Phillips 66 Dual Coat Fascia System with Non-Illuminated Pucks (Shield Image) Installation Guide

This product is designed to fit a Phillips 66 36” canopy. Please verify that your site meets these specifications. If not, please contact LSI Customer Service at 1-800-231-0129 for installation support.

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

Customer Service
Phone No. : 1-800-231-0129
Email:

Thomas Thompson, Field Service
Phone No. : 713-744-4135
Email: Thomas.Thompson@lsicorp.com

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

Verification is VITAL in ensuring all canopy elements are installed properly.

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

Parts

NOTE: The parts below vary per site, depending on what is needed. These lists are to give the installer a guideline of what should be received from LSI. Quantities vary by site. Custom material is not included below. Check the packing list included with each shipment for more accurate verification.

Mounting Angles

QTY.	PART #	DESCRIPTION	FINISH
Varies per Site	594488	1x2x96” Mounting Angle	Aluminum Mill
Varies per Site	576282	1x5x96” Mounting Angle	Galvanized Steel

96” Dual Coat ACM Fascia – KIT PN 605888

QTY.	PART #/DWG #	DESCRIPTION	FINISH
1	604230/ 6110870	36x96” 3mm Dual Coat ACM Panel (per panel – 20 panels per crate)	FEF Red/ MFS Gray
2	632777/ 6701322	96” Bridge Rail Assy (per panel – 40 rails per box)	Brushed Aluminum
2	604190/6701265	Non-illuminated Pucks (per panel – 40 per box)	Brushed Aluminum
1	643272	Al Splice 1.38x2.75x1.38”	Satin Anodized

Corner Assembly - KIT PN 605890

QTY.	PART #/DWG#	DESCRIPTION	FINISH
1	604238/ 6110873	36x21.5x21.5” 3mm Dual Coat Corner (per panel – crated with 96” panels)	FEF Red/ MFS Gray
2	604272/ 6701067	Corner Rail Assembly	Brushed Aluminum

End Cap Assembly – KIT PN 605892

QTY.	PART #/DWG #	DESCRIPTION	FINISH
1	604237/ 6110875	36x22” 3mm Dual Coat End Cap Panel (per panel – crated with 96” panels)	FEF Red/ MFS Gray
1	604601/ 6701184	End Cap Rail Assembly – Female (per panel)	Brushed Aluminum
1	604600/ 6701183	End Cap Rail Assembly – Male (per panel)	Brushed Aluminum

Non-Illuminated Dual Coat ACM – PN 604232

QTY.	PART #/DWG #	DESCRIPTION	FINISH
1	604232	36x96” 3mm Dual Coat ACM Panel w/ Silver Stripe (per panel – 10 per crate)	FEF Red/ MFS Gray/ Silver

Hardware Kit (per panel or one-half per corner/end cap) – PN 604283

QTY.	PART #/DWG #	DESCRIPTION	FINISH
12	470202	#8x3/4 K-Lathe Tek Screw	Paint Red
4	239847	#8x3/4 Tek Screw	Zinc Plated

Hardware

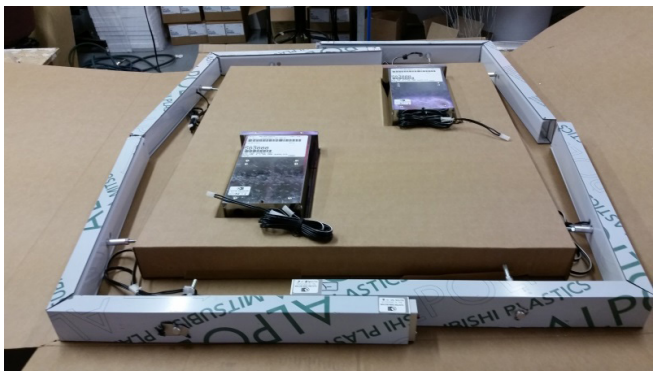
Name	Image	Application	Location
5/16-18 Hex Nut		Attach rail to dual coat ACM	Backside of dual coat ACM on 4” stud
5/16-18 Washer		Attach rail to dual coat ACM	Backside of dual coat ACM on 4” stud
Strain Relief Bushing		Prevent wires from directly contacting ACM panel	Through designated hole in end cap ACM panel

Phillips 66 Dual Coat ACM Packaging/Crating

Mounting Angles

Angles will be received in a crate, bundled by 1x2 and 1x5 angles. The hardware kits for the 96” ACM panels, corners, end caps and all rails will be in this crate as well.

Corners and Corner Rails - Corner ACM panels, assembled corner rails and corner power supplies will be received in a single box, two corners to a box. Hardware for the ACM will be found in the mounting angles crate. The ACM panels will be shipped flat, pre-routed and pre-notched.



End Caps and End Cap Rails

End cap ACM panels, assembled end cap rails (male and female), end cap power supplies and hardware will be received in a single box, two end caps to a box. Hardware for the ACM will be found in the mounting angles crate. The ACM panels will be shipped flat, pre-routed and pre-notched.

96” Rails

Rails will be received assembled, separated into two boxes for “Top Rails” and “Bottom Rails”.

96” Dual Coat ACM Panels

ACM will be received in crates, standard 20 panels per crate. Additional panels will be received in another crate (ex. site requires 32 panels, 20 in one crate, 12 in the second crate). Hardware will be found in the mounting angles crate. The ACM panels will be shipped flat, pre-routed and pre-notched.

96” Dual Coat with Silver Stripe Panels

ACM panel will be received in crates, standard panels per crate. Additional panels will be received in another crate. Hardware for the ACM will be found in the mounting angles crate. The ACM panels will be shipped flat, pre-routed and pre-notched.

Pucks Puck assemblies will be shipped assembled, 40 per box.

Phillips 66 Dual Coat ACM UL Labeling

Each rail will have a UL label applied in a numerical order; however, rails do not have to be installed in sequential order.

The UL label will always face upwards on the rail during installation.

Be mindful of the male/female orientation of the rails from one to the next.

Pay close attention to the UL label placement for corner rails and end cap rails – these will be the easiest to mix up as the rails look similar but must be flipped in a certain way to ensure the labels are facing upwards.

For the corner rails:
- The labels will be applied as such: one on a red side up (top rail) and one on a white side up (bottom rail) per corner.
- One box with corners will have four rails, two with the labels on the red sides, two with the labels on the white sides.
- Each corner rail will be labeled as “C__ of __” (Ex. C1 of 6).
- Each power supply for the corner rail will be labeled as “PC__ of __”, continuing the numbers from the corner rails (Ex. PC5 of 6).

For the end cap rails:
- Left hand end cap: labels will be applied one on the female rail red side up (top rail) and one on the male rail white side up (bottom rail).
- Right hand end cap: labels will be applied one on the male rail red side up (top rail) and one on the female rail white side up (bottom rail).
- One box with end caps will have four rails, one female and one male with the labels on red sides, one female and one male with labels on the white sides.
- Each end cap rail will be labeled as “E__ of __” (Ex. E1 of 6).
- Each power supply for the end cap rail will be labeled as “PE__ of __”, continuing the numbers from the end cap rails (Ex. PE5 of 6).

For the 96” rails:
- The tops and bottoms CANNOT be mixed up – top rails should be male oriented to the left, bottom rails should be male oriented to the right.
- Each rail will be labeled as “R__ of __” (Ex. R1 of 50).
- Each power supply for the rails will be labeled as “PR__ of __” (Ex. PR1 of 25).

Demolition and Angle

Remove all existing fascia and flashing. This is necessary to allow placing washer/nut on studs on back of ACM when installing light rails.

It is the installer's responsibility to determine whether or not the canopy structure is capable of supporting the new fascia system.

If there are existing mounting angles in good condition, leave installed. If there are no mounting angles present, install new angles (next section).

Mounting angles and Hardware

Name	Image	Application	Location
1" x 2" x 1/8" Mounting angle		Mounting ACM to canopy structure	Top of canopy structure
1" x 5" x 1/16" Mounting angle		Mounting ACM to canopy structure	Bottom of canopy structure
#12x7/8 Tek screw (suggested - installer provided)		Mounting angle to canopy structure	Top and bottom of canopy structure

For 36" canopy, angles will be placed 35-3/4" to 35-5/8" apart (very top to very bottom of angles).

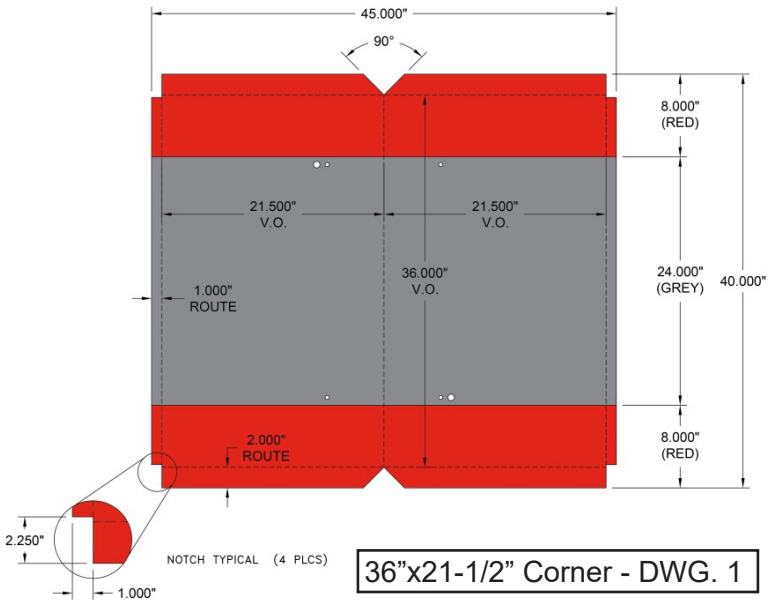
Suggested hardware for installation is a #12x7/8 Tek screw – this can vary depending on the canopy structure. Because of this, installers are to provide all necessary hardware for attaching angles to structure.

