (.155")	28 26 24 22 20 18	.016 .019 .025 .031 .038 .050	No. 37 No. 37 No. 35 No. 33 No. 32 No. 31		
No. 8 (.165")	26 24 22 20 18	.019 .025 .031 .038 .050	No. 33 No. 33 No. 32 No. 31 No. 30		
No. 10 (.191")	26 24 22 20 18	.019 .025 .031 .038 .050	No. 30 No. 30 No. 30 No. 29 No. 25		
No. 12 (.218")	24 22 20 18	.025 .031 .038 .050	No. 26 No. 25 No. 24 No. 22		
No. 14 (.251")	24 22 20 18	.025 .031 .038 .050	No. 15 No. 12 No. 11 No. 9		

Type B



Screw size	Metal tl	nickness	Type A-AB sharp point		
3126	Gage	Inches	Use drill		
No. 4 (.112")	28 26 24 22 20	.016 .019 .025 .031 .038	No. 44 No. 44 No. 43 No. 42 No. 42		
No. 6 (.137")	28 26 24 22 20	.016 .019 .025 .031 .038	No. 37 No. 37 No. 36 No. 36 No. 35		
No. 7 (.151")	26 24 22 20 18 16	.019 .025 .031 .038 .050 .063	No. 32 No. 32 No. 32 No. 32 No. 31 No. 30		
No. 8 (.163")	26 24 22 20 18	.019 .025 .031 .038 .050	No. 32 No. 32 No. 32 No. 32 No. 30		
No. 10 (.186")	26 24 22 20 18	.019 .025 .031 .038 .050	No. 27 No. 27 No. 27 No. 27 No. 27		
No. 12 (.212")	24 22 20 18	.025 .031 .038 .050	No. 19 No. 19 No. 19 No. 18		
No. 14 (.243")	22 20 18 16	.031 .038 .050 .063	No. 13 No. 13 No. 11 No. 8		

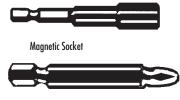
**DEWALT** 



#### **SCREWDRIVING ACCESSORIES**

Other screwdriving accessories also available.

Catalog Number	Description
BLA-DW2221	1/4" Magnetic Socket and 2-9/16" Shank
BLA-DW2222	5/16" Magnetic Socket and 2-9/16" Shank
BLA-DW2115	#2 Phillips Screwdriver Bit
BLA-DW2023	#3 Phillips Screwdriver Bit

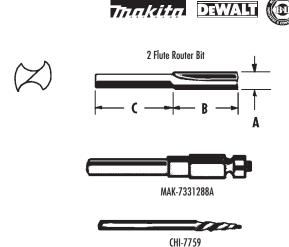


# Phillips Screwdriver Bit

#### **HAND TOOL ROUTER BITS & ACCESSORIES**

Many other router bits and accessories also available.

Catalog Number	Description	A	Dimensi B	ion C	Shank Dia.
BLA-DW6106	Carbide Tipped, 2 Flute Router Bit	1/8"	5/16	" 1"	1/4"
BLA-DW6110	Carbide Tipped, 2 Flute Router Bit	1/4"	1"	1-1/8"	1/4"
BLA-DW6120	Carbide Tipped, 2 Flute Router Bit	1/2"	1"	1-1/16"	1/4"
MAK-7331288A	Carbide Tipped Router Bit, 3/8" Ball Brng, 3/8" Replacement Ball Bearing Only 1/2" Replacement Ball Bearing Only	. 3/8"	1"	1-1/16"	1/4"
MAK-7331322B		-	-	-	-
SR2ASS		-	-	-	-
CHI-7759	1/8" Spiral Pointed Plastic Cutter	1/8"			1/8"



#### **ROUTER BITS FOR ROUTING TABLES AND SIGNMAKING EQUIPMENT**

Please see Graphics section.

#### **SOLDER & ACCESSORIES**

Catalog Number	Description	Put Up
INT-1001	50/50 Bar Solder, 1/2" x 3/4" x 13"	1 lb.
ACID-1	#1 Acid Swab	1





#### **SHEET METAL HAND TOOLS**

Catalog Number	Description
ROP-141	Notcher, 32°, 20 Gauge Capacity
ROP-541A	Notcher, 90°, 20 Gauge Capacity
ROP-542-45	Notcher, 45°, 20 Gauge Capacity
WIS-M-1R	Aviation Snip, Cuts Left w/Red Grips
WIS-M-2R	Aviation Snip, Cuts Right w/Green Grips
WIS-M-3R	Aviation Snip, Cuts Straight w/Yellow Grips
WIS-W-5	Pattern Snip, 16", 2-1/2" Cut, 16ga. Capacity
PRO-939	Scratch Awl
WIS-P406	Replacement Spring for M-1 R
WIS-P407	Replacement Spring for M-2 R
ROP-541BLADE	Replacement 90° Blade Set for 541 A
ROP-542BLADE	Replacement 45° Blade Set for 542-45









#### ROPER #5JR HAND PUNCH

Kit comes compete with 3/32, 1/8, 5/32, 3/16, 7/32, 1/4 and 9/32" punches and dies packaged in a handy plastic case. Throat depth is 1-3/4". Throat height is 7/16". Punch capacity is 9/32" 16ga. mild steel.

Catalog Number	Description
ROP-5JR-K	Hand Punch Kit
ROP-5BASE	Bench Mounting Base
ROP-5P-*	Male Round Punch Tooling
ROP-5D-*	Female Round Die Tooling







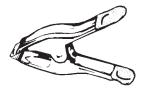
#### **Ordering Information**

Items with "\*" suffix indicates size for tooling. Substitute with 1/8, 5/32, 3/16, 1/4 or 9/32.

#### JORGENSEN "PONY" CLAMP

Vinyl covered jaws and handles.

Catalog Number	Description
JOR-3202HT	Spring Clamp, 2"x6"

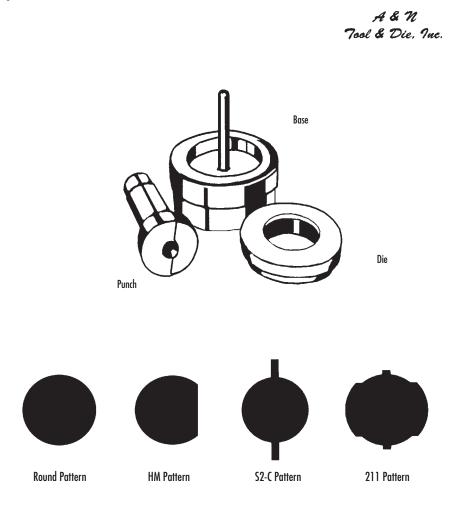




#### **A&N PUNCH TOOLING**

Round punches and dies are interchangeable on AN-B1 or AN-B2 bases. A few hammer blows will make a clean hole in 18 gauge or lighter metal. Blanks fall into a recess in the base. HM tooling produces a "D" shaped panel opening which fits snap-in lampholders. S2-C tooling produces an opening for the EAG-4734-2BU socket. S2-C-L layout tool marks the precise location for the pilot holes when using the S2-C pattern. 211 tooling produces an opening for the CHA-22258.9 socket. 209 tooling produces an opening for the EAG-974-2BU socket.

IIIO CITA ZZZJO.7	socker. 207 fooling produces un o
Catalog Number	Description
AN-P-5/8 AN-P-5/8 AN-P-9/16 AN-P-9/16 AN-P-3/4 AN-P-3/4 AN-P-7/8 AN-P-1 AN-P-1-1/8 AN-P-1-1/8 AN-P-1-1/4 AN-P-1-1/4 AN-P-1-5/16 AN-P-1-5/16 AN-P-1-3/8 AN-P-1-3/8 AN-P-1-7/16 AN-P-1-7/16 AN-P-1-7/16 AN-P-1-1/2 AN-P-1-1/2 AN-P-1-1/2 AN-P-1-1/2 AN-P-1-3/4 AN-P-1-3/4 AN-P-1-3/4 AN-P-2 AN-P-2 AN-P-2 AN-P-2 AN-P-1-3/4 AN-P-2 AN-P-2 AN-P-1-3/4 AN-P-2 AN-P-2 AN-P-1-3/4 AN-P-2 AN-P-1-3/4 AN-P-2 AN-P-1-3/4 AN-P-2 AN-P-1-3/4 A	5/8" Round Punch 5/8" Round Die 9/16" Round Die 9/16" Round Die 3/4" Round Punch 3/4" Round Die 7/8" Round Die 7/8" Round Die 1" Round Punch 1" Round Die 1-1/8" Round Punch 1-1/8" Round Punch 1-1/4" Round Die 1-1/4" Round Die 1-1/4" Round Punch 1-1/4" Round Die 1-5/16" Round Punch 1-5/16" Round Punch 1-5/16" Round Punch 1-7/16" Round Die 1-1/2" Round Die 1-1/2" Round Die 1-1/2" Round Die 1-1/4" Round Die 1-5/8" Round Punch 1-1/4" Round Die 1-5/8" Round Die 1-3/4" Round Die 1-3/4" Round Die 1-3/4" Round Die 2" Round Punch 1-3/4" Round Die 2" Round Punch 1-3/4" Round Die
AN-HM-P AN-HM-D AN-HM-B AN-HM-PP AN-HM-HB	HM Punch HM Die HM Base w/Pilot Pin HM Replacement Pilot Pin HM Replacement Head Bolt Only
AN-S2-C-P AN-S2-C-D AN-S2-C-B AN-S2-C-L AN-PP-2491	S2-C Punch S2-C Die S2-C Base w/Pilot Pins S2-C Layout Tool S2-C Replacement Pilot Pin (2 Needed)
AN-211-P AN-211-D AN-211-B AN-211-PP AN-209-PDB	211 Punch 211 Die 211 Base w/Pilot Pin 211 Replacement Pilot Pin, .310 Sq. 209 Punch/Die/Base
MI1-70/-1 DD	במי ו חוותול חופל חמפב



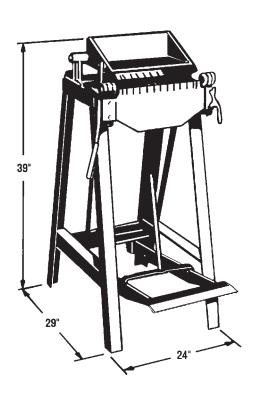
## LETTER FORMING BRAKE

The Roper #99 bending brake has slotted jaws and apron which is designed for braking sheet metal strips on which bent up edges or seams have already been formed. It is small enough to be moved around the shop for convenience or trucked to an installation site.

