

76 Silver ACM & Logos



Installation Guide PN #608507

This product is designed to fit a 76 36" to 48" Canopy. Please verify that your site fits these specifications before beginning. If not, please communicate with the appropriate contacts.

Read through all of the instructions prior to beginning installation and verify (using the packing list) that all parts have been received and in good condition.

TABLE OF CONTENTS

SHEET NO.

Packing List.....	3
Note Before Beginning Installation.....	4
76 Silver ACM Installation.....	5
Hardware	
Demolition	
Mounting Angles	
Corner Panels.....	6
36" ACM 12x12" Corner – Dwg. 1	
42" ACM 12x12" Corner – Dwg. 2	
48" ACM 12x12" Corner – Dwg. 3	
Silver ACM Panels.....	7
36" ACM 118" Panel – Dwg. 4	
42" ACM 118" Panel – Dwg. 5	
48" ACM 118" Panel – Dwg. 6	
Installation of Silver ACM Panels.....	8
Routing & Cutting Silver ACM Panels	
76 Logo Placement.....	9

PLEASE NOTE

The packing lists below will vary per site, depending on what is needed. These lists are to give the installer a guideline of what should be received from LSI. ACM quantity will vary by site. Custom material will not be included below. Please make sure to check the packing list included with each shipment for more accurate verification.

PACKING LIST – ACM

Per (1) ACM Panel (including Non-Illuminated Wave panels) or Per (2) Corners:

QTY.	PART #	DESCRIPTION	FINISH
1	Kit PN 569270	Hardware Kit	Kit Item
22	573611	K-Lathe Tek Screw #8x3/4	Paint TBX Silver

For 30-36" Canopy Only:

QTY.	PART #	DESCRIPTION	FINISH
Varies per Site	577130	36x118" 3mm Silver ACM Panel	TBX Silver
Varies per Site	580051/6110450	36x12x12" 3mm Silver Corner Panel	TBX Silver

For 37-42" Canopy Only:

QTY.	PART #	DESCRIPTION	FINISH
Varies per Site	588877	42x118" 3mm Silver ACM Panel	TBX Silver
Varies per Site	580049/6110451	42x12x12" 3mm Silver Corner Panel	TBX Silver

For 43-48" Canopy Only:

QTY.	PART #	DESCRIPTION	FINISH
Varies per Site	577131	48x118" 3mm Silver ACM Panel	TBX Silver
Varies per Site	580049/6110451	48x12x12" 3mm Silver Corner Panel	TBX Silver

***NOTE* BEFORE CUTTING OR INSTALLING ANY
ELEMENTS, FIELD VERIFY THE CANOPY DIMENSIONS!**

Verification is vital in ensuring all canopy elements are
installed properly

**PLEASE REFER TO THE SITE SPECIFIC
LAYOUTS/RENDERINGS FOR GUIDANCE WITH CUT
PANELS AND ELECTRICAL WIRING**



76 Silver ACM Installation Guide



Demolition

Remove all existing fascia

If there are existing mounting angles, leave installed and use existing angles for installation.



If there are no mounting angles present, install new angles (next section).



Mounting angles

Name	Image	Application	Location
1x2x $\frac{1}{8}$ " Mounting angle		Mounting angle to canopy structure	Top angle to canopy structure for red ACM
1x5x $\frac{1}{16}$ " Mounting angle		Mounting angle to canopy structure	Bottom angle to canopy structure for red ACM
#12x7/8 Tek screw		Mounting angle to canopy structure	Top and bottom angles to canopy structure

There will be 2 mounting angles

-  Top angle: 1 x 2 x $\frac{1}{8}$ " aluminum
-  Bottom angle: 1 x 5 x $\frac{1}{16}$ " aluminum

For 36" canopy, angles will be placed 35 $\frac{3}{4}$ to 35 $\frac{5}{8}$ " apart

For 42" canopy, angles will be placed 41 $\frac{3}{4}$ to 41 $\frac{5}{8}$ " apart

For 48" canopy, angles will be placed 47 $\frac{3}{4}$ to 47 $\frac{5}{8}$ " apart

The mounting angles will be attached straight, level and plumb to the existing canopy structure. The top angle will be installed approximately 12" on center with a #12 x $\frac{7}{8}$ Tek screw. The bottom angle will be installed with a #12 x $\frac{7}{8}$ Tek screw as well.