The mounting angles will be attached straight, level and plumb to the existing canopy structure.
The top angle will be attached using (suggested) #12 x 7/8 Tek screws approximately 12" on center.
The bottom angle will also be attached using (suggested) #12 x 7/8 Tek screws.

There are four primary elements to the dual coat fascia system – ACM, illuminated rails, non-illuminated pucks, and non-illuminated dual coat ACM with silver stripe.

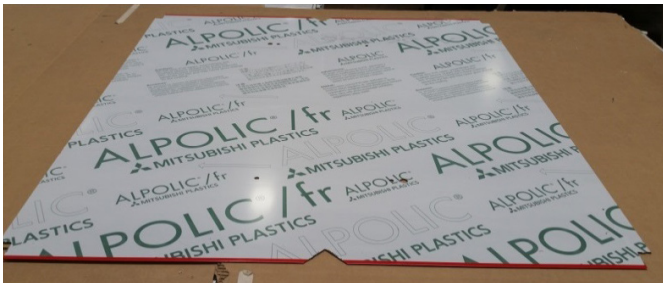
All ACM is to be installed first, then the rails and pucks.

Dual Coat Corner and End Cap ACM Panels

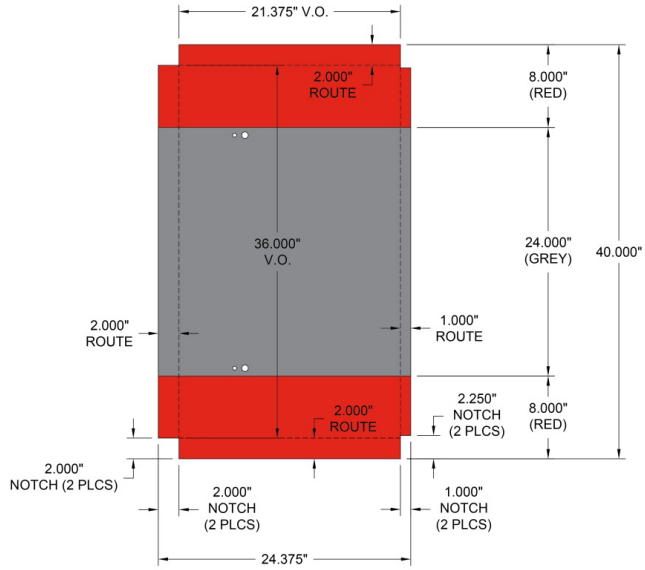


36”x21-1/2” Corner - DWG. 1

Front



Back



36”x21-3/8” End Cap - DWG. 2

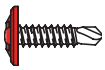
Front

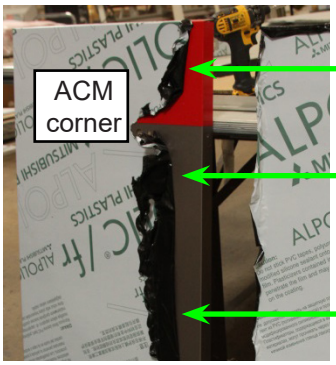
Back

Installing Corner and End Cap Panels

INSTALL THE CORNER PANEL AND END CAP PANELS FIRST

K-lathe self-drilling screw #8 x 3/4” (red). Use to attach ACM to mounting angle at top and bottom of corner panel and end cap.





Pull the film back around the edges of the ACM panels before installation so that it does not get caught between the panels or in the screws. Leave the film on the ACM panels during installation. The film must be removed prior to the rail and puck installation.

Use a level on the corners and end caps so that all 96” panels installed next will be level.

For a partial illuminated canopy (all corners 90 degrees), end caps and corners are required.
Install the end cap panels to the angles following these guidelines:

- The 2”x36” flange towards the edge of the canopy (to the left for a left hand end cap, and to the right for a right hand end cap)
- Offset 1-1/2” from the edge of the canopy
- Using red #8 x 3/4” K-Lathe screws – the first screw is inset about 1” from the edge of panel.
- Follow the layout/guide provided to the installer.

The non-illuminated panels (dual coat ACM with silver stripe) will butt up against the end cap panels when installed, ensuring there are no gaps/offsets with the canopy fascia.

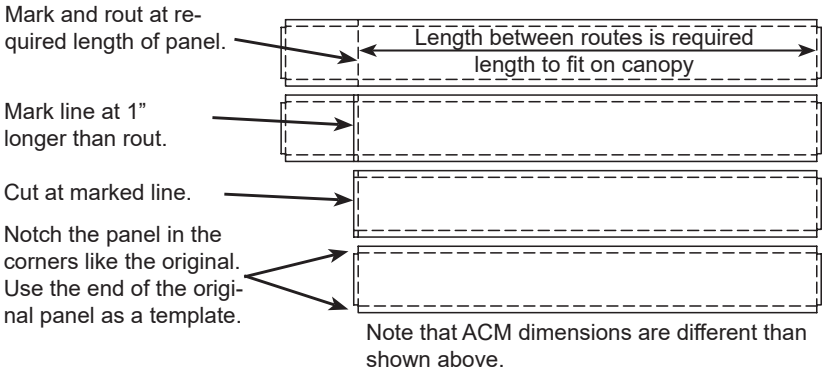
Install the corner panels to the angles and screw into place using red #8 x 3/4” K-Lathe screws.

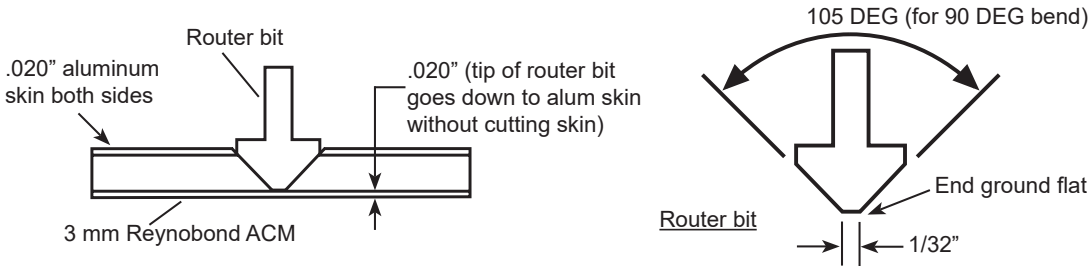
For a fully illuminated canopy (all four-plus sides, all corners 90 degrees), corner panels are required.
Install the corner panels to the angles and screw into place using red #8 x 3/4” K Lathe screws.

Exceptions
If the canopy corners are not all 90 degrees (partial or fully illuminated), custom corners will be shipped – it is possible to receive both standard and custom corners for one site. Please see page for instruction on non-standard canopies.

Routing and Cutting ACM Panels

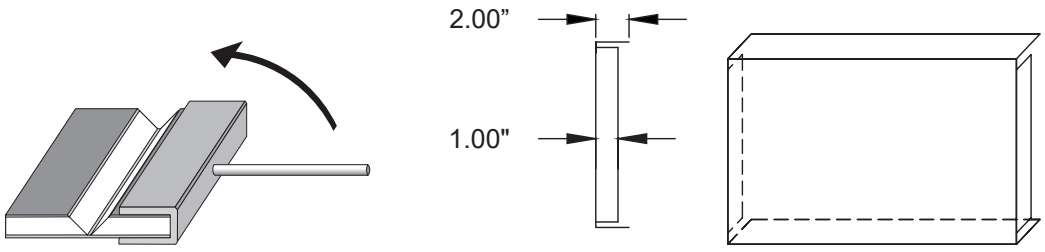
- Measure the length between the last panel placed on the canopy and the corner for the length required.
- Take a 96” panel and measure from the existing end rout to provide the length required to fit on the canopy (remember to reduce length if required to provide gap to allow for temperature expansion 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”).





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.



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.

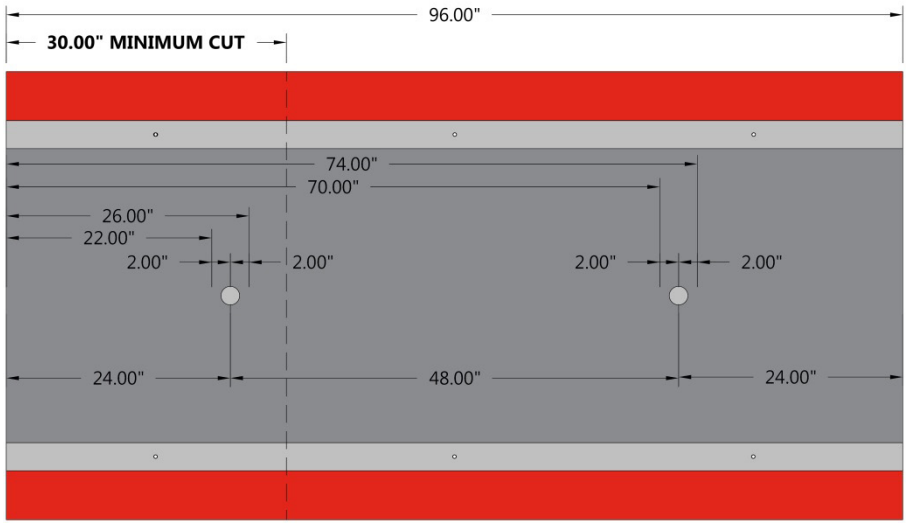
Routing and Cutting ACM Panels

There are specific places in which cuts CANNOT fall. Cutting at the following lengths will interfere with the pucks and rails. (There is also a mimimum allowed panel/rail length of 30”):