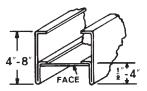
Catalog Number	Description
ROP-99	Letter forming "Finger" Brake

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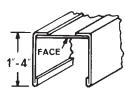
Capacity Mild Steel	20 ga
Max. Bending Length	12'
Slot Depth	3/4'
Max. Jaw Opening	1-1/2'
Weight	185 lbs



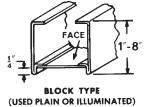
#### three types of drum return formed on no. 99 letter forming brake

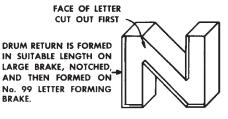


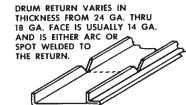
CHANNEL BLOCK TYPE (WITH RACEWAY FOR WIRING, TRANSFORMER, ETC.)



CHANNEL TYPE
(NEON OR INCANDESCENT
PROTECTED TYPE)









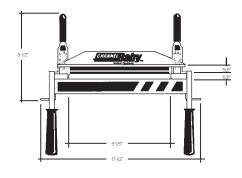
#### CHANNEL BABY LETTER FORMING BRAKE

A high quality economical bench mountable letter forming break. Wide jaw design opens to 4" to make channel letter fabrication simple. Bends aluminum thicknesses from .032 to .063 in widths up to 9" by unlimited length. Blade width: 9.5", side depth: 5/8". Other versions also available.

Made in U.S.A.

Catalog	Weight	
Number	(Lbs.)	
CHA-BABY	17	





#### **WILDER WORKHORSE POWER SLITTERS**

Wilder workhorse power slitters are high quality, economical slitters that are capable of slitting sheet metal, aluminum, stainless steel, plastics, copper, brass, galvanized and mild steel. A unique "hollow ground" and reversible double edged high carbon/high chromium blade is standard on all Wilder slitters which is designed to increase blade use as well as blade life.

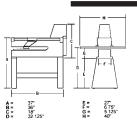
At 215 pounds, Model 2024 is the lightest and most versatile slitter on the market today. Pound for pound, this slitter is built to take on all the work that lightweight sign shops and sheetmetal shops are willing to dish out. Powered by a 1/3 horsepower electric motor, requiring only 115 volts and drawing 6.6 full load amps, the self-feeding WIL-2024 offers unlimited productivity with low operating coasts. With the standard slitting feed rate of 90 ft. per minute (6.7 seconds for a 10ft. sheet) and the approximate 4 seconds needed to move and lock-down the auidebar for width of cut, one can easily see how quick it is to increase efficiency with a Wilder Power Slitter.

WIL- 2024 slits to a maximum thickness of 20 gauge mild steel, with no limit of length. The minimum allowable slitting width is 1-1/4 inches with the maximum width being 24-1/4 inches.

Model 1624 is the most affordable and popular slitter used today. Powered by a 115 volt, 3/4 horsepower electric motor, the WIL-1624 is self-feeding and will slit materials of unlimited lengths at the feed rate of 90 ft. per minute. (18 inches per second). With a maximum thickness capacity of 16 gauge mild steel, a minimum slit width of 1-1/4 inches and a maximum slit width of 24-1/4 inches, the Model 1624 offers a variety of applications with increased productivity.

The guick and improved back gauge system allows for more rigidity and precise movements, resulting in more accuracy and consistency in every cut.

Description	
20 Gauge Slitter 16 Gauge Slitter	
5-1 Angle Iron Stand Assembly SM2 Premium Stand w/Shelf	

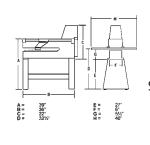


CAPACITY





SPECIFICATIONS	
Cutting Capacity (Mild Steel)	
Maximum Slitting Width	
Minimum Slitting Width	
Feed Direction	
Slitting Speed	
Horsepower	
Horsepower	
Phose 1 Ph	
Cycle	
Full Load Amps	
Shaft Diameter	
Blades (Std.)	
Side Wall Thickness	
Dry Weight 215 lbs	
*Approx. Shipping Weight	
*Wide	







WII-1624

SPECIFICATIONS	
Cutting Capacity (Mild Steel)	
Maximum Slitting Width	24-1/4'
Minimum Slitting Width	1-1/4'
	Right to Lef
Slitting Speed	90 Ft./Min
Horsepower	3/4 Hc
Voltage	115/208-23Ó Volt
	1 Pł
Cvcle	60 Hz
Full Lond Amps	10.6/5.3 Amns
Shaft Diameter	
Blades (Std)	
	Steel Plate
Dry Weight	375 lbs
*Annrox Shinning Weight	450 lbs
. Abrem and being many	

Commerce: 323.803.2000 / 800.225.5432 (CALL IEC) / Fax 323.803.2019

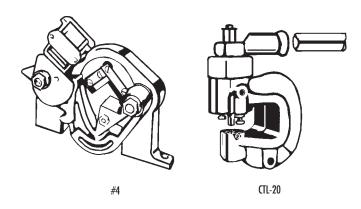
#### ROPER METAL WORKING TOOLS

The #4 shear with its standard blade cuts up to 2x2x1/4" angle iron with varying degrees of distortion. ROP-4-25 contour movable blade minimizes distortion but reduces the capacity to 2x2x3/16".

ROP-CTL-20 is a heavy duty portable punch with a 20 ton capacity. The frame around the die pocket is machined flat to allow punching close to the web of angle iron (9/16" from web to center of hole). Handle extension should be 3/4" pipe, 48 to 60" in length which is not suppled. An optional ROP-119 ratchet handle is available for working in close quarters. Maximum hole capacity is 9/16". 9/16" round tooling and other sizes from 1/8" to 17/32" are available upon request.

Replacement parts available upon request.

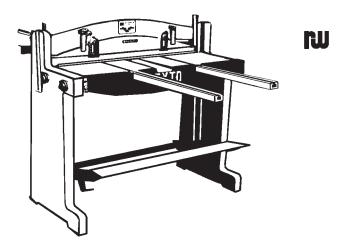
Catalog Number	Description	
ROP-4	Angle Iron Shear w/ Standard Blade and 72" Handle	
ROP-4-25	Contour Movable Blade for ROP-4	
ROP-CTL-20	Portable Punch	
ROP-119	Ratchet Handle for CTL-20	



#### **ROPER FOOT SQUARING SHEAR**

ROP-152 shear offers triple-action shearing which includes relief on both edges of both the fixed and moving blades. It eliminates blade-to-blade friction, provides "bite" to eliminate sheet movement under shearing stress and produces double penetration in its cutting action. All contribute to easier operation. Will accommodate up to a 52" sheet.

Catalog Number	Description	
ROP-152	52" Foot Squaring Shear, 16 Ga. Capacity	

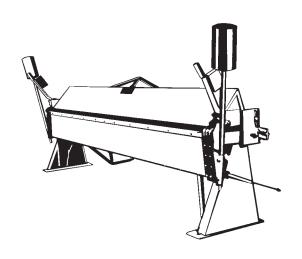


Connecticut

#### **CONNECTICUT BRAKE**

Floor brakes are all steel construction, no castings. Features include heavy tie rods for minimum deflection, removable bending bar & angle, adjustable apron hinges and positive rear adjustment and clamping. Also features an apron stop rod for repeat bends, replaceable bushings, bronze hinge pin and long handles for extra leverage. Full capacity, 1" flange, bar and angle in place. Improved leg design for neat appearance and lighter weight. Other variations also available.

Catalog Number	Description	
ROP-1016	121" Connecticut Brake, 16 Ga. Capacity	
ROP-1018	121" Connecticut Brake, 18 Ga. Capacity	

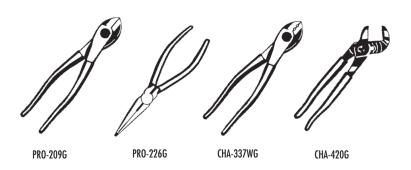




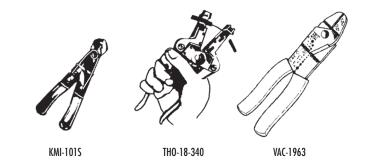
#### PLIERS • CUTTERS • STRIPPERS

Shown are the most commonly requested hand tools normally stocked. All supplied with vinyl grips. Many other high quality hand tools available upon request.

Catalog Number	Description	Mfgr.
PRO-209G	Diagonal Cutters	Proto
PRO-226G	Longnose Pliers	Proto
CHA-337WG	Diagonal Cutter/Strippers for #12-14	Channelock
CHA-420G	Adjustable Pipe Pliers "Channelocks"	Channelock
KMI-101S	Wire Strippers w/Return Spring	K. Miller
THO-18-340	Automatic Wire Strippers	T & B
VAC-1963	Wiring Tool, Cuts/Strips/Crimps	Vaco



(PROTO) CHAN NEL LOCK Miller VA(0 T&B



#### **GLASS FILES**

Quality file heat treated for long lasting cutting edges. Used for cutting glass tubing. Manufactured with a red tang.

