NEW 24V SYSTEM - PLEASE READ PRIOR TO INSTALLING.

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

This product is designed to fit a Phillips 66 48” 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

Important Notes

- Verify canopy dimensions before starting installation.
- Refer to any site specific layout or rendering.
- Use #12 x 7/8” hex washer hd Tek screws to attach mounting angles to canopy with recommended 12” spacing. Use K-lathe screws to attach ACM panels with recommended 12” spacing. Conditions outside of the norm, including excessive wind/snow load may necessitate special structure and fastening requirements.
- A gap is needed between panels to allow for thermal expansion (varies with temperature).

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

Hardware Kit (included in each PN for 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
10	771520	#12X1 Sheeting Screw Hex Washer Head	Zinc Plated W/ Washer

96” Dual Coat ACM Fascia – KIT PN842010

QTY.	PART #/DWG #	DESCRIPTION	FINISH
1	604163/ 6110868	48x96” 3mm Dual Coat ACM Panel (per panel – 20 panels per crate)	FEF Red/ MFS Gray
2	845521/ 6702426	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

Corner Assembly - KIT PN 842012

QTY.	PART #/DWG#	DESCRIPTION	FINISH
1	604236/ 6110874	48x21.5x21.5” 3mm Dual Coat Corner (per panel – crated with 96” panels)	FEF Red/ MFS Gray
2	855865/ 6702434	Corner Rail Assembly	Brushed Aluminum

End Cap Assembly – KIT PN 842014

QTY.	PART #/DWG #	DESCRIPTION	FINISH
1	604235/ 6110876	48x22” 3mm Dual Coat End Cap Panel (per panel – crated with 96” panels)	FEF Red/ MFS Gray
1	855742/ 6702445	End Cap Rail Assembly – Female (per panel)	Brushed Aluminum
1	855743/ 6702444	End Cap Rail Assembly – Male (per panel)	Brushed Aluminum

Non-Illuminated Dual Coat ACM – PN 604214

QTY.	PART #/DWG #	DESCRIPTION	FINISH
1	604214/6110872	48x96” 3mm Dual Coat ACM Panel w/ Silver Stripe (per panel – 10 per crate)	FEF Red/ MFS Gray/ Silver

PWR SUPPLY LED 96W 100-277V, PN 807452 (POWERS (4) 96” BRIDGE RAILS)

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 48" canopy, angles will be placed 47-3/4" to 47-5/8" apart (very top to very bottom of angles).

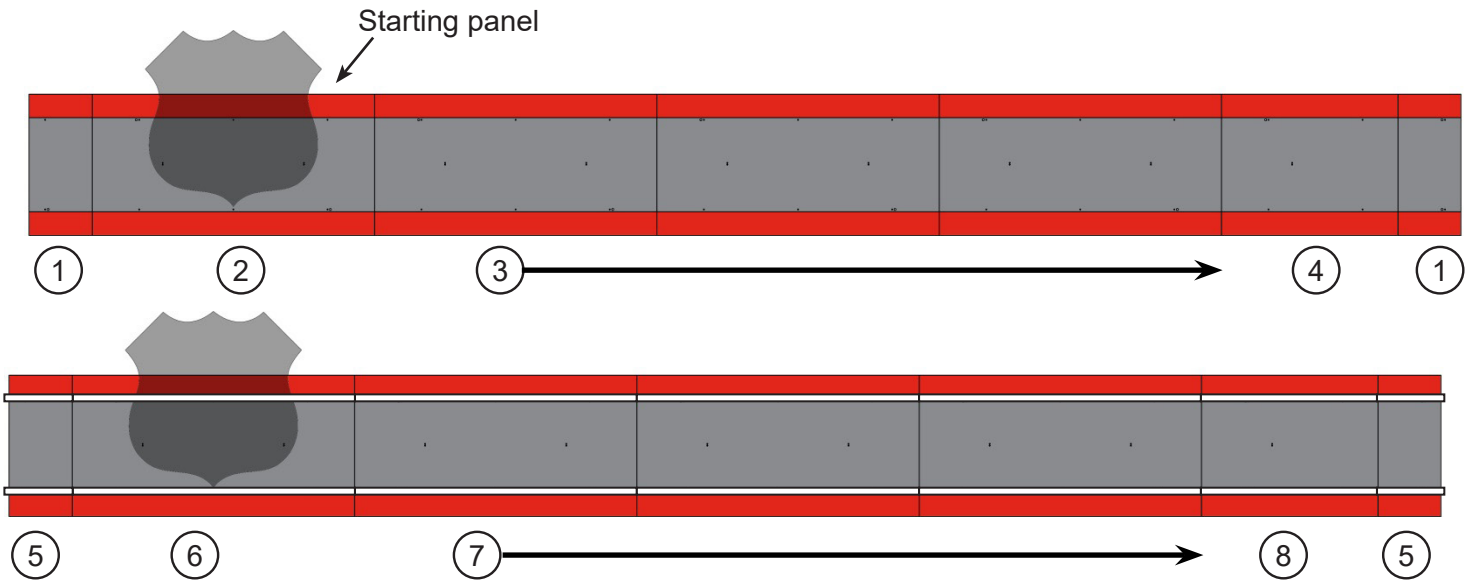
Suggested hardware for installation is a #12x7/8 Tek screw – this can vary depending on the canopy structure. Because of this, installers are to provide all necessary hardware for attaching angles to structure.

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.