Routing and Cutting ACM Panels

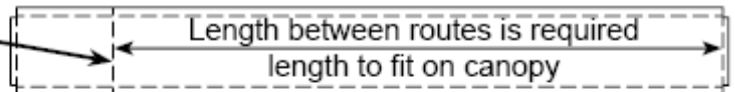
- Measure the length between the last panel placed on the canopy and the corner for the length required.
- Take a 96" panel and measure from the existing end rout to provide the length required to fit on the canopy (remember to reduce length if required to provide gap to allow for temperature expansion of panel). Create a new rout at that length.
- Measure a line 1" from the new rout, and cut the panel on that line. Notch the panel in the corners like the original. Use the end of the original panel as a template.
- If a cut length will be 30" or less, two cut panels will be required (no panel is allowed to be less than 30").

Mark and rout at re-
quired length of panel.

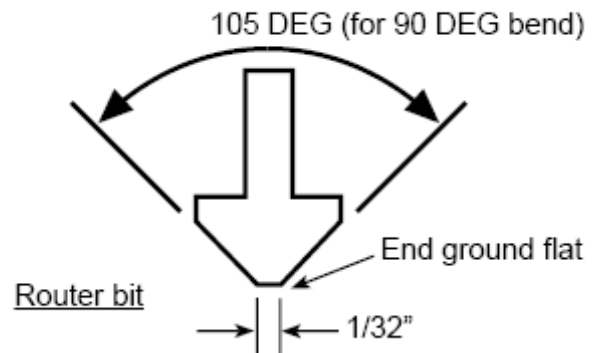
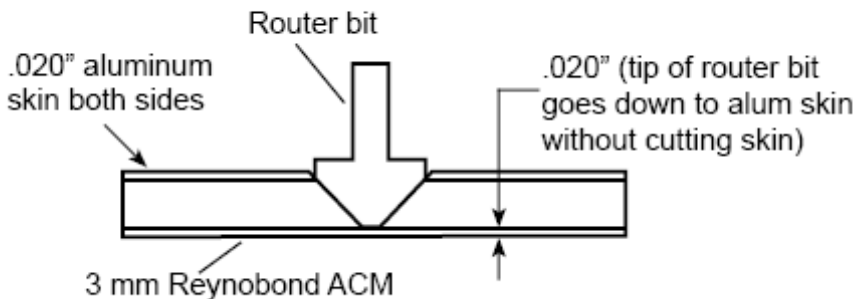
Mark line at 1" lon-
ger than rout.

Cut at marked line.

Notch the panel in the
corners like the original.
Use the end of the origi-
nal panel as a template.

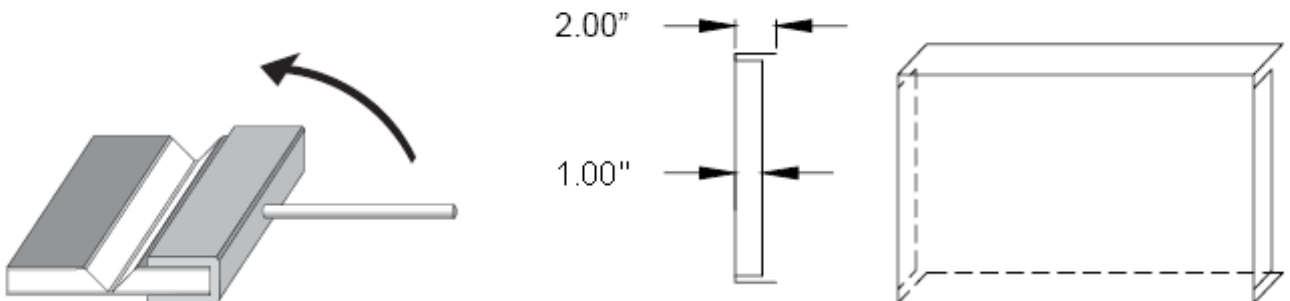


Note that ACM dimensions are different than
shown above.



Bending ACM Panels

Using a bending tool available from LSI or a similar guide, bend the panels along the routed lines as shown in the detail below. Duckbill pliers can be used for bending ACM, but **DO NOT USE REGULAR PLIERS!** This can damage the vinyl overlay and/or mar the surface of the ACM.