Catalog Number	Description	Put Up
SIM-FILE-6	6" Warding Bastard File	12





#### **HACKSAW BLADES**

Catalo Numb	og Jer	Description	Mfgr.	Put Up
BLU-1224U		Hacksaw Blade, 12", 24 Teeth Per Inch	Greenfield	10/100
BLU-1232U		Hacksaw Blade, 12", 32 Teeth Per Inch	Greenfield	10/100





# **Interstate** Electric Co.

#### MAP MEASURES

CAL-SM-C Scale Master Classic is a digital measure with 72 built-in scales including 39 Imperial scales (feet/inches) and 33 Metric scales. It also has 6 custom scales which can be used to "roll" or define any scale, 2 built-in memories, push button counter, many dimensional units and a subtract key. 1 year manufacturer's warranty.

DIE-1723 measures up to 100' in feet, inches and 1/8" increments.

Catalog Number	Description	
CAL-SM-C DIE-1723	Digital Map Measure 100' Map Measure	
CAL-5007	Wheel replacement kit for CAL-SM-C.	

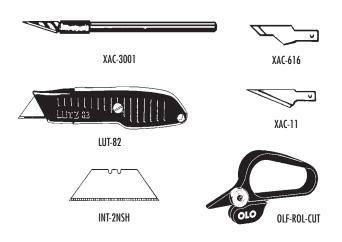
# CAI-SM-C

#### **KNIVES & BLADES**

X-Acto products have many shop uses. INT-SERB single edged razor blades are the sharpest and most durable blades available. OLF-ROL-CUT "Rolling Scissors" allows straight cuts in various thicknesses of paper or vinyl film. Simply push scissors forward and the rolling blade begins to cut. It is durable and safe as no sharp blades are exposed. LUT-82 is a quality, easily adjustable utility knife available in safety orange. Supplied with 3 blades.

Catalog Number	Description	Mfgr.	Put Up
XAC-3001	Knife Handle w/One Blade	X-Acto	1
INT-SERB	Razor Blades	X-Acto	100
OLF-ROL-CUT	Rolling Scissors	Olfa	1
LUT-82	Utility Knife, Retractable	Lutz	1
XAC-11	Pack of 5 #11 Blades	X-Acto	5
XAC-611	Pack of 100 #11 Blades	X-Acto	100
XAC-616	Pack of 100 #16 Blades	X-Acto	100
INT-2NSH	2 Notched Blade fits LUT-82, etc.	-	5/100





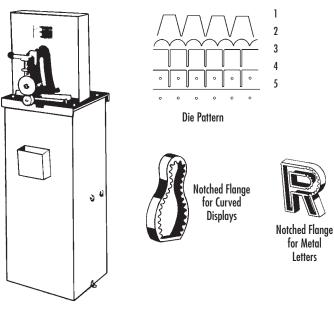
#### **RUOFF NOTCHER**

The Ruoff notcher is a punch press with an adjustable automatic feed designed to punch shapes along the edge of sheet material. Sheet steel up to 16 gauge, stainless up to 20 gauge, aluminum, plastics, cardboard or any sheet material that can be punched can be handled by the Ruoff notcher.

On automatic feed, this notcher can make up to 240 notches a minute. The depth of the notches can be set from 1/8 to 7/8" and the distance between notches can be adjusted from 5/16 to 1-1/8". Various die patterns available are shown below. Notcher is supplied with a #1 pattern die and is equipped with a 115/230 volt motor. RUO-93, a non-marring wheel set is also available and is useful when working with pre-finished metals and delicate materials. Replacement parts available upon request.

Catalog Number	Description
RUO-RAN1	Automatic Notcher w/#1 Die
RUO-1 RUO-2 RUO-3 RUO-4 RUO-5	#1 Punch and Die Set #2 Punch and Die Set #3 Punch and Die Set #4 Punch and Die Set #5 Punch and Die Set
RUO-93	Non-Marring Feed Wheel Set

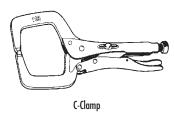
#### **RUOFF**

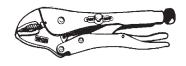




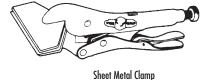
**VISE-GRIP VISE GRIP TOOLS** 

Catalog Number	Description	Jaw Depth	Throat Depth	Throat Height
PET-6R PET-8R PET-9R PET-10R PET-11R PET-18R	6" C-Clamp 8" Sheet Metal Clamp 9" Welding Clamp 10" Pliers 11" C-Clamp 18" C-Clamp	2" - 1-5/8" 1-1/4" 3-3/4" 7"	1-1/2" - - - - 2-5/8" 10"	2" - - - 3-3/4" 4"
PET-452 PET-422 PET-408	Replacement Spring for 5WR, 6R Replacement Spring for 7R, 8R, 9R, 11R Replacement Spring for 10R		-	- - -





**Pliers** 







# The Most Complete Supplier in the West!

Sign, Lighting & Electrical Supplies ● Computer Sign Making Equipment ● Display & Exhibit Supplies Creative Boards & Substrates • Digital Imaging & Laminating Supplies

#### PROFESSIONAL POWER TOOLS

Many brand names are available. Any type of tool can be supplied. Most tools are available in several variations such as motor type, parts configurations, capability and battery size. Most tools are also available in kits and in cordless or pneumatic versions. Call for more information.

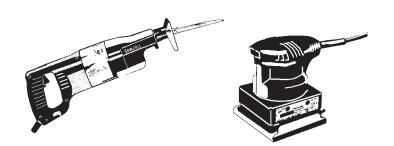


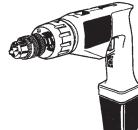












- Drills
- Hammer Drills
- Reciprocating Saws
- Circular Saws
- RoutersNibblers
- Power Sanders
- Grinders





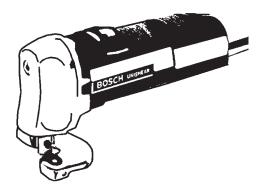


#### **BOSCH PROFESSIONAL UNISHEAR**

The smallest, lightest, 16 gauge shear on the market. Visible blade allows precise pattern cutting, even when held upside down. Ideal for cutting plastic laminate.

Catalog Number	Description
BOS-1500C	16 Gauge "Unishear" Shear
BOS-BLADE-A BOS-BLADE-B	Replacement Blade Set for 1500 & 1500A Replacement Blade (1pc) for 1500B & 1500C

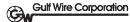
#### **BOSCH**

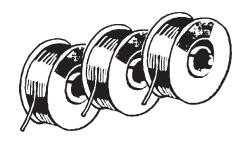


#### MISCELLANEOUS WELDING WIRE

Most any type of welding wire can be supplied; i.e. alloy, size and configuration. Below is a commonly used and stocked wire.

Catalog Number	Description	Put Up
ER-4043-035	Aluminum Welding Wire, .035 Gauge	1 Lb. Roll







#### MIG-135 WELDER

The MIG-135 welding system by OTC Daihen can accomplish a variety of welding processes including MIG welding of aluminum and stainless steel, MAG welding of mild steel and Arc Spot welding.

This system which consists of the WTG-43 welding torch and the CPSS-135 power supply is especially useful for welding aluminum extrusion kits and sheets.

WTG-43 is a light weight, well balanced torch. This ensures high stability and less operator fatigue. Since the wire spool is incorporated in the torch, welding is possible up to 35 feet from the power source, 60 feet with optional cable.

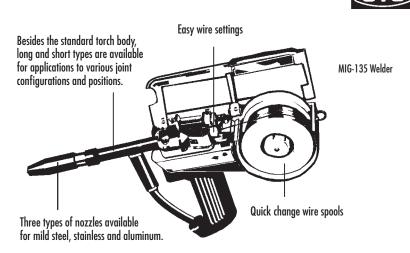
CPSS-135 power supply allows the selection of optimum welding parameters by merely setting the control knobs according to plate thickness and wire diameter used.

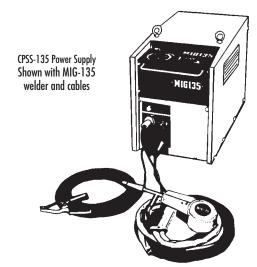
Catalog Number	Description
OTC-MIG-135	Welding Torch & Power Supply Kit Comes complete with 20' gas hose, primary input cable 25' control cable and 25' ground cable clamp.
OTC-WTG-43	Welding Torch Only Must be used in conjunction with a CPSS-135 Power Supply.

#### **ARC SPOT TIMER**

The E876A00 arc timer is virtually necessary for channel letter MIG spot welding.

Catalog Number	Description
OTC-E876A00	Arc Spot Timer





#### WELDING WIRE

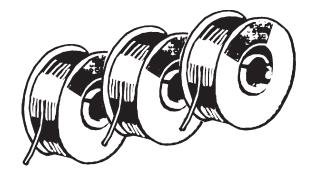
MB-4043 is best suited for aluminum and silicone alloys. This welding wire is made exclusively for the MIG-135 and is installed easily. Wires for other applications available upon request.

Catalog	Description	Weight	Used	Put
Number		Per Roll	For	Up
MB-4043-030	Aluminum Wire, .030 ga.	.44lb.	22 to 14 ga.	1/10/100

#### WELDING ACCESSORIES

Accessories for other applications available upon request.

Catalog Number	Description
OTC-U2075J07	Long & Fine Tip, .030
OTC-U2075J06	Long & Fine Nozzle
OTC-U2464U04	Fine Tip, .030
OTC-U2464U01	Fine Nozzle
OTC-LTBS	Long Torch Body Set



# **Interstate** Electric Co.

#### PETERSON PANEL SAWS

Peterson manufactures a variety of moderately priced panel saws designed for job shops to production applications. Primary consideration in design are accurate cuts, speed in production, low maintenance and safety.