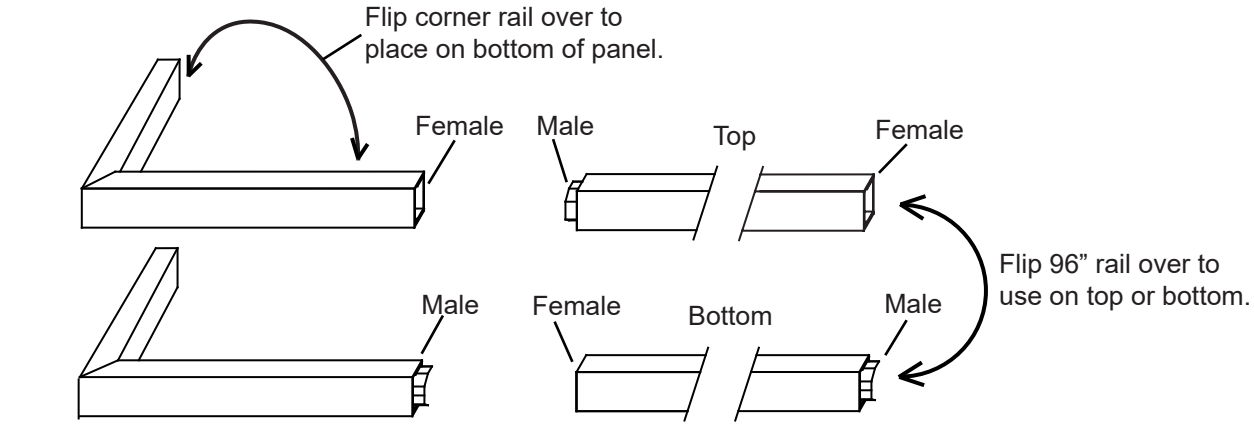
All ACM is to be installed first, then the rails and pucks.

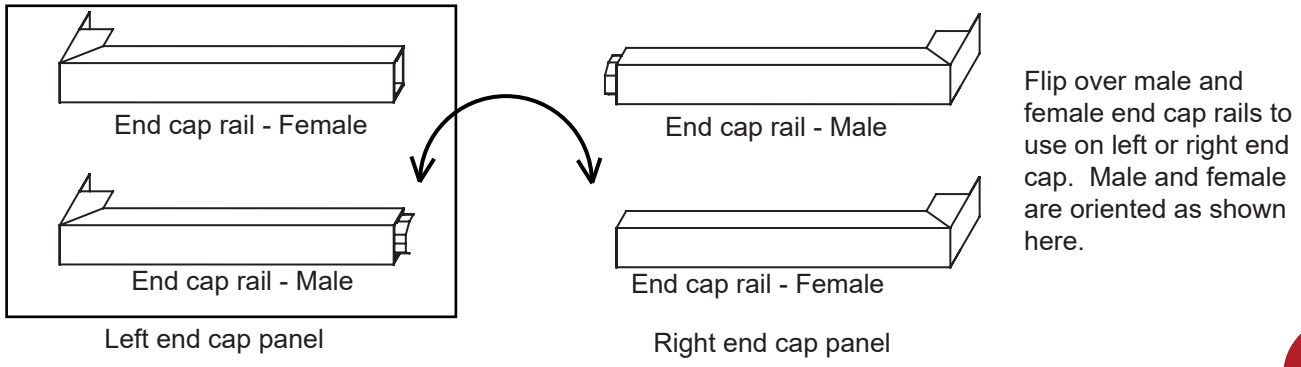
Order of Installation Overview



1. Install corner/end cap panels at each end of canopy first.
2. Install first 96” panel where logo will be placed later.
3. Install 96” panels.
4. Cut last panel to fit (minimum 30” cut panel allowed).
5. Install bridge rails on corner/end cap at each end of canopy first.
6. Install bridge rails on 96” where logo will be placed later.
7. Install bridge rails on 96” panels.
8. Cut last bridge rails to fit on cut panel.

Note: If replacing existing rails with new rails, follow the same instructions above. Do not connect 24V bridge rails to 60W power supplies.



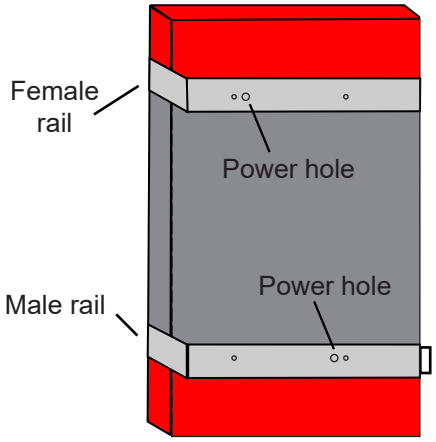


Flip over male and female end cap rails to use on left or right end cap. Male and female are oriented as shown here.