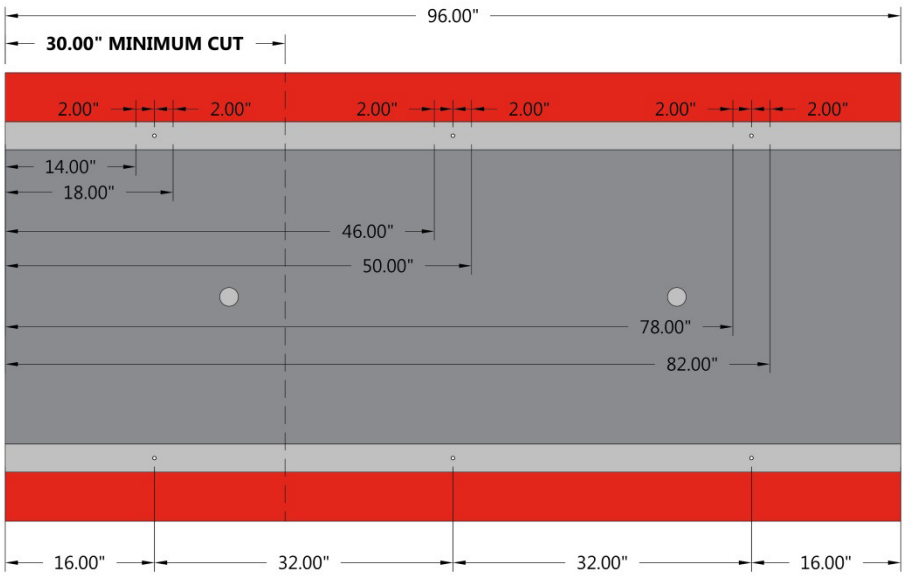
- 14” to 18”
- 22” to 26”
- 46” to 50”
- 70” to 74”
- 78” to 82”

Note: Any cutting of ACM panel will mean that the (top and bottom) light rails installed later must be cut at the same end and by the same length as the panel. Cutting the panel and light rails also changes the distance between puck holes (on adjacent panels) and light rail stud holes. Example: Cutting 3” off the end of panel and light rails on one side reduces distance to 48” - 3” = 45” between pucks on adjacent panels.

CUTS FOR LARGE PUCKS - DWG. 4

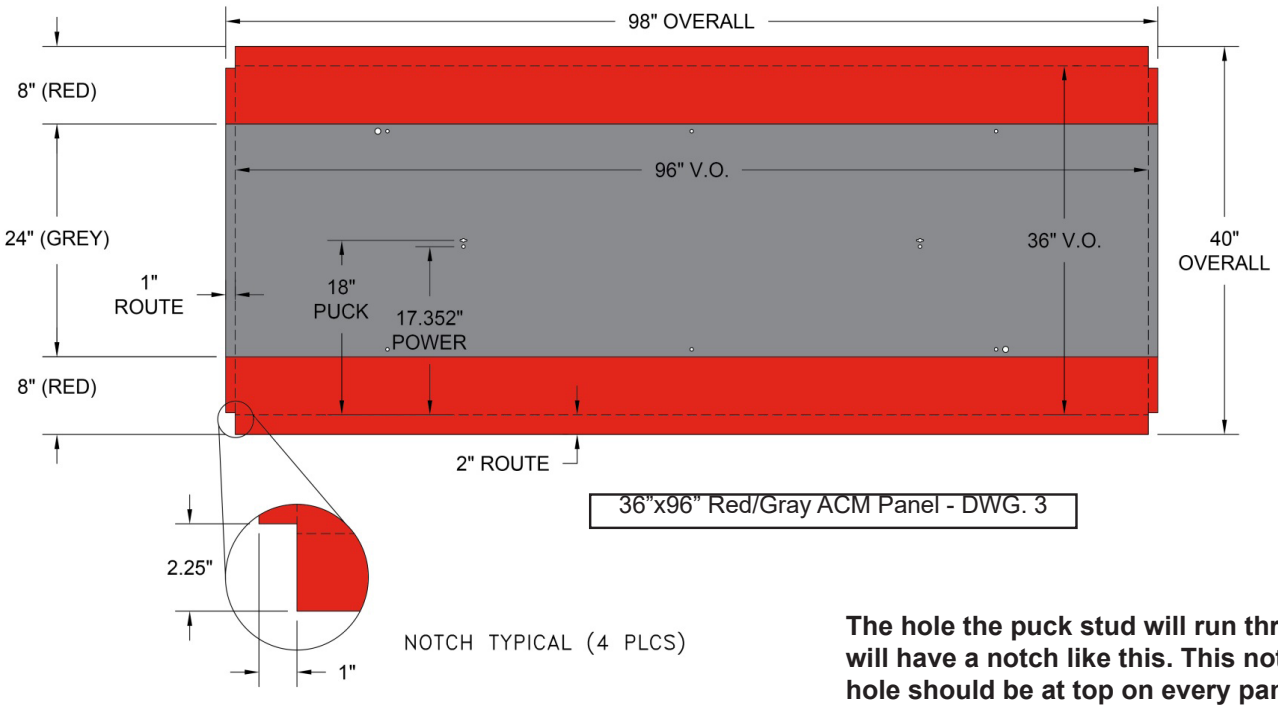


CUTS FOR RAIL PUCKS - DWG. 5



- Depending on the circumstances, it is possible that there will be more than one cut panel on a canopy side. If a cut length will be 30” or less, two cut panels will be required.
- It is also possible that one panel will need to be cut on both ends – this will be noted on the panel layout/rendering. Additional electrical wiring will be required. Refer to the electrical information at the end of this guide.
- **Refer to panel layout/rendering provided**.
- **NEVER** have a cut panel behind the logo.

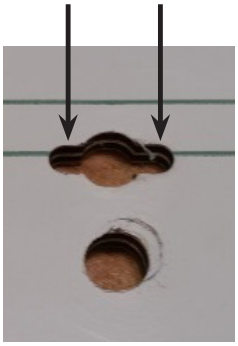
96” Dual Coat ACM Panels



The hole the puck stud will run through will have a notch like this. This notched hole should be at top on every panel installed to ensure a consistent image.

Front

Back

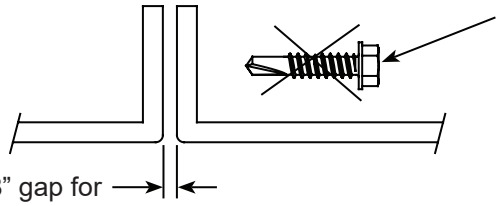


Gap Needed Between Panels to Allow for Temperature Expansion

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 x 10^{-5} in/in-degree F, an ACM panel at 96” length will expand .176” over a range from -20F to +120F.

(Right) Top section of mating flat ACM panels



DO NOT USE SCREWS TO ATTACH SIDE RETURNS (FLANGES) ON PANELS TO EACH OTHER (STITCHING). STITCHING MAY VOID ACM MFR WARRANTY.

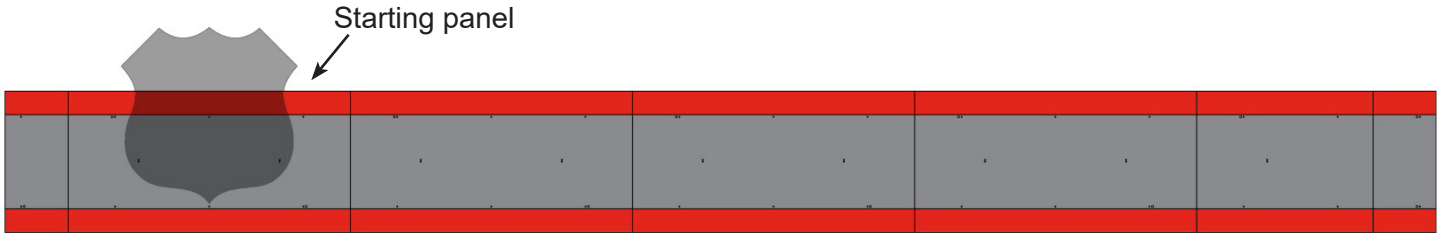
Allow nominal 1/8” gap for thermal expansion between ACM panels; varies by panel temperature.

Installation of 96” ACM Panels

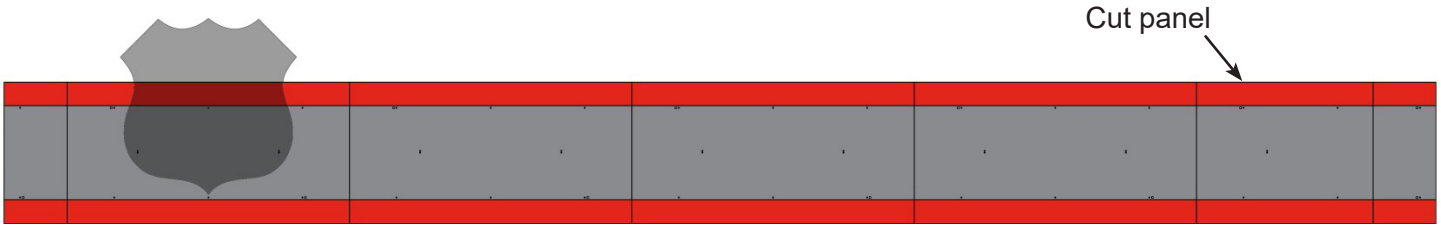
K-lathe self-drilling screw #8 x 3/4” (red). Use to attach dual coat ACM panel to mounting angle at top and bottom of canopy.