The heart of the Peterson machine is the midblade carriage assembly (shown in the illustration below). With the blade centered between the guide rails there are no side pressures to deflect the blade from its straight line cut. The midblade unit can only lift in a vertical line if overloaded.

#### **Guide Rails**

All models use plated and polished 2" precision shafting guide carriage movement. The polished surface and durability of chromed rails enhances smoothness of operation and long life.

#### Carriage Bushings

Four sets of oil impregnated halves are used in combination with the chromed rails. A felt reservoir is inserted in the casting between bushing sets to assure proper lubrication between scheduled maintenance. Oil seals are located at ends of carriage to keep oil in and chips out. Bushing halves can easily be adjusted or even replaced without removing the carriage assembly.

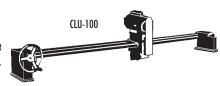
Saw Arbor Assembly

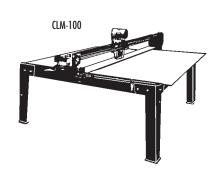
Saw arbor assembly features one inch shaft with large four inch collars for blade stability (two and one-half inch collars can be supplied for special applications). Extra heavy duty, permanently lubricated and sealed bearings are used to assure best performance at high spindle speeds. Spindle speeds range from 2875 to 4200 rpm as needed. The arbor assembly utilizes adjustable bolts and lock nuts on both sides to maintain precise alignment. Cutting length is 100".

All saw motors are totally enclosed and fan cooled to keep sawdust out. Saw uses 10" blade with a cutting depth of 2" or 12" blade with a cutting depth of 3". Additional cutting lengths, motor configurations and accessories available upon request. Other saw models also available, call for more information. Please allow 3 to 4 weeks for delivery.

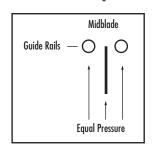
Catalog	Description	Cut	Motor	Approx. Weight
Number		Length	Size	(Lbs.)
CLU-100	Manual Feed, your mounting	100"	3HP, 230/460V	500
CLM-100	Manual Feed, on steel weldment	100"	3HP, 230/460V	800







Midblade Design

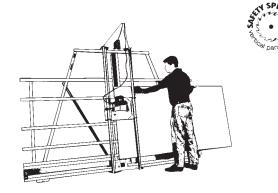




#### **VERTICAL PANEL SAWS**

Safety Speed Cut H-Series panel saws offer full-size vertical panel saw productivity in economical machines. Saws cut within 1/32" on a wide variety of panel materials up to 1-3/4" thick and are available in three cross-cut widths up to 76". These saws work in many applications including sign shops, lumber yards, crating shops and woodworking shops.

Catalog	Cross-Cut	Cut	Saw Blade	Power	Frame	Shipping Weight
Number	Max. Length	Max. Thickness	Dia.	Requirements	Length	(Lbs.)
SSC-H-4	50"	1-3/4"	8"	120V, 13 Amp	10'	197
SSC-H-5	64"	1-3/4"	8"	120V, 13 Amp	10'	220
SSC-H-6	76"	1-3/4"	8"	120V, 13 Amp	10'	251

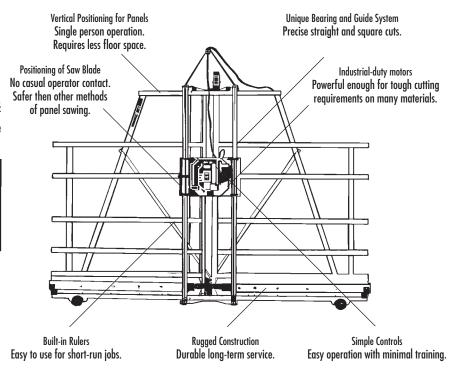


# **PANEL SAW BLADES**

A wide range of saw blades and router bits are available. Blades are carefully selected for cutting a variety of materials from plywood to foam board, from polycarbonate plastic to aluminum plate.

Catalog Number	Description	Saw Blade Type
SSC-848-ATBL SSC-860-TCG SSC-8200-HG	For Premium Wood, 8" For Plastics, Etc., 8" General Purpose, PC, 8"	Carbide Carbide HSS
SSC-860NRTCG	For Non-Ferrous Metals, 8"	Carbide





#### PANEL SAW ACCESSORIES

Safety Speed Cut offers a full line of panel saw accessories. Shown are the most requested accessories. Some must be factory installed. Other accessories and a complete catalog available upon request.

#### Mid-Way Fence

For working with small pieces, the mid-way fence brings the work up to waist-height and gives it firm support on a flat surface for the best alignment of the cut. The mid-way fence fits on both the left and right sides of the machine and includes rulers and a manual stop block.

Catalog Number	Description
SSC-H-6470	Mid-Way Fence

#### **Dust Collection Systems**

Available for all SSC machines to meet the environmental needs of production shops. A kit containing the dust hood and hose can be connected into shop-wide dust systems or a stand-alone system. A vacuum can be installed with a 1HP or a 2-1/4HP motor fitted to either a 20 gallon tank or a 55 gallon adaptor.

Catalog Number	Description
SSC-H-456A	Dust Collection System, 1 HP.

#### Hold Down Bar

A material hold down bar keeps thin and flexible materials tight against the frame for easier and safer cutting. Bars feature spring fingers with non-marring rollers to hold difficult materials.

Catalog Number	Description
SSC-H-440	H-4 Hold Down Bar
SSC-H-550	H-5 Hold Down Bar
SSC-H-660	H-6 Hold Down Bar

#### **Quick Stop**

A quick stop adds an easy to use method of making repeat cuts all the same length to the saw. This accessory significantly increases the productivity of the saw or router.

Catalog Number	Description
SSC-H-6460	Quick Stop









#### NESCHEN

### Digital Imaging Mounting Adhesives



For many years, Neschen has produced the highest auglity line of mounting adhesives in the world, possessing the name Gudy, which has long stood for excellence. In addition to its superior quality, Neschen offers a large selection of products for every need.

Neschen USA's mounting adhesives can be used for many types and sizes of projects to enhance any kind of inkjet or laser print. The most innovative benefit of these products is that they include a double-sided adhesive that can be the same or very different from each other. 328' length rolls may also be available. Sold by the roll.

#### **GUDY 808 MOUNTING ADHESIVE**

A white, high tack PVC adhesive that adheres to almost any surface. Used for permanent mounting of photographs, digital prints, drawings, etc. Perfect for mounting encapsulated prints. Suitable for use with Fome-Cor®, Foam-X®, Gatorfoam®, Sintra®, Ultraboard, Ultramount, Sintrex™, paperboards, etc.

Catalog	Roll
Number	Size
NES-25030 NES-25031 NES-6008494 NES-6008495 NES-25033 NES-6008496 NES-37898 NES-6008497	24.0" x 164' 32.7" x 164' 38.0" x 164' 41.0" x 164' 48.0" x 164' 51.0" x 164' 54.0" x 164' 61.0" x 164'

#### **GUDY 831 MOUNTING ADHESIVE**

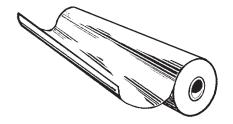
A white, very high tack adhesive on a fleece paper carrier. Suitable for manual application. For use on smooth, rough and flexible surfaces from cardboard to plastic.

Catalog	Roll
Number	Size
NES-26395	24.0" x 164'
NES-26396	32.7" x 164'
NES-6008500	41.0" x 164'
NES-26397	48.0" x 164'
NES-6008501	51.0" x 164'
NES-6008794	61.0" x 164'

#### **GUDY 870 TRANSFER ADHESIVE**

A very thin transparent transfer adhesive film without carrier that is suitable for flexible surfaces. Hardly increases the object's thickness; the adhesive does not rupture when cut or when the backing paper is removed.

Catalog	Roll
Number	Size
NES-26983	24.4" x 164'
NES-6005327	32.0" x 164'
NES-6008502	41.0" x 164'
NES-26984	48.8" x 164'



#### **GUDY 802 MOUNTING ADHESIVE**

A very thin transparent adhesive for universal application on all smooth surfaces.

Catalog	Roll
Number	Size
NES-25551	24.0" x 164'
NES-25552	32.7" x 164'
NES-6008489	41.0" x 164'
NES-25553	48.0" x 164'
NES-6008490	51.0" x 164'
NES-6008491	61.0" x 164'
NES-25619	65.4" x 164'

#### **GUDY 804 MOUNTING ADHESIVE**

A transparent film with permanent adhesive on one side and removable adhesive on the other. Particularly suitable for mailing rolled up photographs, shop windows and temporary decorations.

Catalog	Roll
Number	Size
NES-25911	24.0" x 164'
NES-6008493	41.0" x 164'
NES-25923	48.0" x 164'

#### **GUDY 909 MOUNTING ADHESIVE**

A permanent double-sided mounting adhesive that can be applied to the face of graphics so that it can be applied to the inside of glass or acrylic. Has excellent clarity and can be used in outdoor applications for general mounting.

Catalog	Roll
Number	Size
3850FM-9956	38.0" x 150'
5150FM-9956	51.0" x 150'

#### **GUDY WHITE**

A white, opaque 1.4mil adhesive for use on all smooth surfaces and rough plastic surfaces. Its white, opaque carrier prevents bleed through.

Catalog	Roll
Number	Size
NES-36638	43.3" x 164'
NES-36647	54.0" x 164'

#### **GUDY WHITE REMOVABLE**

A white, opaque 1.4mil adhesive that incorporates one side of permanent adhesive and the other side with a reversible adhesive. Allows residue-free removal from almost any surface and is particularly suitable for floor graphics. Its white, opaque carrier prevents bleed through.