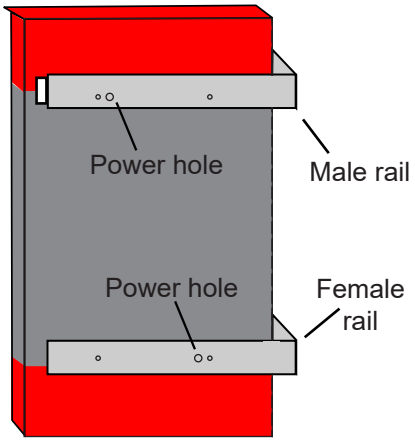
Order of Installation Overview

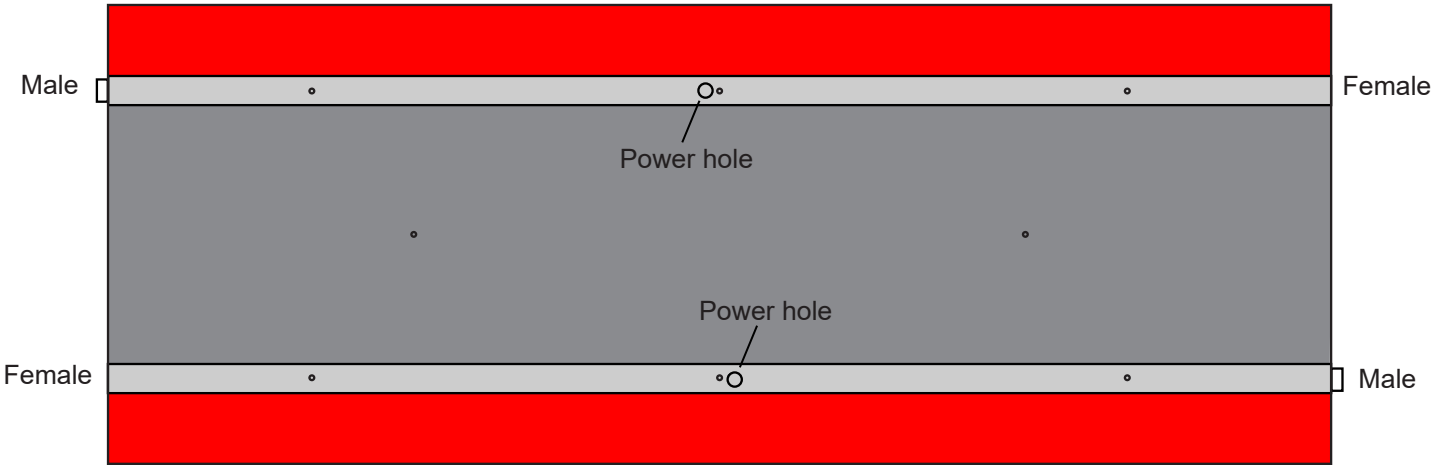
Flip end cap panel over 180 deg to use on left or right end of canopy.

End cap panel with male and female rails on left end of canopy.

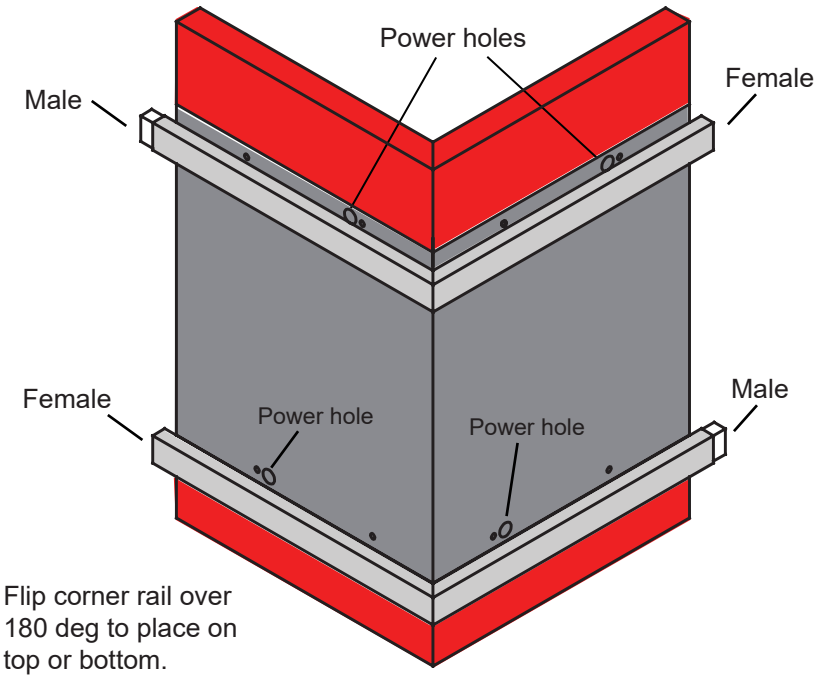


End cap panel with male and female rails on right end of canopy.