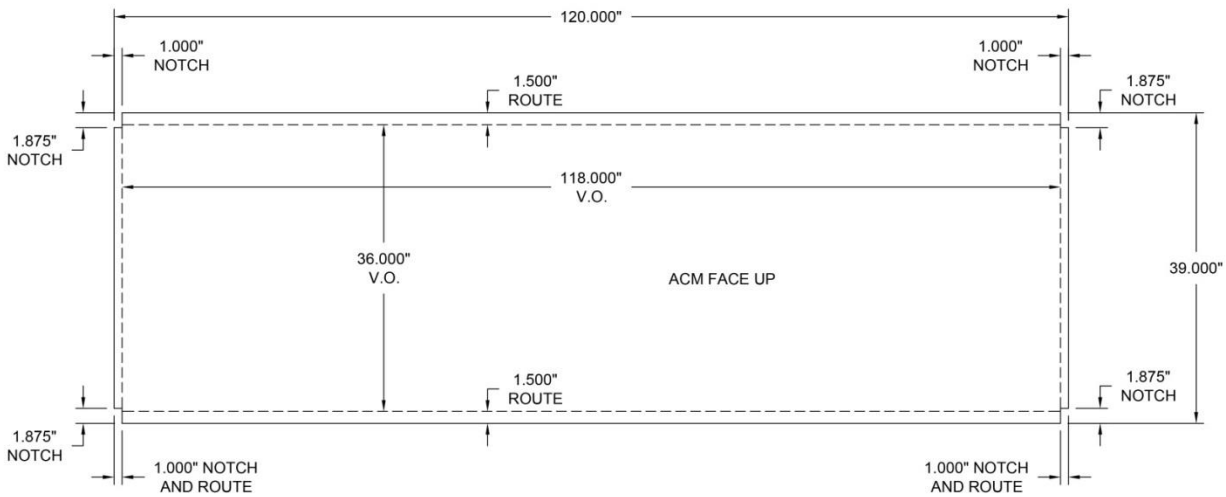


Silver ACM panels

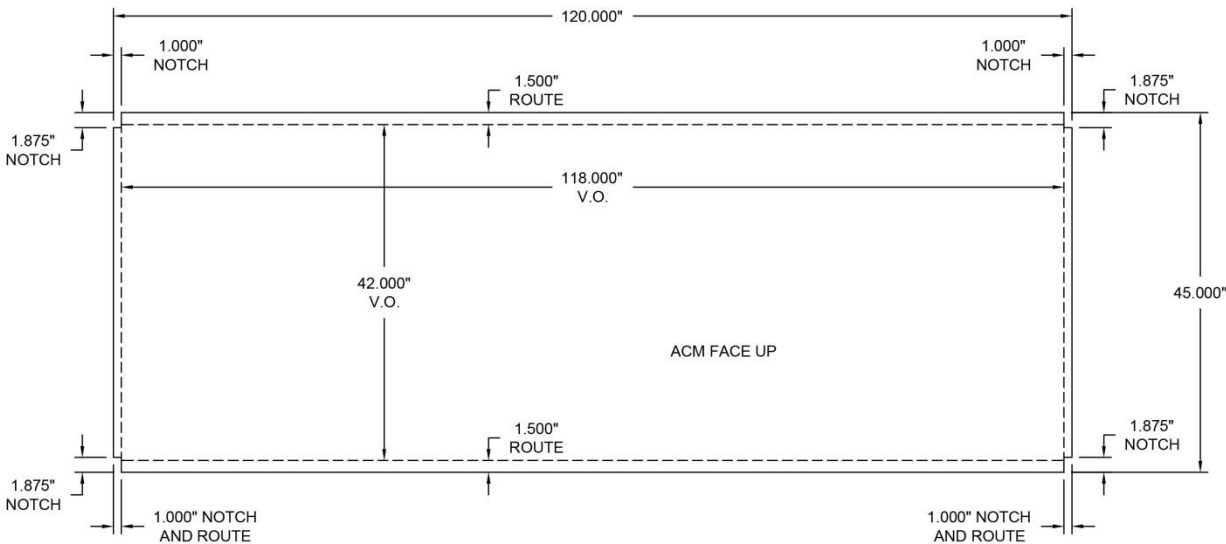
The silver ACM panels will be shipped flat, pre-routed & pre-notched