- Pull the film back around the edges of the ACM panels before installation so that it does not get caught between the panels or in the screws. However, leave the film on the ACM panels during installation. This will help to protect the ACM face from marring or damage. The film will need to be removed prior to rail and puck installation.
- Fold the ACM along the routed lines.
- Attach the ACM to the angles using red #8 x 3/4” K-Lathe screws.
- Begin at the logo end with a full 96” dual coat ACM panel after the corner. The logo **MUST** be placed on a full ACM panel (later), NOT A SEAM. Proper placement of this first panel must be done correctly.

Example – If the logo will be placed on the left end of the canopy face, the first 96” panel should begin at that corner.



- Continue installing 96” panels until the space to the next corner is LESS THAN 96”.
- Cut and fold a 96” panel using the procedure discussed previously.
- Attach the cut panel using red #8 x 3/4” K-Lathe screws.



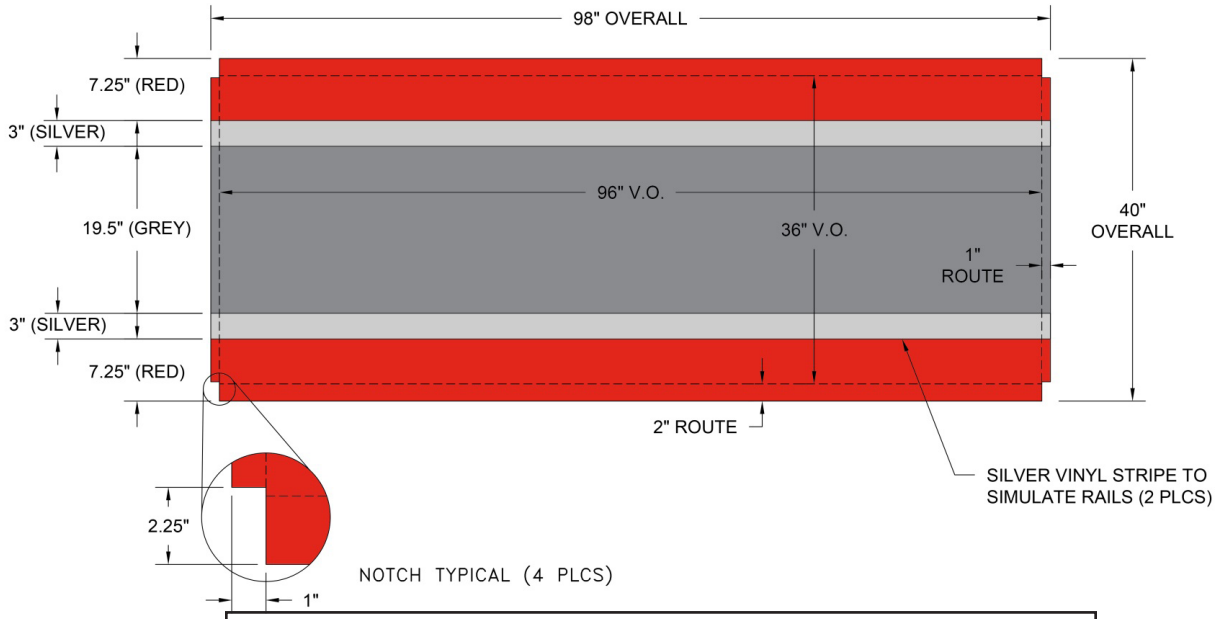
Refer to the panel layout/rendering provided.

Do this for all illuminated sides of the canopy, as specified per the layouts provided. Remember, if there are multiple logos on a canopy, the starting panel should ALWAYS be behind the logo, regardless of what side of canopy it is on.

UPDATED INSTRUCTIONS: Use PN 771520 - SCR TEK HWH #12X1 SHEETING, STL ZINC W/ WSHR to fasten the top return of ACM panels to the top mounting angle. The sheeting screws will provide more strength to hold the ACM panels to the canopy in high wind.

PN 771520, #12X1 SHEETING SCREW

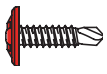
Dual Coat with Silver Stripe (faux) ACM Panel



36”x96” DUAL COAT WITH SILVER STRIPE PANEL- DWG. 6

Installation of Dual Coat with Silver Stripe ACM Panels

K-lathe self-drilling screw #8 x 3/4” (red). Use to attach dual coat with silver stripe (faux) ACM panel to mounting angle on top and bottom.



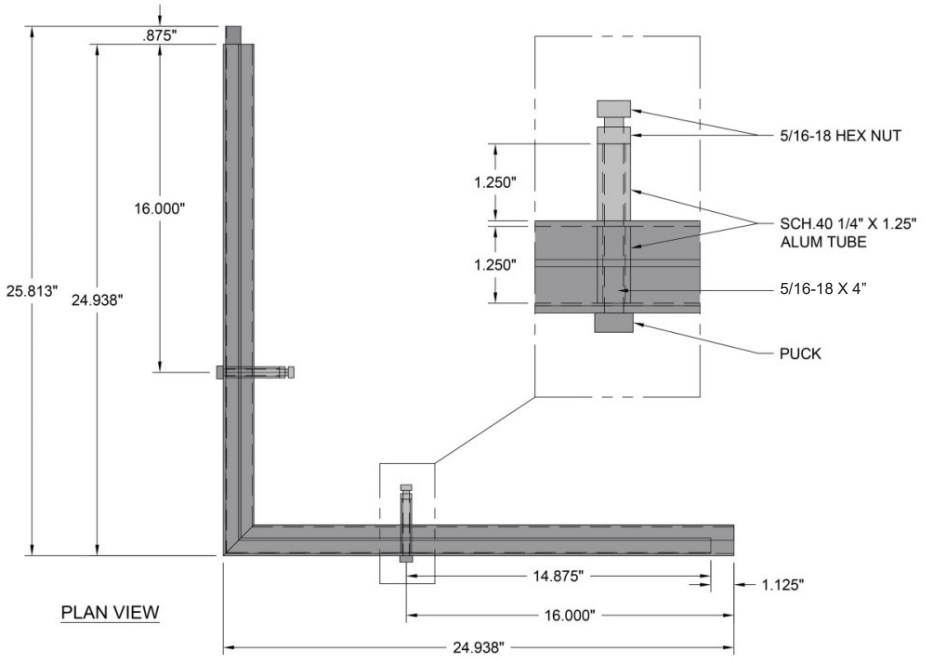
Attach the dual coat with silver stripe (faux) ACM to the angles using red #8 x 3/4” K-Lathe screws.

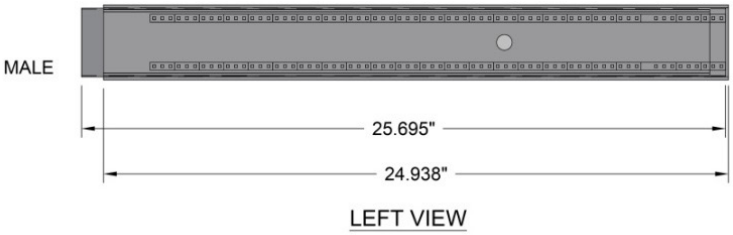
If there is a logo on the dual coat with silver stripe side, begin at the logo end with a full 96” panel after the corner. The logo MUST be placed on a full ACM panel, NOT A SEAM. Placement of this first panel must be done correctly.

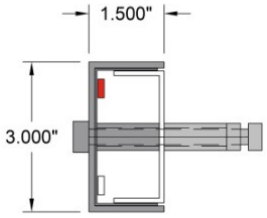
If there is no logo, mirror the front side in panel placement.