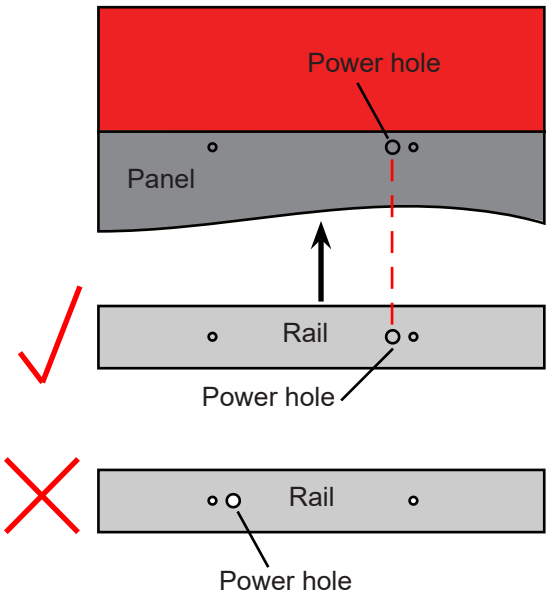




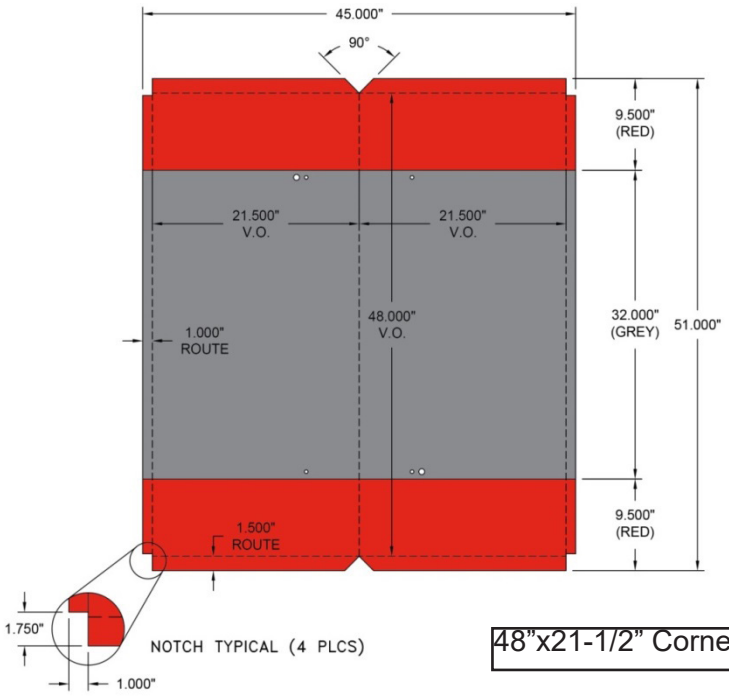
Flip 96” rail over 180 deg to place on top or bottom.



Flip corner rail over 180 deg to place on top or bottom.



Dual Coat Corner and End Cap ACM Panels

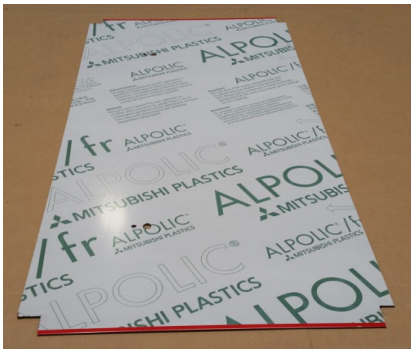


Front

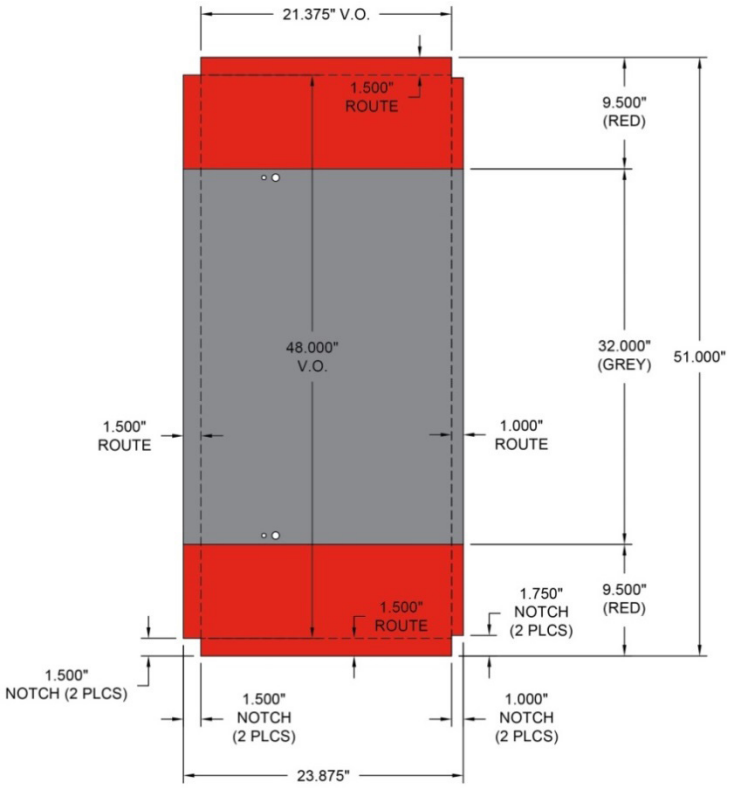
Back

48”x21-1/2” Corner - DWG. 1

Front



Back

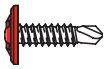


48”x21-3/8” End Cap - DWG. 2

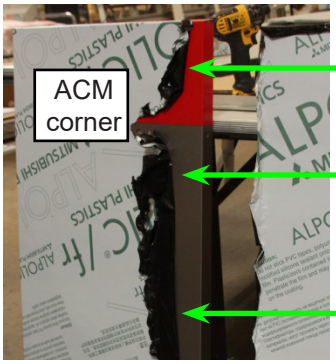
Installing Corner and End Cap Panels

INSTALL CORNER PANEL AND END CAP PANELS FIRST

PN 771520, #12X1 sheeting screw in top return (provides more strength in high wind)



Red #8 x 3/4" K-lathe screw in bottom return



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. It may be better to use a square or another panel as a vertical guide.

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:

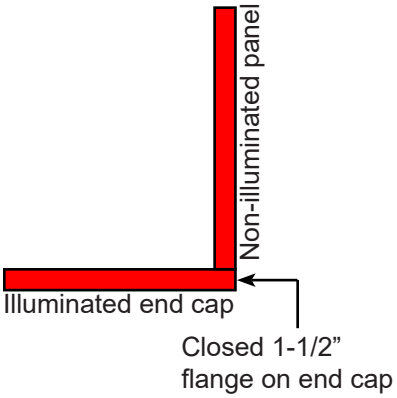
- Place the 1-1/2"x48" flange towards the edge of the canopy.
- Offset 1-1/2" beyond the edge of the canopy
- Use #12X1 steel zinc plated sheeting screws with washer (PN 771520) to fasten the top return of ACM panels and red K-lathe screws to attach ACM panels on bottom return, both with recommended 12" spacing. – the first screw is inset about 1" from the edge of panel.
- Follow the layout/guide provided to the installer.

On non-illuminated side of canopy, non-illuminated panels (dual coat ACM with silver stripe) will butt up against edge of end cap panels, with the end cap covering the edge of the non-illuminated panel.