ACM will be received in crates

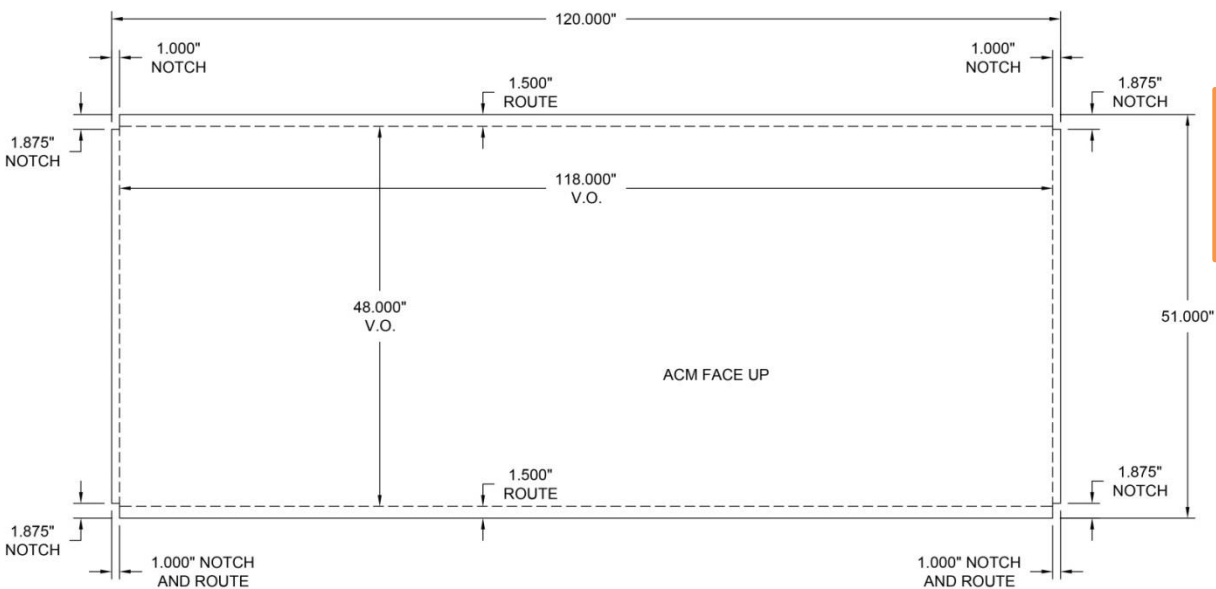
Hardware will be received in one collective box