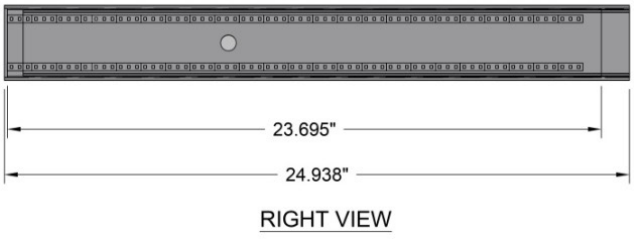
Phillips 66 Rail and Puck Installation

Corner Rail Assembly





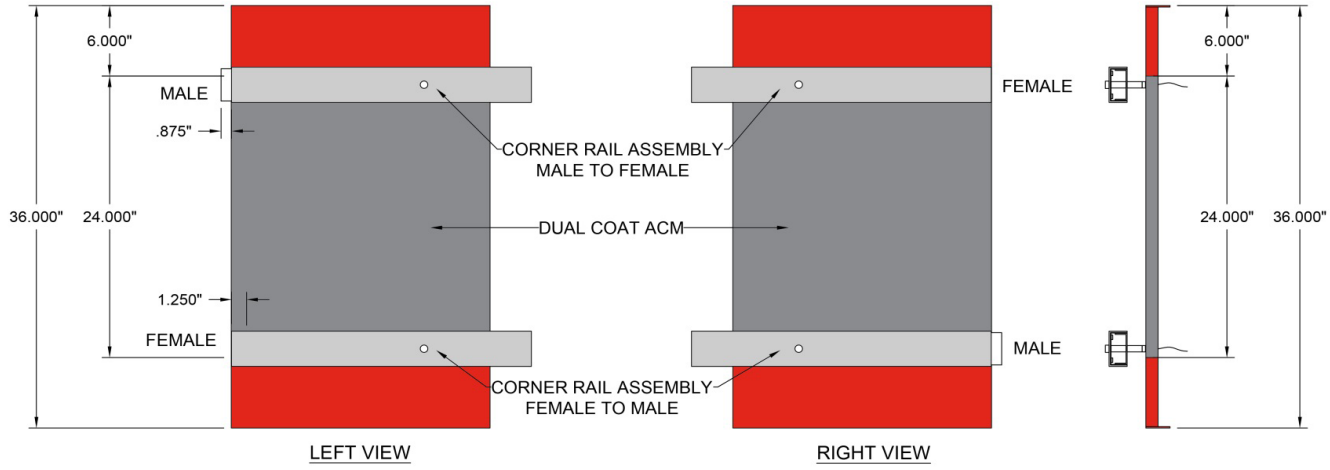




Corner Rail - DWG. 7

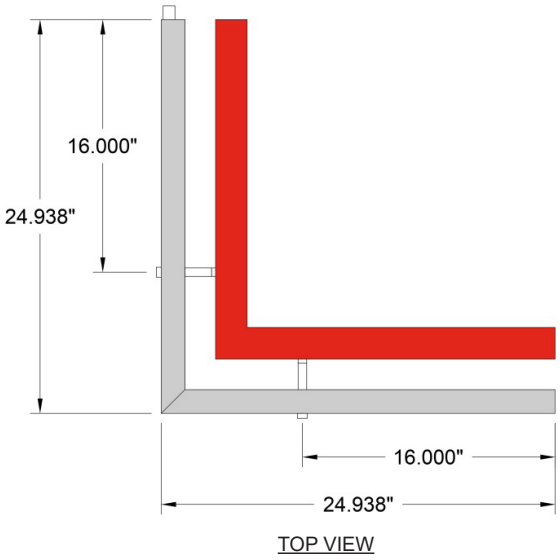
Installation of Corner Rails

Remove the 5/16-18 washer and nut, slide the studs through the appropriate holes in the ACM and insert the cable. Slide the cable with the molex connector through the power hole, and secure the strain relief bushing in the ACM panel.



LEFT VIEW

RIGHT VIEW



TOP VIEW

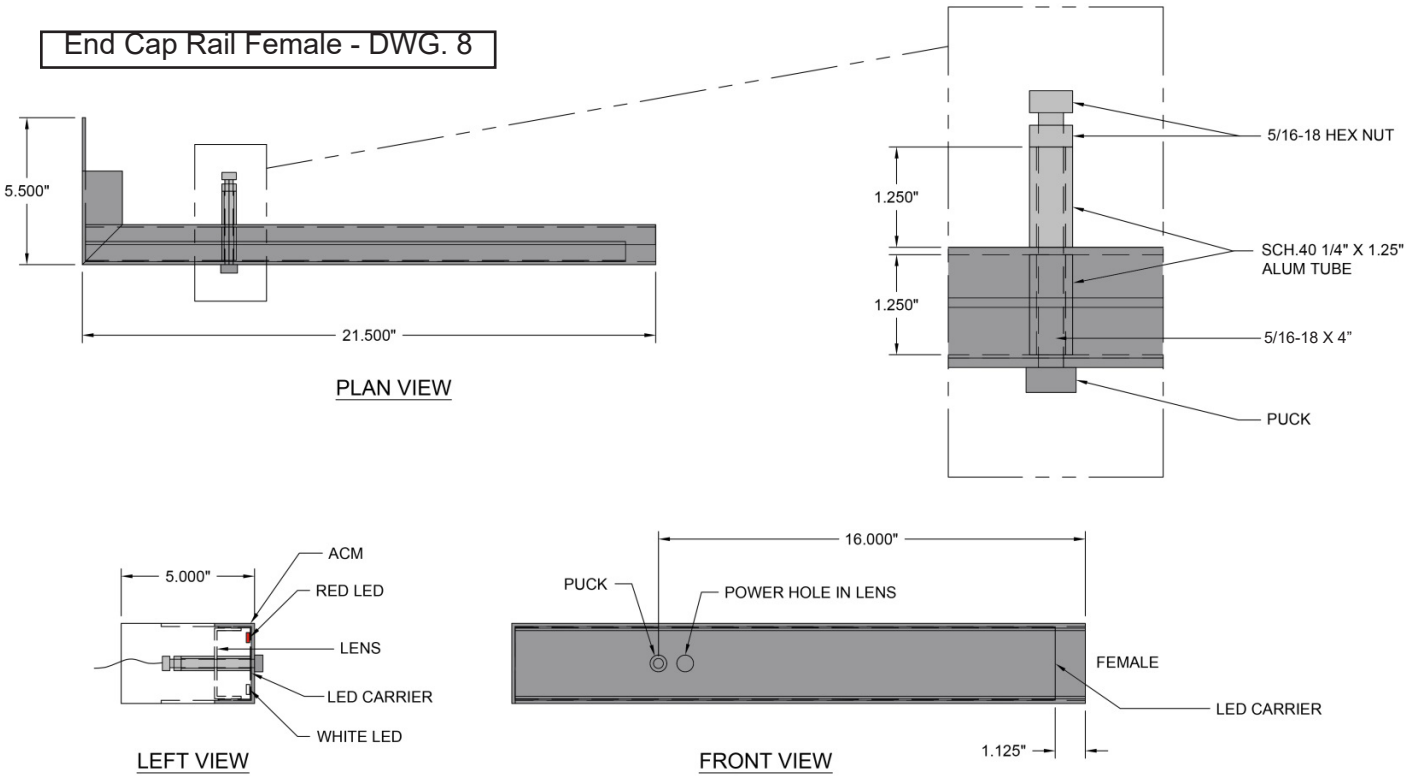
For the top rail, the red LED strip will be on the top of the rail (male on left on top rail).

For the bottom rail, the red LED strip will be at the bottom of the rail (male on right on bottom rail).

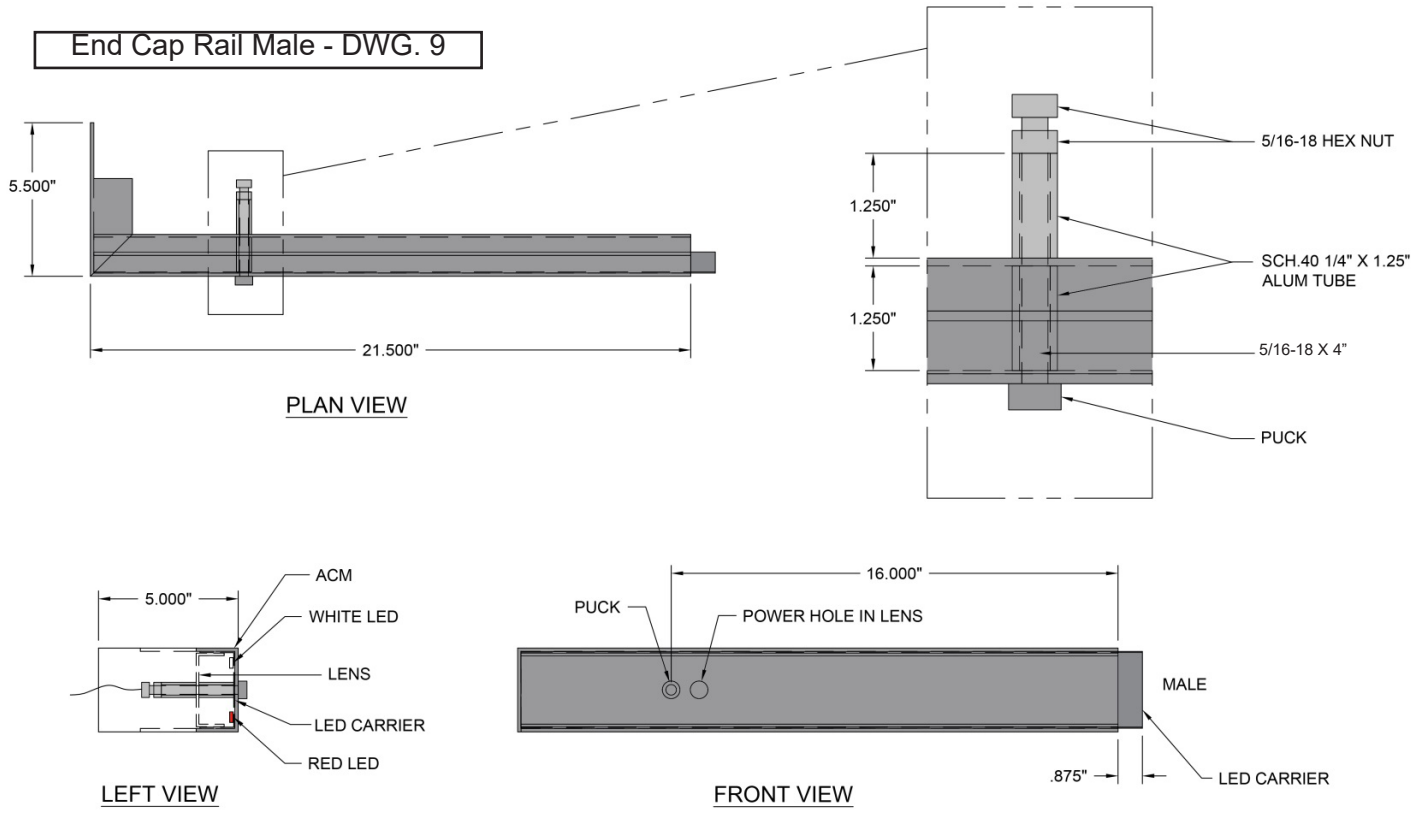
Secure the rail to the ACM with the washer and nut.