Install corner panels to angles using #12X1 steel zinc plated sheeting screws on top return and red K-lathe screws on bottom return.

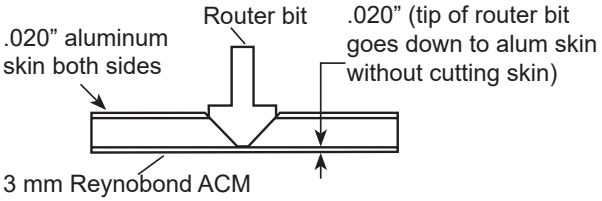
For a fully illuminated canopy (all four-plus sides, all corners 90 degrees), corner panels are required.
Install the corner panels to the angles using #12X1 steel zinc plated sheeting screws in top return and red K-lathe screws in bottom return, both with recommended 12" spacing.

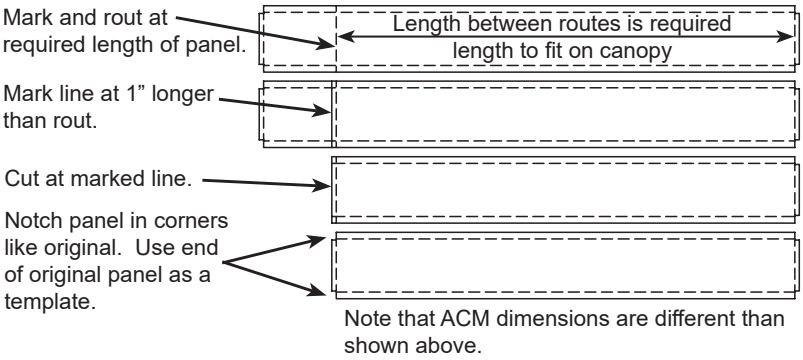
Exceptions
If the canopy corners are not all 90 degrees (partial or fully illuminated), custom corners will be shipped – it is possible to receive both standard and custom corners for one site. Please see page for instruction on non-standard canopies.

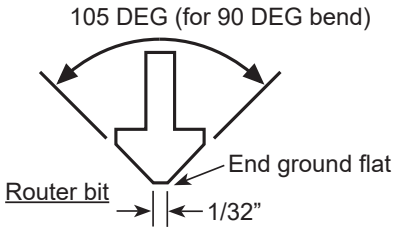


Routing and Cutting ACM Panels

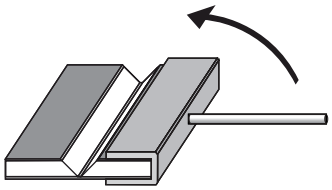
- Measure the length between the last panel placed on the canopy and the corner for the length required.
- Take a 96” panel and measure from the existing end rout to provide the length required to fit on the canopy (remember to reduce length if required to provide gap to allow for temperature expansion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

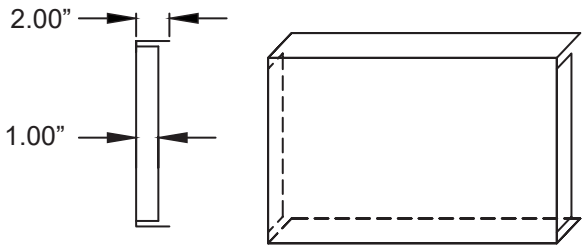






Bending ACM Panels





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

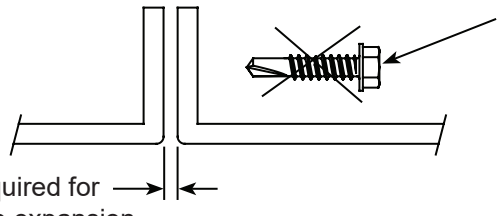
When working in temperatures below 60 deg F, the ACM could be kept and bent inside a truck, car wash or other enclosed space that is at a higher temperature. Panels should be kept separated by 1/2” space to allow warm air to circulate around each panel. Panels must not be re-bent in the cold to avoid vinyl cracking.

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.

At 80 deg F or higher, a 1/16” gap should be used between full length panels. Installation at lower temperature requires a greater gap to allow the panels to expand (for example, installation at 40 deg F requires a 1/8” gap). The thermal coefficient of expansion of 1.31 x 10-5 in/in-degree F can be used to calculate required gap for a larger temperature change.

(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.

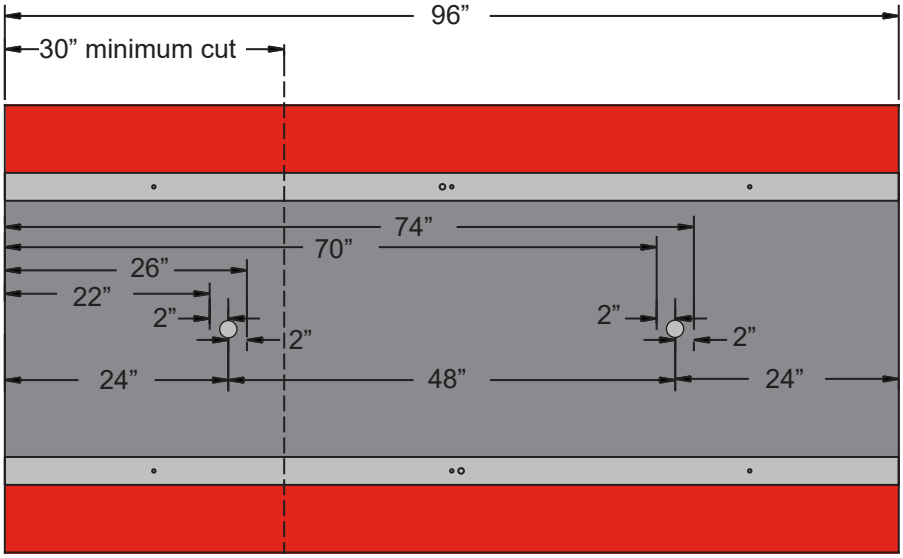
Routing and Cutting ACM Panels

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”):