**36" ACM
118" PANEL
DWG. 4**



**42" ACM
118" PANEL
DWG. 5**



**48" ACM
118" PANEL
DWG. 6**

Minimum Temperature for Bending ACM

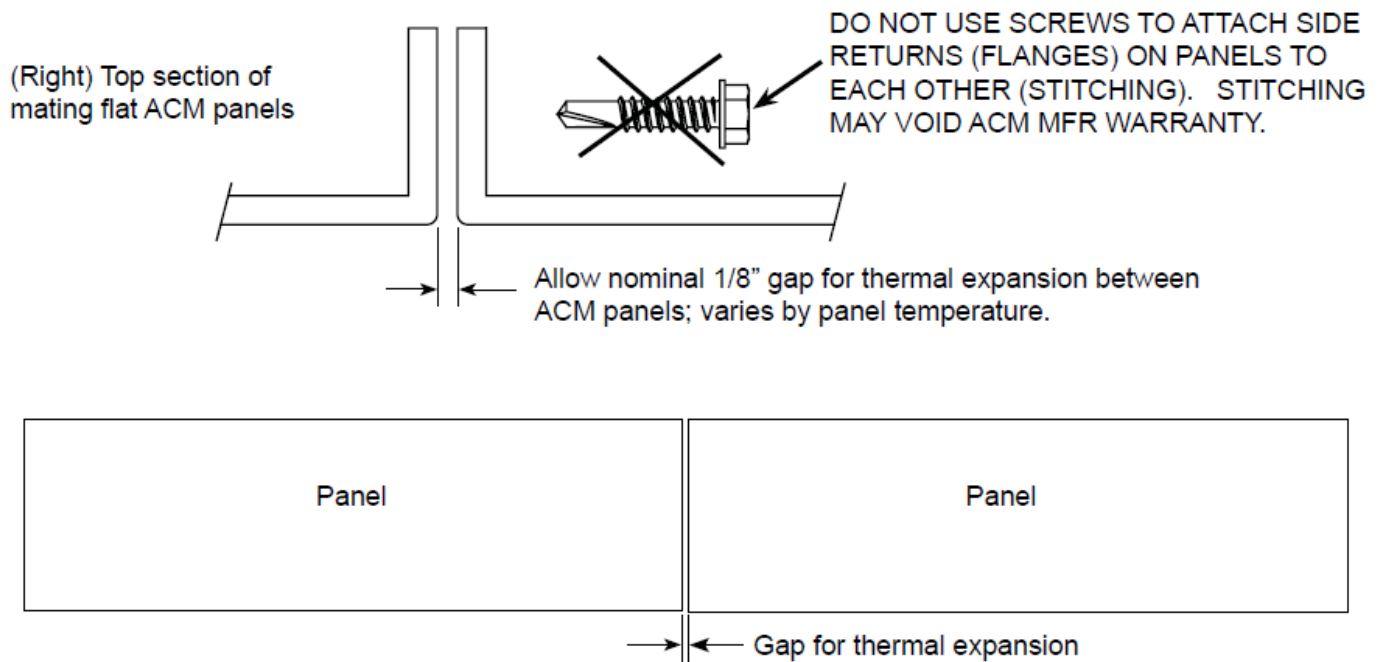
3M requires the substrate and ambient temperature to be a minimum of 60 deg F (16 deg C) for the 3M vinyl on the ACM panels for bending. Failure to follow this procedure can lead to cracking of the 3M vinyl.

When working in temperatures below 60 deg F, the ACM could be kept and bent inside a truck, car wash or other enclosed space that is at a higher temperature.

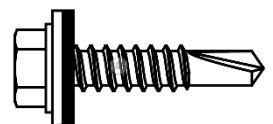
Gap Needed Between Panels to Allow for Temperature Expansion

To prevent warping of ACM panels on canopy structures caused by thermal expansion, a gap should be allowed between panels. Also, stitching (using screws to attach end returns on adjacent panels together) must not be done, because it eliminates the gap between panels and aggravates warping of panels.

Typically, a 1/8" gap should be used between full length panels. This can be readily spaced using a scrap of ACM. The gaps may be reduced to 1/16" when installing in hot temperatures (panel temperature 100 deg F or above) to allow the panels to contract when they cool off. 3/16" gaps should be used when installing below 40 deg F panel temperature. Based on a thermal coefficient of expansion of 1.31×10^{-5} in/in-degree F, an ACM panel at 96" length will expand .176" over a range from -20F to +120F.



UPDATED INSTRUCTIONS: If Light Bar will not be installed on top of an ACM panel, then use PN 771520 - SCR TEK HWH #12X1 SHEETING, STL ZINC W/ WSHR to fasten top return of ACM panel to top mounting angle. These sheeting screws hold panels to canopy better in high wind. If Light Bar will be installed on top of a panel later, use the K-lathe screws to fasten top of that panel to top mounting angle (sheeting screws on panel prevent Light Bar from seating flush). Fasten Light Bar using sheeting screws later.



PN 771520, #12X1
SHEETING SCREW

Installation of silver panels

If installing ACM for a site that has faux (vinyl) waves, **BE SURE** that silver is not applied to that side.

Fold ACM along routing lines, using an ACM bending tool or duckbill pliers.

DO NOT USE REGULAR PLIERS! This can mar the surface of the ACM.

Apply the silver ACM panels to the angles and screw into place using silver #8 x ½ K Lath screws

Begin at the logo end with a full 118" silver ACM panel after the corner.

The logo **MUST** be placed on a full ACM panel, **NOT** A SEAM. Proper placement of this first panel must be done correct.

Example – If the logo will be placed on the right-hand end of the canopy face, the first 118" panel should begin at that corner.

STARTING PANEL



Continue installing 118" panels until the space to the next corner is **LESS THAN 118"**

Routing and cutting silver ACM panels

Measure the length between the last panel and the corner panel (length "X").

Take a 118" panel and measure from the route inward for the length of "X", and create a new route.