Catalog	Roll
Number	Size
NES-22438	54.0" x 164'

#### **GUDY WINDOW**

A double-sided repositionable mounting adhesive that can be applied to the face of graphics so that it can be hand-applied to the inside of glass or acrylic and easily removed without residue.

Catalog	Roll
Number	Size
NES-6008365	38.0" x 164'
NES-6000712	48.0" x 164'

#### NESCHEN



**Pressure Sensitive Laminatina Films** Always test ink and media with laminates intended to be used.

Most inkjet prints are not waterproof and are only slightly UV resistant. These films protect inkjet images against moisture and mechanical damage. Depending on the area of application, the use of UV films will protect images against UV rays and double or triple the image life-span. Neschen laminating films offer more than just protection by also providing enhancement to the print quality. Sold by the roll.

# FILMOLUX PHOTO GLOSS FILM



UV resistant 3mil, clear, semi-gloss PVC laminate with a smooth finish. Ideal for high traffic areas. Suitable for applications both indoors and outdoors. Resists a large number of aggressive substances.

Catalog	Roll
Number	Size
NES-33941	24" x 164'
NES-33942	32.7" x 164'
NES-6008471	38" x 164'
NES-6008472	41" x 164'
NES-6008473	51" x 164'
NES-6004012	61" x 164'

# FILMOMATT MATTE FILM



UV resistant 3mil, clear, matte PVC film with a smooth finish. Virtually eliminates reflective glare. Ideally suited for blueprints, maps, warning signs and drawings. Will accept special inks, pencil and permanent felt-tip pens.

Catalog	Roll
Number	Size
NES-25975	32.7" x 164'
NES-6008481	38" x 164'
NES-6008482	41" x 164'
NES-6008483	51" x 164'
NES-6008484	61" x 164'

#### FILMOLUX E GLOSS FILM



UV resistant 3mil, clear PVC laminate with a semigloss finish. Ideal for high traffic areas. Protects Ĕ-stat prints, ink-jet prints (80g/22lb min. paper), photographs and transparencies from dirt, fingerprints and UV rays.

Catalog	Roll
Number	Size
NES-21583	54" x 164'

FILMOLUX SATIN FILM

UV resistant 3mil, clear PVC film. Semi-matte finish minimizes reflection.

Catalog	Roll
Number	Size
NES-25688	24.4" x 164'
NES-25689	32.7" x 164'
NES-6008475	38" x 164'
NES-6008476	41" x 164'
NES-25690	48.8" x 164'
NES-6008478	51" x 164'
NES-6008479	61" x 164'

# FILMOLUX 2004 FILM



.0

A glossy, smooth 1mil film for writing on and wiping off with special markers. An inexpensive film particularly suitable for charts and menu boards. For indoor use.

Catalog	Roll
Number	Size
NES-26116	24.4" x 164'
NES-33301	37.4" x 164'
NES-6009106	38" x 164'
NES-26119	48.8" x 164'

#### FILMOLUX E SATIN FILM



UV resistant 3mil, clear PVC laminate with a semimatte finish. Ideal where reflective glare is a problem. Protects E-stat prints, ink-jet prints (80g/22lb min. paper), photographs and transparencies from dirt, fingerprints and UV rays.

Catalog	Roll
Number	Size
NES-21587	54" x 164'

#### **RECOMMENDED FOR:**



**Inkjet Prints** 



Classical Photos



**Electrostatic Prints** 

#### FILMOLUX LUSTRE FILM



UV resistant 3mil, clear PVC film. Provides a slight sheen while reducing reflective glare.

Catalog	Roll
Number	Size
NES-37411	32.7" x 164'
NES-6004645	38" x 164'
NES-6008480	41" x 164'
NES-36828	51.5" x 164'

# FILMOLUX S-50 HIGH GLOSS FILM

A top quality 2mil, clear polyester film with a high gloss finish. Both indoors and out, the high gloss composition of this film enhances prints and emphasizes the brightness of the color with high dimensional stability.

Catalog	Roll
Number	Size
NES-6007912	38" x 164'
NES-6007913	51" x 164'

# FILMOLUX UV-E FILM



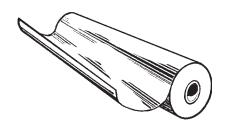
A high UV resistant 1.5mil, clear PVF (Tedlar) semigloss film. Ideal where reflective glare is a problem. Protects E-stat prints, ink-jet prints (80g/22lb min. paper), photographs and transparencies from dirt, fingerprints and UV rays.

Catalog	Roll
Number	Size
NES-36263	37.4" x 164'
NES-36285	54" x 164'



#### NESCHEN

Pressure Sensitive Laminating Films cont. Always test ink and media with laminates intended to be used.



#### **RECOMMENDED FOR:**



**Inkjet Prints** 



Classical Photos



**Electrostatic Prints** 

#### FILMOLUX PC-15 FILM





A 15mil over-laminating polycarbonate pressuresensitive film with a velvet/gloss finish utilizing an optically clear permanent acrylic adhesive on a 3mil, polyester film liner. This polycarbonate film offers protection from UV, abrasion, moisture and other environmental exposures. Its laminated by cold laminating process without the addition of heat.

Catalog	Roll
Number	Size
NES-2550PC	25.5" x 150'
NES-3850PC	38" x 150'
NES-5150PC	51" x 150'

# FILMOLUX JET-PRO FILM

Filmolux Jet-Pro Gloss and Satin over-laminating films are a self-adhesive, cadmium-free, glossy clear or satin finsh and environmentally friendly polypropylene films. Washable and resistant to a large number of detergents and solvents as well as being coated with a solvent-free, age-resistant and permanently elastic acrylic adhesive. Jet-Pro is minimally UV stabilized and thus designed primarily for indoor uses.

Filmolux Jet-Pro over-laminating films contain a PVC-free protection and enhancement of a wide range of image carriers. Compatible with all current inkjet-printing processes. This product is excellent for protection of bar code labels, as the plasticizer-free film prevents bleeding of colors.

Catalog Number	Finish	Roll Size
NES-6008506	Gloss	38" x 164'
NES-6006574	Gloss	38" x 328'
NES-6008507	Gloss	51" x 164'
NES-6008766	Gloss	51" x 328'
NES-6006576	Gloss	61" x 328'
NES-6008504	Satin-Matte	38" x 164'
NES-6006571	Satin-Matte	38" x 328'
NES-6008505	Satin-Matte	51" x 164'
NES-6008765	Satin-Matte	51" x 328'
NES-6008722	Satin-Matte	61" x 164'
NES-6006573	Satin-Matte	61" x 328'

# FILMOMATT H200 FILM





A self-adhesive, cadmium-free, matte, non-reflective rigid hard-PVC film without plasticiser. Washable and resistant to a large number of detergents and solvents. Coated on one side with a solvent-free, age-resistant and permanently elastic acrylate adhesive. Filmomatt H200 can be printed on using special inks.

Areas of application include strengthening of paperback covers, tables and plans. Used to stabilize panels and displays. Photos and prints, if laminated on both sides with Filmomatt H200 should not be rolled up as wrinkles may appear.

Catalog Number	Finish	Roll Size
NES-25349	Gloss	24.4" x 164'
NES-25351	Gloss	48.8" x 164'
NES-25367	Matte	24.4" x 164'
NES-25369	Matte	48.8" x 164'

#### FILMOLUX 4133 LEXAN FILM



5mil. semi-matte Lexan with a velvet finish. Although easily rolled-up, it is non-curling. A good element for floor graphics.

Catalog	Roll
Number	Size
NES-25233	48.8" x 33'

FILMOLUX FGS FILM







A self-adhesive, cadmium-free, transparent, embossed, plasticised PVC film. The synergy of texture and hardness of the film delivers excellent scratch, dirt and slip performance. Washable and resistant to a large number of detergents and solvents. Coated on one side with a solvent-free, ageresistant and permanently elastic acrylate adhesive, developed targeting compatibility with toners used in electrostatic printing.

Catalog	Roll
Number	Size
NES-22434	43.3" x 164'
NES-22435	54" x 164'

# SFAI Thermal Laminatina Films



#### JET GUARD

Jet Guard films are polyester heat-activated linerless films that bond at low temperatures (185°F - 205°F) for optimum performance when encapsulating or overlaminating ink jet prints. Linerless films provide fast. easy webbing and more cost effective production. Jet Guard films enhance images, protect against ultraviolet light and add value to rigid or flexible graphics.

JET GUARD GLOSS: Delivers crystal clarity, high impact color enhancement and razor sharp contrast while protecting images from the rigors of display applications.

JET GUARD CRYSTAL MATTE: Reduces reflected light for easy viewing. Ideal for trade show applications, this film offers a clear matte finish that enriches print colors as it protects.

JET GUARD DEEP CRYSTAL: Enhances color and protects graphics with a durable, scratch resistant, sand textured surface with a satin matte finish. Perfect for pop-up displays and large display graphics.

Catalog Number	Roll Size
3mil Clear Gloss (1mil fil	m/2mil adhesive)
SEA-4125	38" x 150'
SEA-4126	51" x 150'
SEA-4128	61" x 150'
5mil Clear Gloss (2mil fil	m/3mil adhesive)
SEA-4120	38" x 150'
SEA-4121	51" x 150'
SEA-4122	55" x 150'
SEA-4123	61" x 150'
6mil Crystal Matte (3mil	film/3mil adhesive)
SEA-4115	38" x 150'
SEA-4116	51" x 150'
SEA-4117	55" x 150'
SEA-4118	61" x 150'
6mil Deep Crystal (3mil film/3mil adhesive)	
SEA-60083	34.6" x 150'
SEA-4110	38" x 150'
SEA-4111	51" x 150'
SEA-4112	55" x 150'
SEA-4113	61" x 150'

#### PRINT GUARD UV

Print Guard UV is a family of low-temperature. heat-activated overlaminating films that feature ultra-violet protection, low bonding temperatures (185°F - 205°F) and an aggressive solvent acrylic adhesive. Ideal for use with inkjet, photographic, or any other heat-sensitive media. Print Guard UV films can be applied with any multi-temperature commercial roller laminator. Print Guard UV is available in the following finishes:

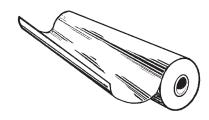
PRINT GUARD-UV STANDARD GLOSS: A brilliant, high aloss finish for maximum visual impact.