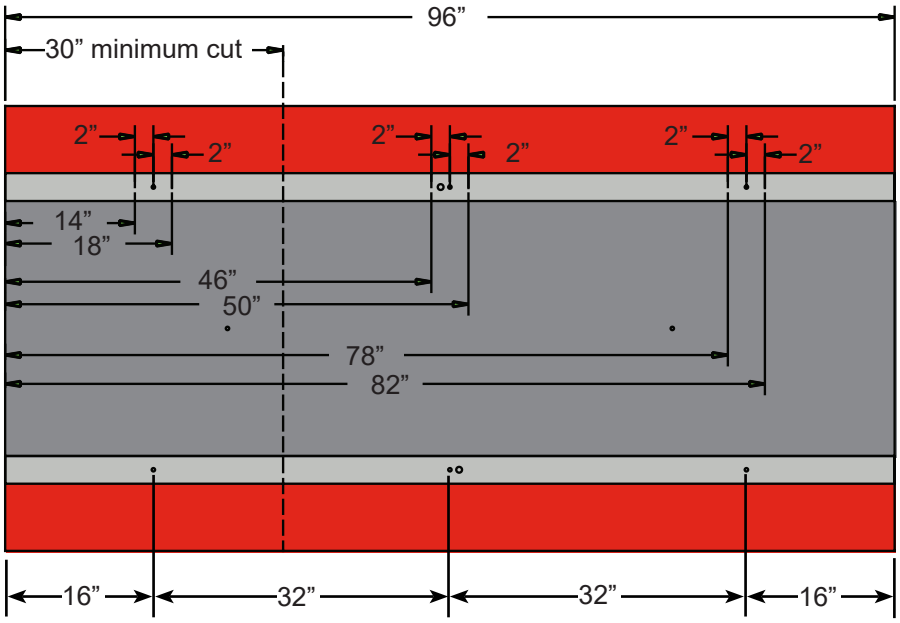
- 14” to 18”
- 22” to 26”
- 46” to 50”
- 70” to 74”
- 78” to 82”

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

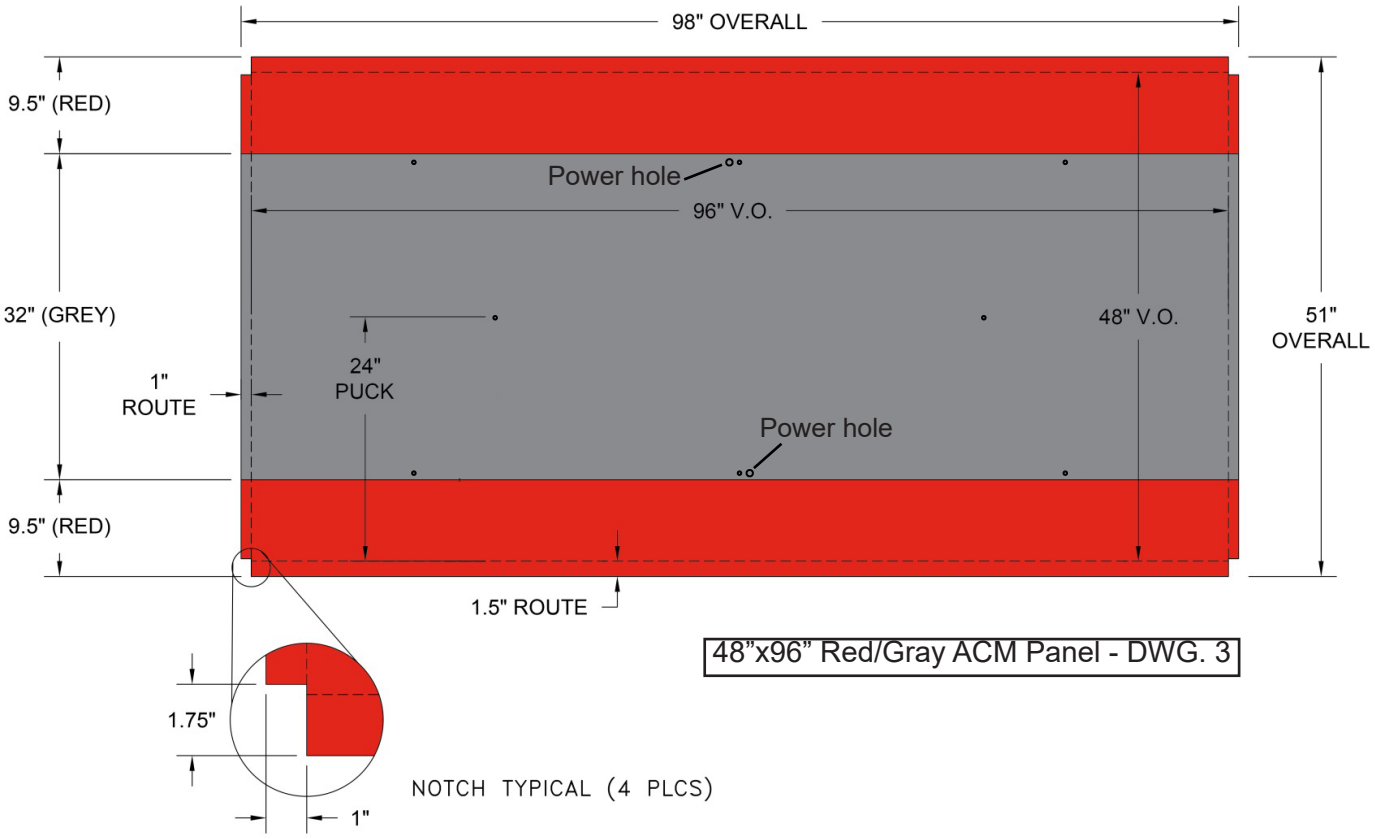


CUTS FOR RAIL PUCKS - DWG. 5



- 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.