Measure over 1", and cut the panel. Notch the panel as the original, 1 ¾" deep.

Use the end of the original panel as a template

CUT PANELS



Depending on the circumstance, it is possible that there will be more than one cut panel on a side. If a cut length will be 12" or less, two cut panels will be required.

Please refer to the panel layout provided for reference.

NEVER have a cut panel behind the logo unless on a faux wave side

Do this for all sides of the canopy. Remember, if there are multiple logos, the starting panel should **ALWAYS** be behind the logo, regardless of what side it is on

NOTE For some canopies, the fascia height varies from 40-42". The installer will receive 42" height ACM panels and corners, and will need to field cut, route and notch to fit actual canopy height. Please make sure to follow the drawings and instructions above to avoid any issues.



76 Logo Placement Guide



There will be three different sizes of logos:

-  17"
-  22 $\frac{3}{8}$ "
-  33 $\frac{3}{4}$ "
-  45"

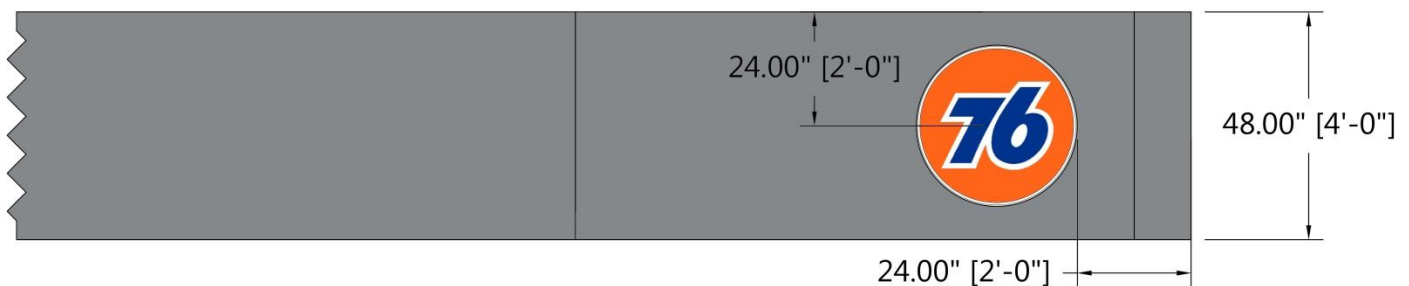
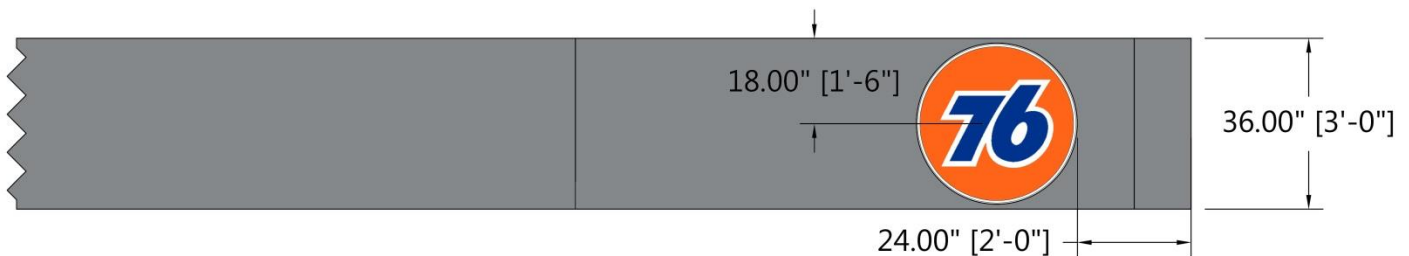
Logo placement will always be 24" from the end of the canopy to the edge of the logo. This is regardless of the logo size, or whether the logo is on a wave side or a downlight side.

Logo placement is determined by the layout/rendering provided to you.

Logos will be center justified top and bottom to the canopy fascia

Hardware for the logo will be included with the logo box.

Example – 33 $\frac{3}{4}$ " logo on 36" and 48" fascia



Appendix

9/8/2021 - Added updated instructions (yellow box) to use PN 771520, #12X1 sheeting screws to fasten top return of ACM panels to top mounting angle (for more strength in high wind). Added page to field cut and fold ACM panels. Added gap requirement between panels to allow for temperature change and no stitching panels together.