

# Lamp and Pipe Chart

ABC's "Easy Sheet" series on building extruded aluminum sign frames - 1/01

# 4

One of the advantages in working with ABC's aluminum extrusion system is that it is a modular form of construction. It's easy to build most any sign, since all ABC components are standardized.

ABC's frames need to be cut to a certain size over the nominal lamp length for a perfect fit. This length includes the sockets and the dimension of the wireway which encloses the wiring to help meet U.L. requirements.

Use the following chart as quick reference for the amount frames should be built over the nominal lamp length (48", 72", 96", etc.). For example: if 8' lamps are used, the Large A/Flexframe should be built with an outside dimension of 8'-4.5" in the lamp direction.

On large non-decorated backgrounds, especially if they are white polycarbonate, ABC suggests installing lamps closer together than those on the chart to reduce lamp "hot spots". Polycarbonate is more translucent than acrylic or flexible face

substrate. Recommended lamp centers for illuminated signs are given, and based on placing fluorescent lamps twice the distance apart as their distance away from the face. In single face signs, place lamps as far back in the frame as possible.

Maximum Pipe Diameter gives the largest size pipe (outside diameter), that will pass through the frame.

All internal pipes, struts and braces should be painted white to maximize light reflection and to minimize shadows.

FRAME	SIZE FRAME IS BUILT OVER LAMP LENGTH	MAXIMUM PIPE DIAMETER	LAMP CENTERS
* Large A Flexframe or Large A Bedframe	4.5"	6.625"	12"
Small A Flexframe or Small A Bedframe	4.5"	3.5"	12"
Double Hinge Frame	0.5"	4.5"	12"
Single Hinge Frame	0.5"	3.5"	12"
12" Conventional Frame	1.5"	6.625"	12" Flat 14" Formed
Type I-10" Frame	0.5" or 1.5" (see catalog sheet)	5.563"	12" Flat S/F 10" Flat D/F 12" Pan S/F 12" Pan D/F
Type II-8" Frame	1.5"	4.5"	10" Flat S/F 8" Flat D/F 10" Pan S/F 10" Pan D/F
Type III-6.5" Frame	0.5"	3.5"	8" Flat S/F 6" Flat D/F 10" Pan S/F 10" Pan D/F
** Type IV -5" Frame	0.5"	2.875"	10" Pan S/F 10" Pan D/F
** Small E-Z Frame	0.25"		

\* Example: If 8' lamps are used, then the outside dimension of the Large A/Flexframe should be 8'-4.5" in the lamp direction.

\*\* ABC suggests that Type IV Frames not be used for flat faced internally illuminated signs, except in applications with opaque or partially opaque backgrounds; (use 5" maximum lamp centers).

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The parts described on this page are covered by one or more of the following patents:

U.S. 4,007,552 4,265,039  
CANADIAN 1,021,565 1,149,159 1,170,048 1,170,049 1,170,050