End Cap Rail Assembly

End Cap Rail Female - DWG. 8

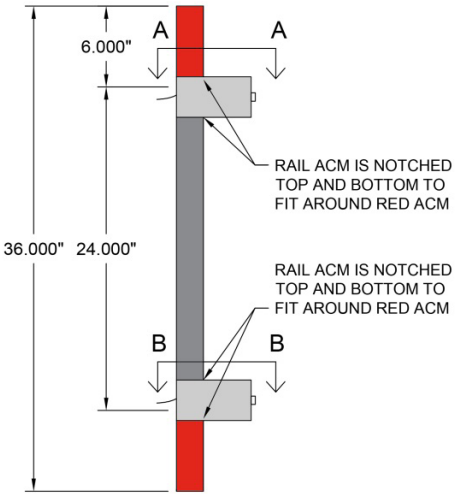


End Cap Rail Male - DWG. 9

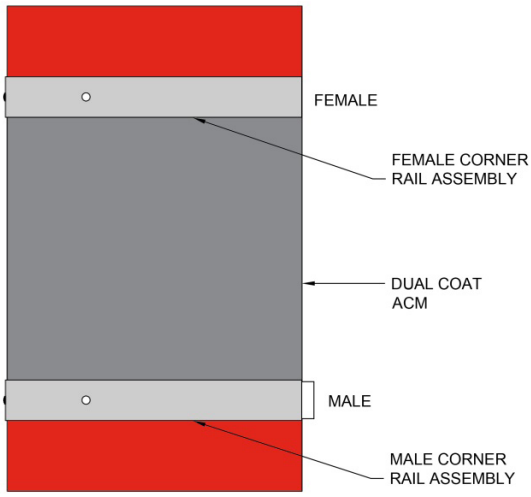


Installation of End Cap Rail Assembly

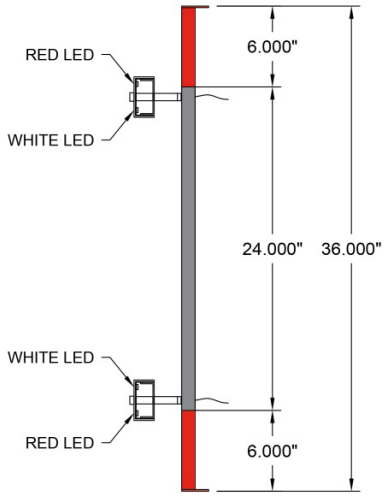
Remove the 5/16-18 washer and nut, slide the studs through the appropriate holes on the ACM and the cable. Slide the cable with the molex connector through the power hole, and secure the strain relief bushing in the ACM panel.



LEFT END VIEW



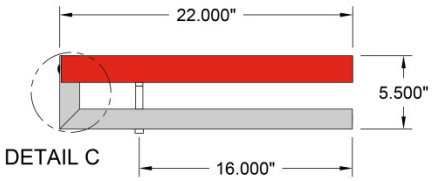
FRONT VIEW



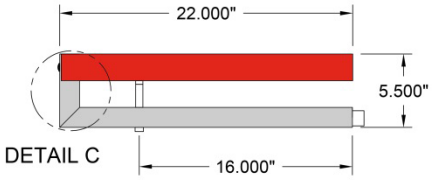
RIGHT END VIEW

For the left hand end cap, the female rail assembly will be at the top of the panel, and the male rail assembly will be at the bottom.

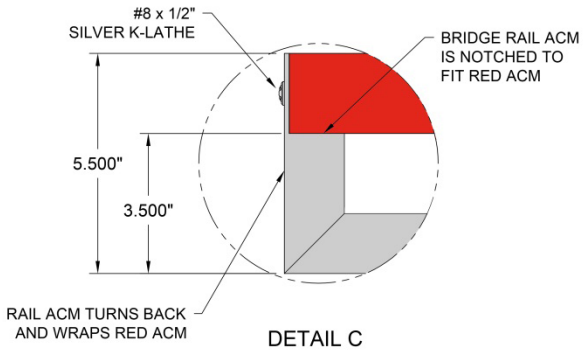
For the right hand end cap, the male rail assembly will be at the top of the panel, and the female rail assembly will be at the bottom.



SECTION A-A

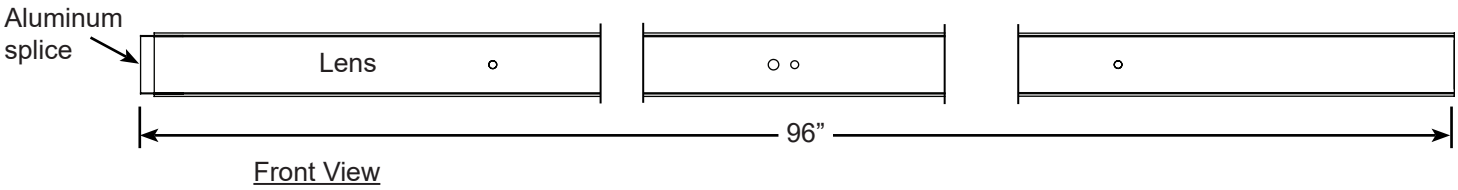


SECTION B-B

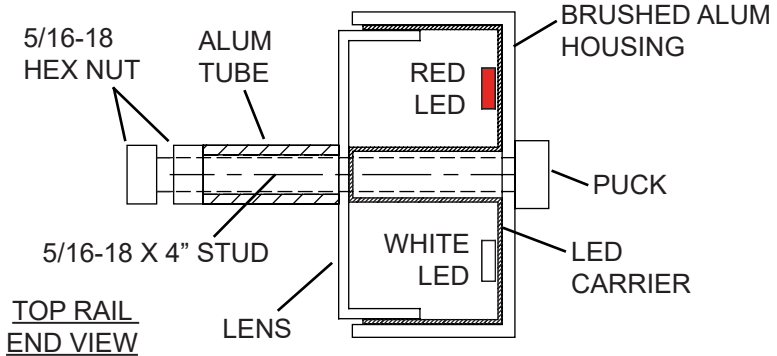


Secure the rail to the ACM with the washer and nut on the front, and silver K-lathe for the side.

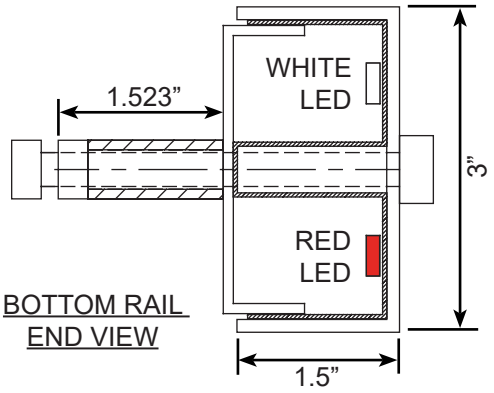
96” Rail Assembly



Front View

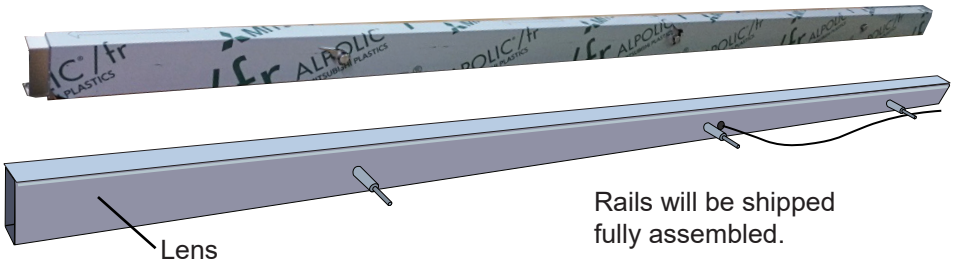


TOP RAIL END VIEW



BOTTOM RAIL END VIEW

96” Rail Assembly - DWG. 10



Keep in mind that there are two different ends to each rail – a male (below left photos) and a female (below right photos). Rails are to be installed male to female, matching up with the end cap and corner rails.

When installing the 96” rails, match each full rail with a full 96” ACM panel. There should never be a partial rail section on a full ACM panel.

Remove the 5/16-18 washer and nut, and slide the studs through the appropriate holes on the ACM. For the top rail, the red LED strip will be on the top of the rail (male on left to female on right). For the bottom rail, the red LED strip will be at the bottom of the rail (female on left to male on right). Secure the strain relief bushing in the ACM panel, and then secure the rail with the washer and nut.