PRINT GUARD-UV LUSTRE: Sparkling, semi-gloss finish that reduces glare and reflection while adding rich color enhancement.

PRINT GUARD-UV SATIN MATTE: Soft, moderately reflective finish that enhances colors while reducing glare for clear, easy viewing.

PRINT GUARD-UV ULTRA MATTE: Provides a flat finish that softens images while eliminating glare and reflections.

Catalog Number	Roll Size
1.8mil Gloss (1mil film/	(0.8mil adhesive)
SEA-2049	38" x 150'
SEA-2071	41" x 150'
SEA-2072	51" x 150'
2.6mil Lustre (2mil film	/0.6mil adhesive)
SEA-2073	25" x 150'
SEA-1317-3	31" x 150'
SEA-1315-3	38" x 150'
SEA-1685-3	41" x 150'
SEA-1662	41" x 400'
SEA-1674	43" x 150'
SEA-1668	43" x 400'
SEA-2272	51" x 150'
SEA-2273	51" x 400'
SEA-60153	55" x 400'
2.6mil Satin Matte (2m	il film/0.6mil adhesive)
SEA-2074	ź 25" x 150'
SEA-1318-3	31" x 150'
SEA-1316-3	38" x 150'
SEA-1683-3	41" x 150'
SEA-1660	41" x 400'
SEA-1669	43" x 400'
SEA-2274	51" x 150'
SEA-2278	51" x 400'
4mil Ultra Matte (3mil f	ilm/1mil adhesive)
SEA-11056	41" x 328'
SEA-11238	49" x 328'



#### THERMASHIELD R

ThermaShield "R" films are specially designed for reprographic and digital imaging media. This tough polyester film is coated with an optically clear, permanent, heat-activated adhesive for use on multitemperature commercial roller laminators.

Catalog Number	Roll Size
3mil Clear Gloss (1mil fi	lm/2mil adhesive)
SEA-3222	25" x 500'
SEA-3226	38" x 500'
SEA-3227	43" x 500'
SEA-3228	51" x 500'
SEA-3229	55" x 500'
5mil Clear Gloss (3mil fi	m/2mil adhesive)
SEA-3232	25" x 250'
SEA-3236	38" x 250'
SEA-3237	43" x 250'
SEA-3238	51" x 250'
SEA-3239	55" x 250'
10mil Clear Gloss (7mil	film/2mil adhesive)
SEA-3262	25" x 250'
SEA-3266	38" x 250'
SEA-3267	43" x 250'
SEA-3268	51" x 250'
SEA-3269	55" x 250'
3mil High Luster (.5mil film/2.5mil adhesive)	
SEA-3676	38" x 500'
SEA-3677	43" x 500'
SEA-3678	51" x 500'
SEA-3679	55" x 500'
3mil Matte (.5mil film/:	2.5mil adhesive)
SEA-3776	38" x 500'
SEA-3777	43" x 500'
SEA-3778	51" x 500'
SEA-3779	55" x 500'

# SEAL Thermal Laminatina Films and Adhesives Cont.

#### THERMASHIELD MB

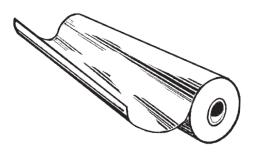
ThermaShield MB (Mount Backing) is a low-temperature (200°F), heat-activated, solid white paper-based backing material with an outer polypropylene film surface that is ideal for backing prints in encapsulating applications. Its thickness controls light bleed-through while offering the pliable rigidity needed for flexible applications. Also offers additional protection to prints by providing an outer surface that repels moisture, oils and dirt.

Catalog	Roll
Number	Size
10mil Opaque White Par	per w/ Polypropylene film surface
SEA-3876	38" x 250'
SEA-3877	43" x 250'
SEA-3878	51" x 250'
SFA-3879	55" x 250'

#### STOPLIGHT BACKING FILM

An opaque, white, flexible backing film for encapsulated images used in pop-up and panel display applications. A heat-activated polyester film offering rigidity and rollability with excellent lay-flat memory while linerless for fast easy webbing and minimal waste. Works equally well with ink jet, electrostatic and photographic images and provides an excellent substrate solution for a wide range of graphics applications that require extra durability.

Catalog	Roll
Number	Size
9mil Stoplight #220 Whit	e (6mil film/3mil adhesive)
SEA-60077	34.6" x 150'
SEA-60660	38" x 200'
SEA-60675	51" x 200'
12.5mil Stoplight #320 V	Vhite (11mil film/1.5mil adhesive)
SEA-63021	38" x 200'
SEA-63022	51" x 200'



#### **MULTIBOND HA**

MultiBond HA mounting adhesive is a transparent, heat-activated (195°F) adhesive film with a single release liner recommended for indoor applications. This adhesive is idealy used for pre-coating boards or prints on any commercial roller laminator to allow for one-step mounting and laminating.

Catalog	Roll
Number	Size
SEA-3978	51" x 250'

#### **FLOOR GUARD**

A premium non-slip, heat-activated  $(200^{\circ}\text{F})$  laminating film with an aggressive solvent acrylic adhesive specifically designed for the creation of interior floor graphics. Offers a non-reflective textured finish that affords clear viewing while also providing a durable, scuff-resistant, waxable surface. Ideal for use with Print Mount Removable for a complete floor graphics system. Meets international standards for slip resistance.

Catalog	Roll
Number	Size
5mil Floor Guard PVC (4	mil film/1mil adhesive)
SEA-2962	38" x 200'
SEA-2961	51" x 200'

#### **COLORMOUNT DRY ADHESIVES**

A permanent dry mounting adhesive tissue for low temperature bonding (175°F to 200°F) of resin coated photos, glossy posters and regular papers to a wide range of mounting boards. Its breathability makes it ideal for non-porous or high moisture content materials.

Catalog	Roll
Number	Size
SEA-609	20" x 150'
SEA-615	24" x 300'
SEA-617	36" x 300'
SEA-618	40.5" x 150'
SEA-620	42" x 150'
SEA-621	42" x 300'
SEA-623	48.5" x 300'

# SEAL Pressure Sensitive Laminating Films





Print Shield Ultra is a series of premium, pressuresensitive laminating films designed to protect and enhance images. These films offer the added benefit of UV inhibitors and a range of durable finishes. Ideal for inkjet, electrostatic, photographic and plain paper media. Its solvent acrylic adhesive provides an aggressive permanent bond. Available in the following finishes:

PRINT SHIELD ULTRA GLOSS: A brilliant glossy film that offers crisp definition, color enrichment and distortion-free viewing.

PRINT SHIELD ULTRA LUSTRE: Provides a deep, polished look and adds sparkling sheen that heightens contrast and color.

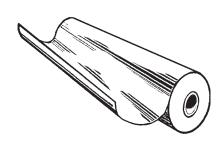
PRINT SHIELD ULTRA MATTE: Provides a flat, nonreflective finish that enriches and deepens colors yet is virtually invisible. Ideal for images on display under direct lighting.

Catalog	Roll
Number	Size
2.2mil Ultra Gloss Polye: SEA-1688 SEA-2336 SEA-1375 SEA-1376-1 SEA-1359 SEA-4131	ster (1mil film/1.2mil adhesive) 25" x 200' 38" x 200' 41" x 200' 51" x 200' 51" x 400' 79" x 164'
4.5mil Ultra Luster PVC SEA-1652-1 SEA-2337 SEA-1653-1 SEA-1654-1 SEA-1655 SEA-1689	(3.5mil film/1mil adhesive) 25" x 150' 31" x 200' 38" x 200' 41" x 200' 51" x 200' 51" x 400' 54" x 200'
4.5mil Ultra Matte PVC	(3.5 mil film/1mil adhesive)
SEA-2338	38" x 200'
SEA-2312-1	41" x 200'
SEA-2313	51" x 200'
SEA-4132	79" x 164'

#### **SEAL WRITE**

A glossy, pressure-sensitive polypropylene film that affords high washability, turning virtually any image into a write-on/wipe-off display chart.

Catalog	Roll
Number	Size
2mil Polypropylene (1m	il film/1mil adhesive)
SEA-2080	51" x 200'



#### PRINT SHIELD STANDARD

Print Shield Standard pressure-sensitive laminating films use a water-based acrylic adhesive and are perfect for inkjet, electrostatic and photographic media, providing a cost-effective solution for economy minded applications. These films are an excellent solution for rigid interior graphics. Available in the following finishes:

PRINT SHIELD STANDARD GLOSS: A thin, glossy finish that heightens color and sharpens definition.

PRINT SHIELD STANDARD MATTE: A non-reflective, smooth, clear, flat finish which adds definition and depth.

Catalog	Roll
Number	Size
2.6mil Gloss Polypropyle	ne (1.6mil film/1mil adhesive)
SEA-62020	38" x 200'
SEA-60082	41" x 150'
SEA-60117	51" x 150'
SEA-60303	61" x 150'
4mil Matte PVC (3mil fil	m/1mil adhesive)
SEA-62022	38" x 200'
SEA-60108	41" x 150'
SEA-60211	51" x 150'
SEA-60404	61" x 150'

## PRINT SHIELD DEEP CRYSTAL

Print Shield Deep Crystal is a unique, pressuresensitive overlaminate with a scratch-resistant, crystal-textured satin finish. Used in conjunction with PS Stoplight, It produces a durable solution for pop-up displays without the use of heat.