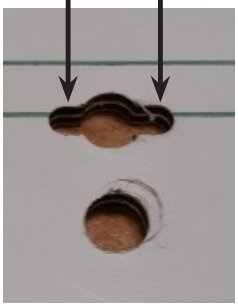
96” Dual Coat ACM Panels



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.

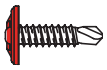
Front

Back



Installation of 96” ACM Panels

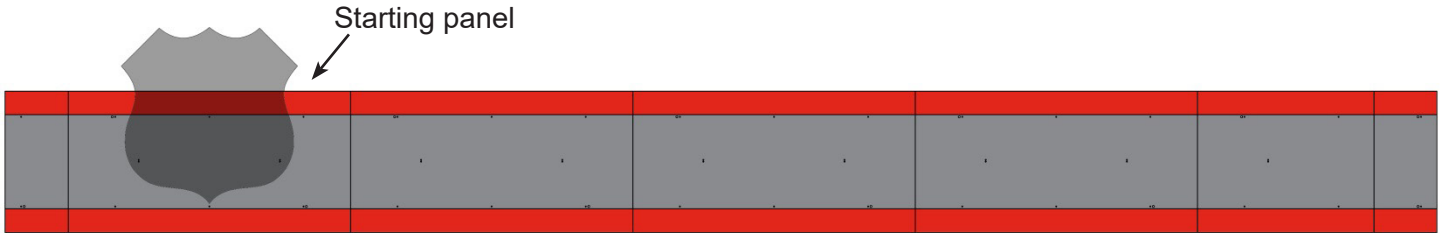
PN 771520, #12X1 sheeting screw in top return (provides more strength in high wind)



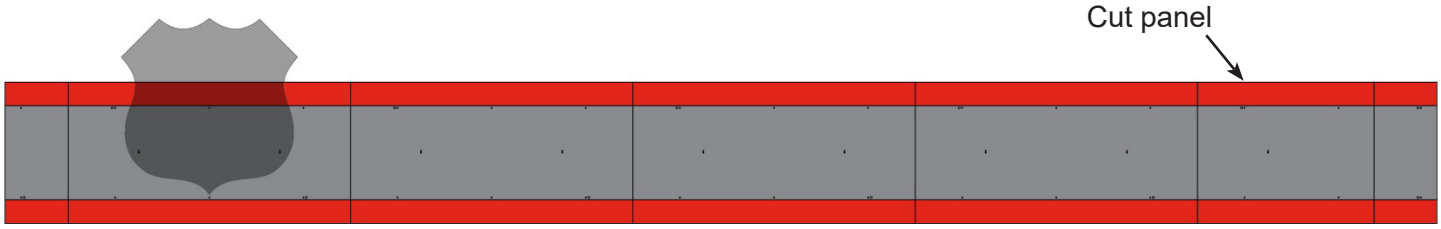
Red #8 x 3/4” K-lathe screw in bottom return

- 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.
- Use #12X1 steel zinc plated sheeting screws with washer (PN 771520) in top return of ACM panels and red K-lathe screws in bottom return to attach ACM panels, both with recommended 12” spacing.
- 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.



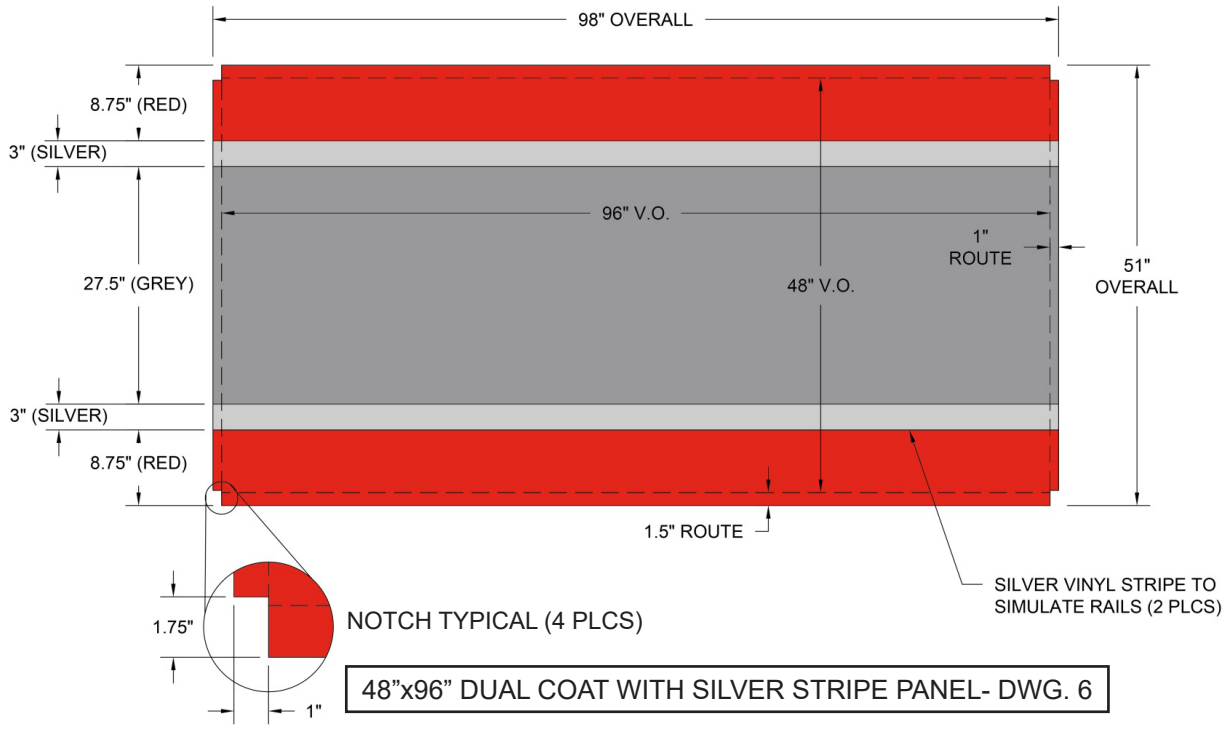
- Continue installing 96” panels until the space to the next corner is LESS THAN 96”.
- Cut and fold a 96” panel.
- Attach the cut panel to angles using #12X1 steel zinc plated sheeting screws in top return and red K-lathe screws in bottom return.