Cutting 96” Rail Assembly

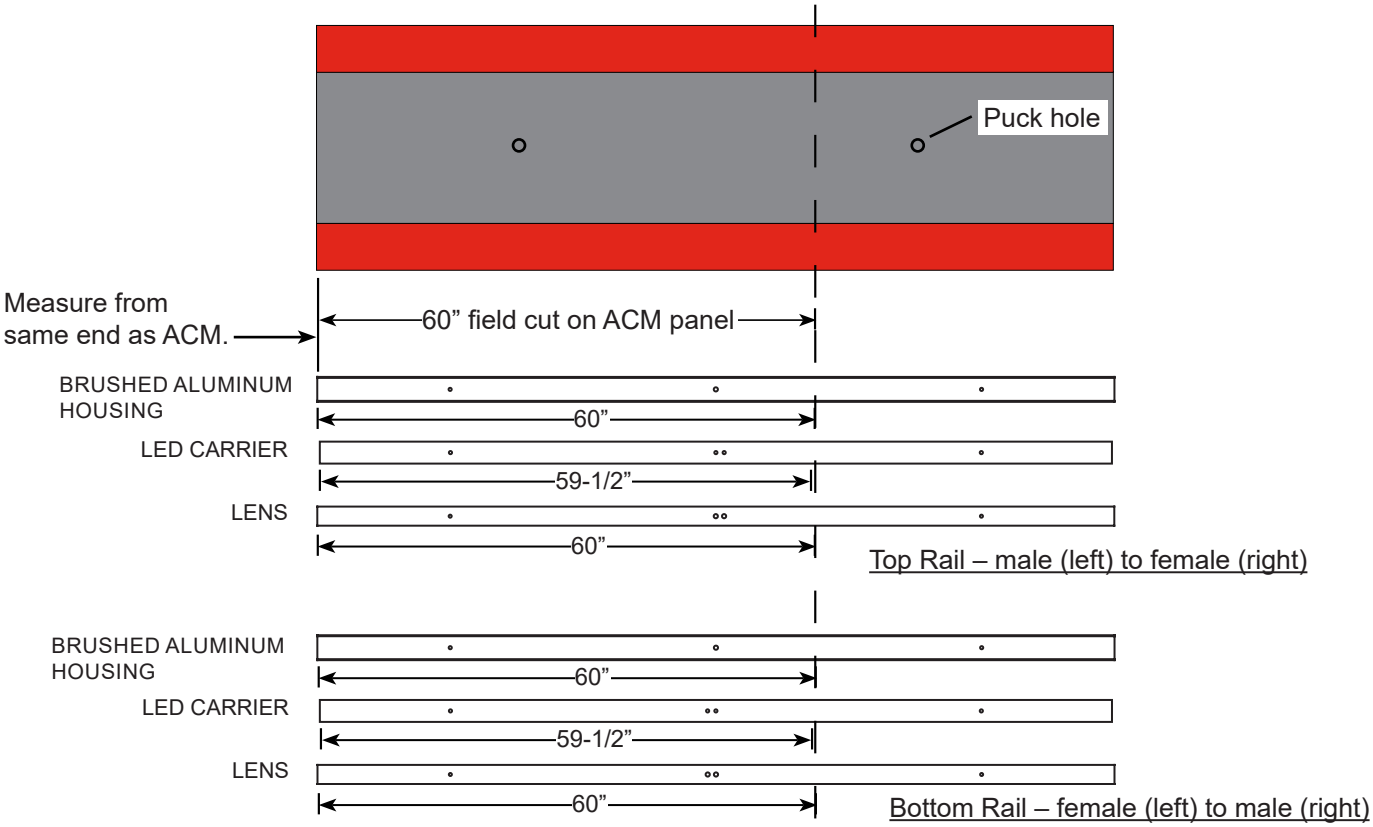
Disassemble the rail. Each piece of the rail system (Brushed Aluminum Housing, LED carrier and polycarbonate lens) will need to be cut individually. Do not cut through assembled rail with one saw cut; that could cut through an LED module or cause other problems.

Remove aluminum splice strip from end of assembly. The top and bottom rails will be cut the same way.

Note: Any cutting of ACM panel will mean that the (top and bottom) light rails installed later must be cut at the same end and by the same length as the panel.

Remove aluminum splice from end for cutting parts, and replace after cut parts are re-assembled.

Measure rail pieces from same end as ACM panel (uncut end of ACM panel) by same distance as ACM was cut (measure 1/2” shorter on LED carrier). A field cut to fit a 60” gap between rails example is shown below.

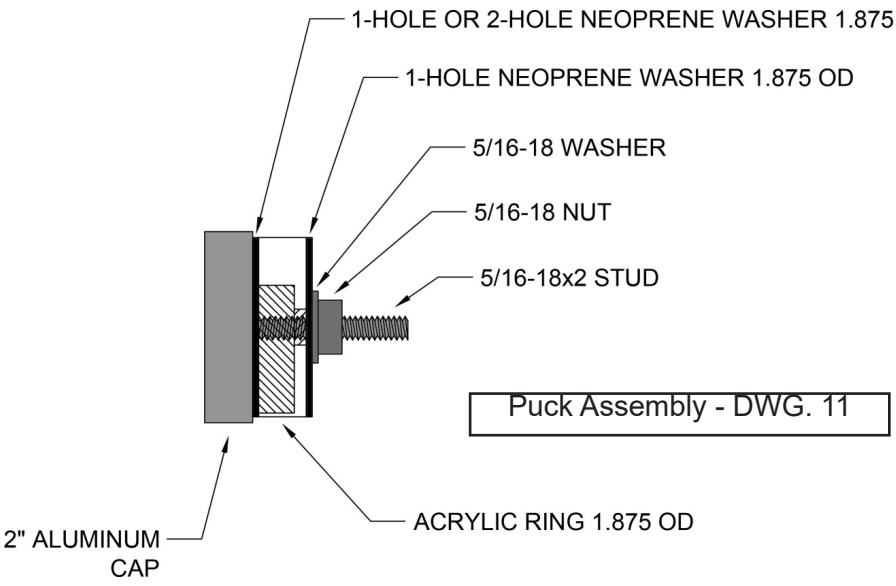


Cut each piece to the measured dimension. For the ACM, be sure to flatten and secure the section that is to be cut. When cutting LED carrier, **DO NOT cut an LED module**. If an LED module is cut, then cut wires to damaged module and put a dab of silicone on wires from last good module as electrical insulation and to seal out moisture.

Replace aluminum splice on same end it was removed from on top and bottom rails.

Reassemble the rails and install on the ACM panels the same way as installing the full length rails.

Non-Illuminated Puck Assembly



1. Remove the 5/16-18 hex nut and 5/16-18 washer from the puck assembly.

2. Slide the 2” stud into the notched hole in the ACM and then secure with the washer and nut.

Hardware

Name	Image	Application	Location
5/16-18 Hex Nut		Attach puck to dual coat ACM	Backside of dual coat ACM on 4” stud
5/16-18 Washer		Attach puck to dual coat ACM	Backside of dual coat ACM on 4” stud

Non-Standard Canopy Installation

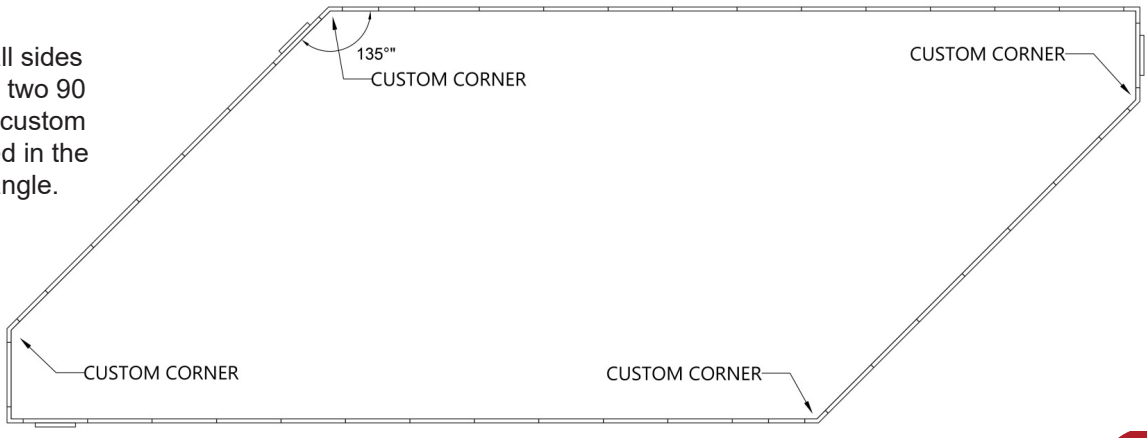
If the canopy corners are not all 90 degrees (partial or fully illuminated), custom corners will be shipped – it is possible to receive both standard and custom corners for one site.

The custom corners will be shipped routed but without the center V-notch. This notch will need to be made in the field to fit the angle of the corner it is being installed onto.

The rails will be the same – no center V-notch.

If the non-standard canopy also requires end caps, these will be installed as instructed above. The non-illuminated dual coat ACM with silver stripe that butts against it will need to be cut in the field to fit that angle against the end cap, if necessary.

In the example at right, all sides are illuminated, requiring two 90 degree corners and four custom corners that were notched in the field to fit a 135 degree angle.



Electrical Wiring of Rails to Power Supplies

Power Supplies
60W power supplies in one box - 100-277VAC/12VDC, 1.1A-0.45A
2X60W power supplies in one box - 100-277VAC/12VDC, 2.2A-0.9A

Illuminated Rails
3mm ACM rail with .093 polycarbonate lens
1½" stand-off
Red and white LED modules
6300k white/ 625 Nm red
3.75W/ft of rail (7.5 W/ft of ACM panel)

Circuits
20A circuit x 80% = 16A

33" logo
.093 white polycarbonate face
Painted red and black as required
23 LED Sloan VL plus white long
.36W 40 LM each
Total 8.28W/ 920 lm
60W power supply 1.0A
120VAC/12VDC
7.8 sq ft cr area

60" logo
.093 white polycarbonate face
Painted red and black as required
74 LED Sloan VL plus white long
.36W 40 LM each
Total 26.64W/ 2960 lm
60W power supply 1.0A
120VAC/12VDC
25 sq ft cr area