Catalog	Roll
Number	Size
6mil Multi-Layer Film (3	.4mil film/2.6mil adhesive)
SEA-63016	38" x 200'
SEA-63017	51" x 200'

#### PRINT SHIELD PRO FILM

Print Shield pro pressure-sensitive laminating films combine economy with professional performance and finish. Offers high-tack adhesion and are ideal for protecting today's didgital media from the rigors of display use.

PRINT SHIELD PRO GLOSS: Provides a thin, brilliant finish that boosts color and offers crisp definition. Pro Gloss utilizes a water-based acrylic adhesive.

PRINT SHIELD PRO LUSTER: Manufactured with a solvent acrylic adhesive which contains additional UV absorbers. Deepens and enriches colors, type and lines while maintaining excellent clarity.

PRINT SHIELD PRO MATTE: A flat, non-reflective finish that yields a softening effect to lines and images. Pro Matte utilizes a water-based acrylic adhesive.

Catalog	Roll
Number	Size
3mil Pro Gloss Polyester	(1 mil film/2mil adhesive)
SEA-1441	41" x 150'
SEA-1442	51" x 150'
SEA-1443	51" x 300'
3mil Pro Luster PVC (2mil film/1mil adhesive)  SEA-1451	
4mil Pro Matte Polyeste	r (2mil film/2mil adhesive)
SEA-1461	41" x 150'
SEA-1462	51" x 150'
SEA-1463	51" x 300'

#### PRINT SHIELD ELEMENT

Formulated with high levels of UV absorbers and aggressive solvent acrylic adhesive, Print Shield Element high gloss film extends the outdoor life of displays by minimizing environmental damage. Its polymeric construction makes it extremely durable and increases the life expectancy of the film to 2 years in outdoor conditions. Use with an outdoor ink and media set along with Print Mount Ultra to create long lasting rigid outdoor displays.

Catalog	Roll
Number	Size
3.5mil Polymeric PVC (2	?.4mil film/1.1mil adhesive)
SEA-63111	41" x 200'
SEA-63112	51" x 200'



#### SEAL



### Pressure Sensitive Laminating Films and Adhesives

# PRINT MOUNT DELTA

An excellent, economical 2mil clear adhesive with polyester carrier for digital prints and reprographic media. Its pressure-sensitive adhesive utilizes a hot-melt technology that produces a tacky adhesive that permanently bonds to both soft and rigid substrates. Ideal for use in indoor and short-term outdoor applications.

Catalog	Roll
Number	Size
SEA-63160	25" x 200'
SEA-63161	31" x 200'
SEA-63162	38" x 200'
SEA-63163	41" x 200'
SEA-63164	43" x 200'
SEA-63165	51" x 200'
SEA-63166	51" x 400'

#### PRINT MOUNT WHITE

A high quality, economical, opaque white 3mil water-based acrylic mounting adhesive with white polypropylene carrier. Designed for pre-coating stable panels and media that are used for indoor applications.

Catalog	Roll
Number	Size
SEA-62000	25" x 200'
SEA-62001	38" x 200'
SEA-62002	41" x 200'
SEA-62003	43" x 200'
SEA-62004	51" x 200'
SEA-62005	51" x 400'
SEA-62006	61" x 200'
SEA-62007	79" x 200'

#### PRINT MOUNT PLUS

3mil solvent acrylic pressure-sensitive adhesive with a clear polyester carrier. Perfect for mounting digital prints, photographic prints and posters to a variety of substrates including cardboard, foam board, wood and plastic. Provides a strong permanent bond and can be used in both indoor and outdoor annlications

uppliculions.	
Catalog Number	Roll Size
Print Mount Plus with Sin	gle Release Liner
SEA-1339	25" x 150'
SEA-1615	31" x 200'
SEA-2341	38" x 200'
SEA-1344-1	41" x 200'
SEA-2333	43" x 200'
SEA-1347-1	51" x 200'
SEA-1348	51" x 400'
SEA-2342	61" x 200'
Print Mount Plus Wide wi	th Dual Release Liner
SEA-4130	79" x 164'

## **PRINT MOUNT ULTRA**

A 3mil solvent acrylic adhesive with a white polypropylene carrier that mounts with unsurpassed smoothness. Print Mount Ultra is an opaque, white, permanent, pressure-sensitive mounting adhesive that hides substrate blemishes and conforms to curved surfaces. An excellent choice for mounting thin media. As an opaque adhesive, it keeps dark substrates from bleeding through. Ideal for use in indoor and outdoor applications.

Catalog	Roll
Number	Size
SEA-1626 SEA-1622A SEA-1659 SEA-1649-9 SEA-1623-1 SEA-1658 SEA-1649-6 SEA-1625 SEA-1648	25" x 150' 31" x 200' 38" x 200' 41" x 200' 41" x 400' 43" x 200' 51" x 200' 51" x 400' 54" x 200'

#### PRINT MOUNT REMOVABLE

A clear 4mil water-based permanent/removable pressure-sensitive acrylic mounting adhesive with clear PVC carrier. Ideal for all print media. Permanent side bonds firmly to the print while its removable side provides a secure bond to floors or other surfaces, yet allows the graphic to be removed when necessary.

Catalog	Roll
Number	Size
SEA-2977	38" x 200'
SEA-2976	51" x 200'

#### OPTIMOUNT

An optically clear, double-sided 3mil solvent acrylic adhesive with a polyester carrier. For face mounting ink jet, photographic, electrostatic and plain paper prints to clear acrylics, plastic and glass. OptiMount features UV inhibitors that protect images from fading and creates a permanent bond to both the graphic and substrate. Its acid-free adhesive coatings perform flawlessly in vented light box applications.

Catalog	Roll
Number	Size
SEA-1372-1	25" x 200'
SEA-2310	41" x 200'
SEA-2311	51" x 200'
SEA-1352	51" x 400'

### PS STOPLIGHT

An opaque, white, flexible, pressure-sensitive polyester film with an aluminum layer offering rigidity and rollability with excellent lay-flat memory. Ideal for use in pop-up and panel display applications. Works equally well with inkjet, electrostatic, photographic images and provides an excellent substrate for graphic applications that require extra durability.

Catalog Number	Roll Size
	6.1mil film/1mil adhesive)
SEA-63006	38" x 200'
SEA-63007	51" x 200'

### PRINT MOUNT USA

A 1.5mil carrier-free solvent acrylic pressure-sensitive adhesive that offers a permanent bond and unique flexibility. Dual release liners protect the pure adhesive layer and afford easy application. Excellent for use on flexible substrates.

Catalog Number	Roll Size
SEA-1889	51" x 200'

#### **PROSEAL**

### Mounting and Laminating System

#### PRO-SEAL POUCH BOARDS

Designed to create indoor signs, displays or presentation materials quickly, easily and with minimal waste. Pouch boards produce rigid displays with optimum image enhancement and protection. Each pouch board is manufactured with a rigid, heat-activated adhesive-coated 3/16" foam board with an overlaminate attached by a 1/4" adhesive strip across the short edge. Available in the following variations:

Catalog Number	Dimensions (Inches)	Put Up
Gloss White Pouch Board SEA-62305 SEA-62306 SEA-62307	d 25 x 37 37 x 49 41 x 61	10 10 10
Deep Crystal White Pouc SEA-62310 SEA-62311 SEA-62312	th Board 25 x 37 37 x 49 41 x 61	10 10 10
Gloss Black Pouch Board SEA-62320 SEA-62321 SEA-62322	25 x 37 37 x 49 41 x 61	10 10 10
Deep Crystal Black Pouch SEA-62325 SEA-62326 SEA-62327	n Board 25 x 37 37 x 49 41 x 61	10 10 10

#### **PRO-SEAL SLED**

A 3/16" foam board with a siliconized paper facer for use with encapsulation pouches.

Catalog	Dimensions	Put
Number	(Inches)	Up
SEA-62360 SEA-62361	26 x 39 38 x 50	3

#### PRO-SEAL MOUNTING BOARDS

Provides an economical mounting solution for a wide range of media where no protective laminate is required. Excellent for indoor display and presentation material. Each mount board consists of a rigid heatactivated adhesive-coated 3/16" foam board.

Catalog Number	Dimensions (Inches)	Put Up
White Mounting Boards SEA-62340 SEA-62341 SEA-62342	25 x 37 37 x 49 41 x 61	10 10 10
Black Mounting Boards SEA-62345 SEA-62346 SEA-62347	25 x 37 37 x 49 41 x 61	10 10 10

#### PRO-SEAL WINDOW GRAPHIC POUCHES

5mil gloss polyester laminate top and bottom with one side coated with a clear, removable pressuresensitive adhesive.

	Catalog	Dimensions	Put	
	Number	(Inches)	Up	
	SEA-60755	18.5 x 24.5	25 <sup>(1)</sup>	
	SEA-60774	25 x 37	25 <sup>(1)</sup>	
	SEA-60813	37 x 49	25 <sup>(1)</sup>	
1	NOTE: (1) Includes one (1) ProSeal sled.			

#### FLEXIBLE ENCAPSULATING POUCHES

ProSeal clear encapsulating pouches were designed to create indoor signs, displays or presentation materials where flexibility is a necessity. 5mil gloss polyester laminate top and bottom.

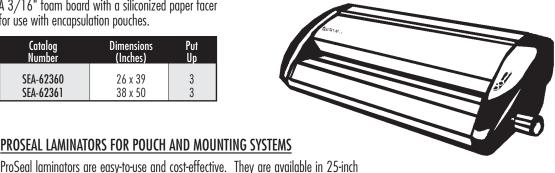
ProSeal opaque back pouches consist of a 5mil gloss polyester laminate with ThermaShield MB white backing.