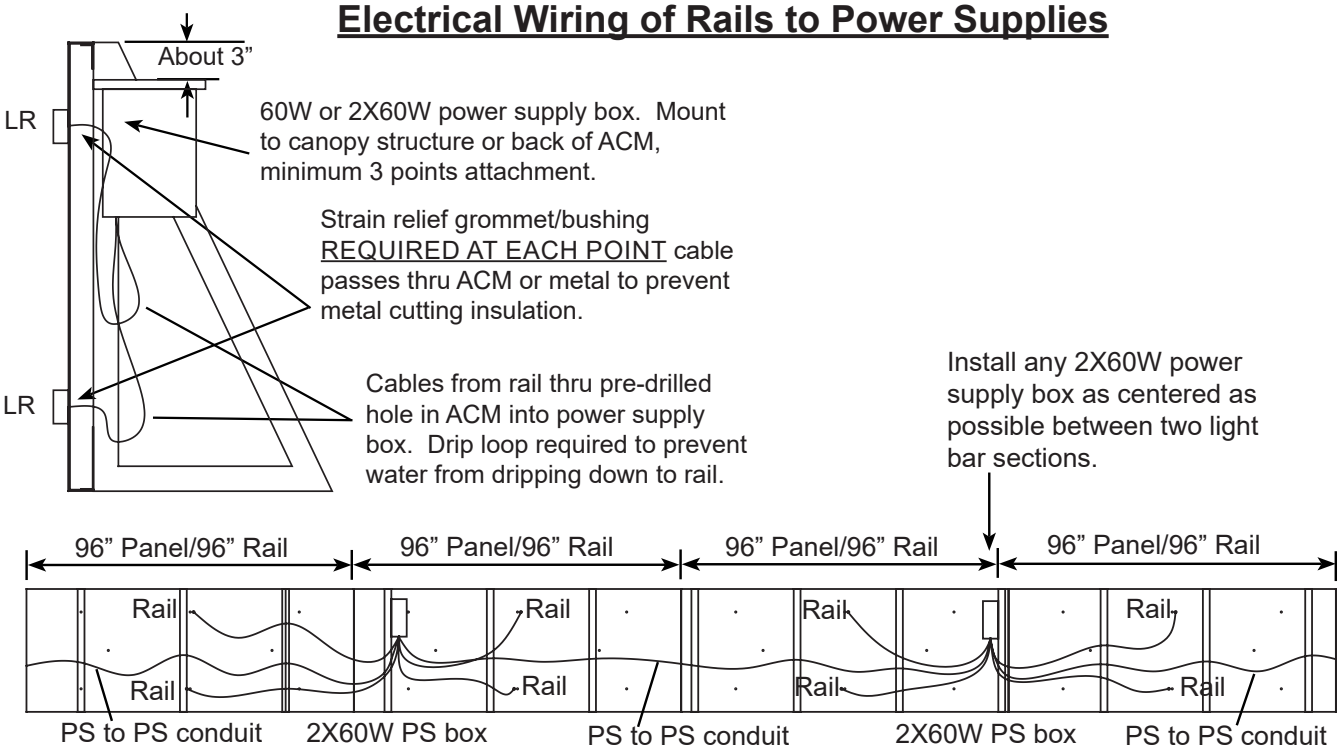
45" logo
.093 white polycarbonate face
Painted red and black as required
36 LED Sloan VL plus white long
.36W 40 LM each
Total 12.96W/ 1440 lm
60W power supply 1.0A
120VAC/12VDC
14.3 sq ft cr area

For the rail assembly, there are two different ways to receive 60W power supplies:
-2X60W (two 60W power supplies in a box); can run 32ft of rails (on two 8ft ACM panels)
-60W (one 60W power supply in a box); can run 16ft of rails (on one 8ft ACM panel), or 8ft of rails (on one 4ft ACM panel) with one pair of rails on one corner, or 12ft of rails (on one 6ft ACM panel) with one pair of rails on one end cap.

The rail assemblies for 96" panels, end caps and corners all come with two wires at the end of each cable to connect inside the power supply box.

For a standard 96" illuminated panel, the two cables (from the top and bottom rails) OF THE SAME PANEL go into one power supply box. Do not wire the top and bottom Rails on one panel to different power supply boxes.

Electrical Wiring of Rails to Power Supplies



One pair of Rails on one ACM panel requires one 60W power supply. Two pairs of Rails for two panels require one 2X60W power supply. Cut sections/corners can be combined onto one 60W power supply, but must not exceed 60W.

Get as close as possible to maximizing the power supply potential for optimum efficiency; running 80” of rail on a 60W power supply will be better than running 20” of rail on a 60W power supply. DO NOT EXCEED THE MAXIMUM WATTS!

Circuit Specifications:
The power supply is multi-volt – 100-277 VAC.
120VAC, 20A circuit = 16A (80%) = (14) 60W pwr supplies or (7) 2X60W pwr supplies (15.4A) at 1.1A each
240VAC, 30A circuit = 24A (80%) = (43) 60W pwr supplies or (21) 2X60W pwr supplies (23.4A) at .55A each
NOTE The above number of power supplies are applicable ONLY to a circuit with nothing else on it – please recalculate for any additional elements connected to the circuit (i.e. logos).

Acceptable conduit – rigid (EMT) and flexible weatherproof (Sealtite); do not use romex.
In some areas, a cable rated for exterior exposure can be used – check local codes for further information.

(9) 2X60W power supplies at 16 ft apart = 144 ft. If greater than 144 ft run, wire heavier than 14 gauge is needed. If 10 ft cable from light rail is not enough, spliced cable must accommodate voltage drop and be weatherproof with weatherproof wire nuts.

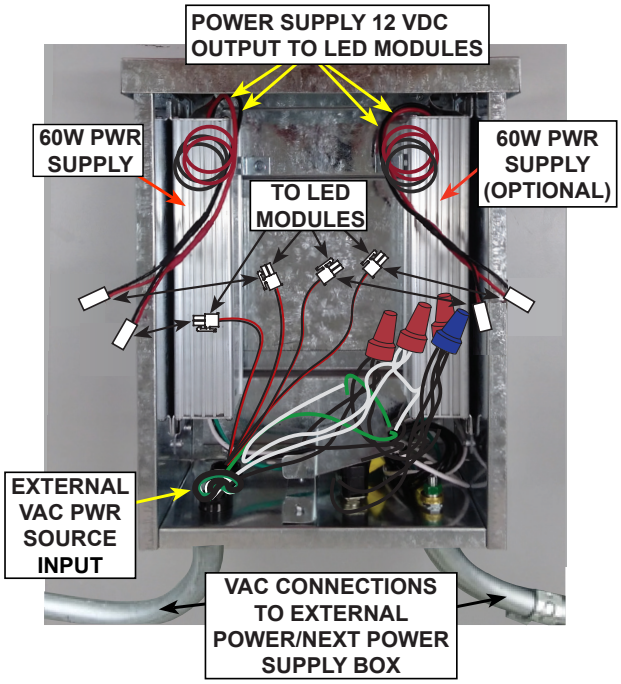
Rails and canopy logos should not be placed on the same circuits as deck lighting – LED Rails are classified as UL48 Outline Lighting for Signage, and per UL classifications signs should be on a separate circuit from lighting.

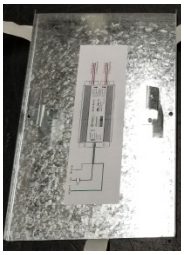
Logos can be connected into the same circuit as the LED Rails, if this does not exceed allowed amps.

Follow the National Electrical Code and all state and local codes.

Wiring and Power Supply Box Installation

-Power supply boxes need to be installed upright and above the roof deck (to avoid water), and MUST have at least three connection points to the structure.
-Licensed electrician must connect all wiring. Use wire nuts to connect all twisted ends of wires. Follow the National Electrical Code and all state and local codes.
-There MUST be a drip loop in the wire between the LED modules and the power supply box.
-Bushing(s) MUST be installed at every point a wire runs through metal (e.g., flashing). This is required by UL. If the wire runs through multiple layers, a pass through non-metallic pipe (i.e., PVC) can be used.
-All wire connections must be made INSIDE the power supply box.
-**TO PREVENT CORROSION/SHORTING, WIRES AND CONNECTORS MUST BE FREE OF WATER BEFORE MAKING CONNECTIONS. DRY WITH HOT AIR BEFORE CONNECTING IF NECESSARY.**
-Tie strain relief knot in VAC wires and cables to LEDs inside box to prevent them from pulling out of box.
-Connect VAC line wire (black) to switch inside box and VAC neutral wire (white) to AC input on each power supply.
-Ground wires (green) connect to ground screw in junction box.
-External (source) VAC wires: black is line, white is neutral, green is ground.
-Secure the cover to the power supply box once all wiring is completed – DO NOT LEAVE THE COVER OFF!
-Test and make sure all switches are on for each box once connected to circuits. Any switch left in the off position will prevent the LED modules from lighting.
-LED rails and signs should not be placed on the same circuits as building lighting – LED rail is classified as UL48 Outline Lighting for Signage, and per UL classifications, outline lighting and signs should be on a separate circuit from lighting.
-Signs can be connected into the same circuit as LED rails if they do not exceed the allowed amperage.
-Be sure that the roof deck is clean of all wiring – secure any excess wire in a neat roll/bundle so it does not hang/lay on the roof deck. Wires coming from LED rails/power supply boxes must be fastened to wall or solid structure using fasteners/cable ties and not be hanging loose.





POWER SUPPLY BOX COVER (SHOWN SMALL)

Appendix

2/4/2016 - Created.
3/10/2021 - Converted to In-Design, added information and images on routing/cutting/bending ACM, reordered some sections for better organization.
3/15/22021 - Added electrical information for mounting power supplies to canopy structure and wiring to LED Rails, added electrical and wiring information on Rails. Updated part numbers on Parts page at beginning of guide for LED rail (changed 568556 to 632777), non-illumated puck (changed 604190A to 604190), added PN 643272 AL SPLICE, changed PN 239732 (#10x3/4 Tek screw) to 239847 (#8x3/4 Tek screw) to match hardware kit PN 604283 BOM.
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 gap requirement between panels to allow for temperature change and no stitching panels together. Added statement in electrical instructions that wires/connectors must be free of water before joining.
5/31/2023 - Added aluminum splice PN 643272 to light rail on pp 17-18. Compressed text and images to reduce length of document.