Catalog Number	Dimensions (Inches)	Put Up		
Gloss Laminate Pouch SEA-60659 SEA-60666	18.5 x 24.5 25 x 37	25 <sup>(1)</sup> 25 <sup>(1)</sup>		
SEA-60679	37 x 49	25(1)		
Gloss Laminate with Opaque White Backing				
SEA-60686	18.5 x 24.5	25(1)		
SEA-60697	25 x 37	25 <sup>(1)</sup>		
SEA-60708	37 x 49	25(1)		
NOTE: (1) Includes one (1) ProSeal sled.				

#### **CLEANING BOARDS**

Helps clean adhesive residue from rollers left by previous use.

Catalog	Dimensions	Put
Number	(Inches)	Up
SEA-60742	26 x 39	5
SEA-60751	45 x 63	5





PROSEAL 25 NEMA 5-15R with 12 Amp Breaker



PROSEAL 44 NEMA 5-20R with 20 Amp Breaker

ProSeal laminators are easy-to-use and cost-effective. They are available in 25-inch and 44-inch models featuring a space-saving tabletop design.

<u>Specifications</u>								
Catalog Number	Maximum Width	Maximum Temperature	Maximum Speed	Maximum Pressure	Electrical	Roller Nip Settings	Dimensions	Net Weight
ProSeal 25 SEA-60766	25"	250°- 300° F	1.5 - 2.0 fpm	60 - 80 psi	110VAC, 13Amp	0, 1/8", 3/16", 1/4"	40W x 12H x 15D	70 lbs.
ProSeal 44 SEA-60824	44"	250°- 300° F	1.5 - 2.0 fpm	60 - 80 psi	110VAC, 17Amp	0, 1/8", 3/16", 1/4"	58W x 12H x 15D	160 lbs.



### **GLENROY LAMINATION FILMS**

Enhancement and Protection for Inkjet, Electrostatic and Photographic Prints
Always test ink and media with laminates intended to be used.

#### DI PREMIUM HEAVY GAUGE FILM

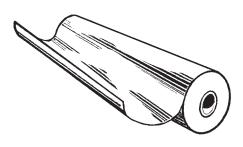
A high performance, low processing temperature, UV protected, thermal laminating film engineered for wide format applications on both ink jet and electrostatic prints. Excellent resistance to delamination when exposed to high moisture environments and intense UV sunlight. Products laminated with this film display a great reduction in print fade. For use on both single side and two sided laminating and mounting applications. High clarity and excellent bond to heavy ink coverage. Useable temperature range of 185°F to 245°F.

Tomporatoro rango or 103 1 10 2 13 1.				
Catalog Number	Roll Size			
3mil Polyester Gloss Film	n (1mil polyester/2mil adhesive)			
GLE-012DI25	25" x 500'			
GLE-012DI38	38" x 500'			
GLE-012DI43	43" x 500'			
GLE-012DI51	51" x 500'			
GLE-012DI55	55" x 500'			
022 012233				
	n (3mil polyester/2mil adhesive)			
GLE-032DI25	25" x 250'			
GLE-032DI38	38" x 250'			
GLE-032DI43	43" x 250'			
GLE-032DI51	51" x 250'			
GLE-032DI55	55" x 250'			
10mil Polyester Gloss Fili	n (7mil polyester/3mil adhesive)			
GLE-Ó73DI25	25" x 250'			
GLE-073DI38	38" x 250'			
GLE-073DI43	43" x 250'			
GLE-073DI51	51" x 250'			
GLE-073DI55	55" x 250'			

#### WHITE FILM

Glenseal 10.0 WL is a white opaque, high performance thermal laminating film designed for the backside of posters, tags and printed materials. The Glenseal white product group offers increased bond strengths and a broad processing temperature range. This material may be used on both single and double sided laminators. Typical lamination settings are 230°F top; 210°F bottom; speed 3-5 ft/min.

Catalog	Roll
Number	Size
10mil White Film (7mil	polyester/3mil adhesive)
GLE-073WL38	38" x 250'
GLE-073WL43	43" x 250'
GLE-073WL51	51" x 250'



#### SCRATCH RESISTANT FILM

A high performance, low processing temperature UV protected, thermal laminating film engineered for wide format applications on both ink jet and electrostatic prints. Excellent resistance to delamination when exposed to high moisture environments and intense U.V. sunlight. Products laminated with this film display a great reduction in print fade. For use on both single and double sided laminating and mounting applications. High clarity and excellent bond to heavy ink coverage. Useable temperature range of 185°F to 245°F.

Catalog	Roll
Number	Size
5mil Polyester Satin Film	(3mil polyester/2mil adhesive)
GLE-032LL25	25" x 250'
GLE-032LL38	38" x 250'
GLE-032LL43	43" x 250'
GLE-032LL51	51" x 250'
GLE-032LL55	55" x 250'
10mil Polyester Satin Filr	n (7mil polyester/3mil adhesive)
GLE-073LL25	25" x 250'
GLE-073LL38	38" x 250'
GLE-073LL43	43" x 250'
GLE-073LL51	51" x 250'
GLE-073LL55	55" x 250'

#### PREMIUM LIGHT DUTY FILM

A high performance thermal laminating film for printed materials requiring protection. For use on both single and double sided laminating applications. Common uses are for posters and printed materials with heavy ink coverage. Semi-gloss (satin) finish. High clarity. Increased bond strengths. Can be used over a broad range of processing temperatures.

Catalog	Roll
Number	Size
3mil Polyester Satin Film GLE-030S125 GLE-030S138 GLE-030S143 GLE-030S151 GLE-030S155	(1mil polyester/2mil adhesive) 25" x 500' 38" x 500' 43" x 500' 51" x 500' 55" x 500'
5mil Polyester Satin Film GLE-023LL25 GLE-023LL38 GLE-023LL43 GLE-023LL51 GLE-023LL55	(2mil polyester/3mil adhesive) 25" x 250' 38" x 250' 43" x 250' 51" x 250' 55" x 250'
3mil Polyester Matte Film	n (1mil polyester/2mil adhesive)
GLE-030MI25	25" x 500'
GLE-030MI38	38" x 500'
GLE-030MI43	43" x 500'
GLE-030MI51	51" x 500'
GLE-030MI55	55" x 500'



# **SEAL LAMINATOR SELECTION GUIDE**

Seal brand laminators offer state-of-the-art features and can be used with both hot and cold laminates. Other models also available. Call for more information.

Features	lmage 80S	lmage 6500	Image 600MD <sup>(3)</sup>	Image 62 Pro	Image 62 Plus	Image 600S	lmage 410	Ultra 62	Ultra 44
Working Width			0.0	V2	02.1.02				
Hot	80" (2030mm)	61" (1550mm)	61" (1550mm)	61" (1550mm)	62" (1575mm)	55" (1400mm)	43" (1090mm)	61" (1550mm)	42" (1065mm)
Cold	80" (2030mm)	61" (1550mm)	61" (1550mm)	62" (1575mm)	61" (1550mm)	61" (1550mm)	43" (1090mm)	61" (1550mm)	44" (1115mm)
Applications									
Rigid Indoor Display	Χ	Х	Χ	Χ	Х	χ	Х	Х	Х
Flexible Indoor Display		Х	Х	χ	χ		χ	χ (1)	χ (1)
Floor Graphic Display	Х	Х	Х	Х	Х	Х	Х	Х	Х
Backlit Display	Х	Х	Χ	Х	χ	Х	χ	Х	Х
Pop-up Display	X (2)	χ	Χ	Χ	χ	χ (2)	χ	χ (2)	χ (2)
Rigid Outdoor Display	Х	χ	Х	χ	χ	χ	χ	Х	Х
Processes									
Cold Mounting	Χ	χ	χ	Χ	χ	χ	χ	Х	Х
Cold Laminating	χ	χ	χ	Х	Х	χ	χ	χ	Х
Heat-activated Mounting	Х	χ	χ	χ	χ	χ	χ	Х	Х
Heat-activated Laminating	Х	χ	Х	χ	χ	χ	χ	Х	Х
One-Pass Encapsulating		χ	Х	χ	χ		χ	Х	Х
Transfer		Low Temp Only							
Capability									
Level of Operator Training	Moderate	Advanced	Moderate	Moderate	Minimal	Moderate	Minimal	Minimal	Minimal
Output Volume	High	High/Very High	High/Very High	High	Medium	Medium	Medium	Low/Medium	Low/Medium
Suitable Consumables									
Floor Guard	χ	Х	χ	Х	χ	χ	χ	Х	Х
Print Guard UV	Χ	Х	χ	χ	χ	χ	χ	Х	Х
Jet Guard	Х	Х	Χ	Х	Х	Х	Χ	Х	Х
Print Shield	Х	Х	χ	Χ	χ	χ	Χ	Х	Х
Print Mount	Х	Х	χ	Χ	Χ	χ	χ	Х	Х
Print Mount Removable	Х	χ	Х	Χ	Χ	χ	χ	Х	Х
Optimount	χ	χ	Χ	χ	χ	χ	χ	Х	Х
Thermashield R		Х	Х	Х	Х		Х	Х	Х
Thermashield MB		Х	Х	Х	Х		Х		
Stoplight	χ (2)	Х	Х	Χ	χ	χ (2)	Χ	χ (2)	χ (2)
ProSEAL Board & Pouch	Х	χ	Х	Х	χ	Х	Х	Х	Х

NOTE: (1) Only use ProSEAL Pouch Boards and Pouches (2) Only Pressure-sensitive Materials (3) Image 600D is 55" Hot/61" Cold, Medium/High Output Volume, Otherwise Same Specs

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