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.

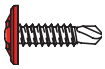
Dual Coat with Silver Stripe (faux) ACM Panel



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

Installation of Dual Coat with Silver Stripe ACM Panels

PN 771520, #12X1 sheeting screw in top return (provide more strength in high wind)



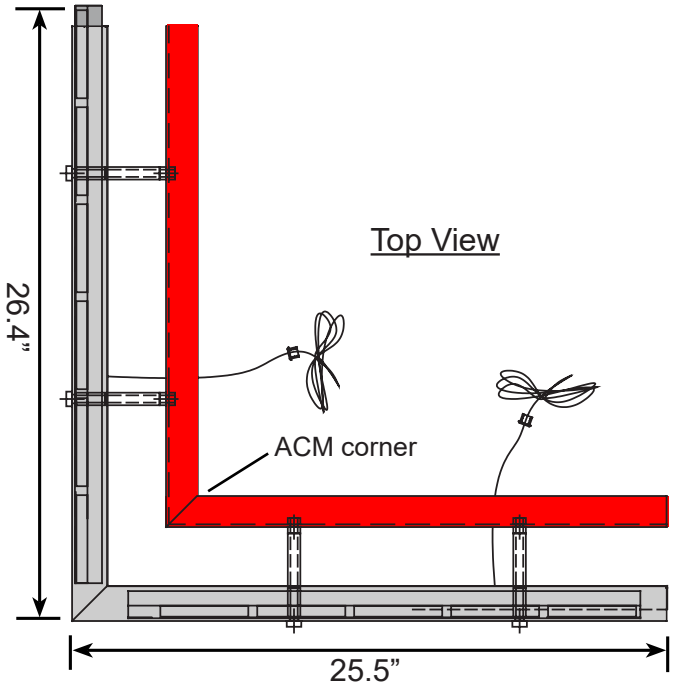
Red K-lathe screw in bottom return

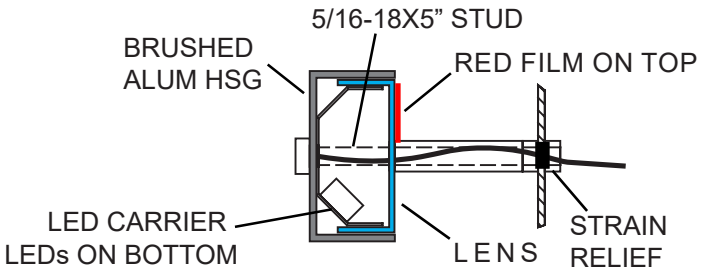
Attach the dual coat with silver stripe (faux) ACM to the angles using the sheeting screws in top return and red K-lathe screws in bottom return, both with recommended 12” spacing.

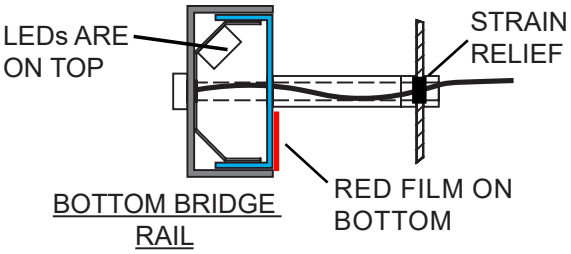
If there is a logo on the dual coat with silver stripe side, begin at the logo end with a full 96” panel after the corner. The logo MUST be placed on a full ACM panel, NOT A SEAM. Placement of this first panel must be done correctly.

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

Installation of Corner Rails

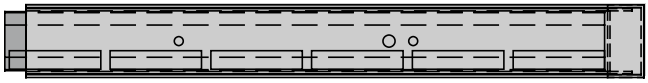




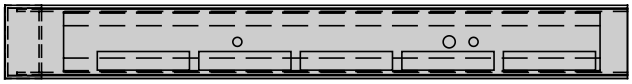


- Remove 5/16-18 washer and nut.
- Slide studs through appropriate holes in ACM and insert cable.
- Slide cable with molex connector through power hole, and secure strain relief bushing in ACM panel.
- Secure the rail to the ACM with the washer and nut.

Rail mounted at top of ACM corner - LEDs on bottom

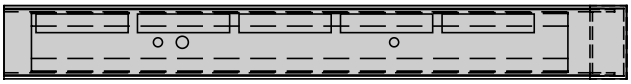


Male - Front View

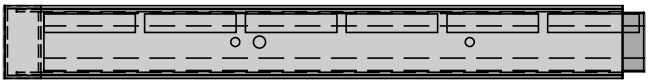


Female - Front View

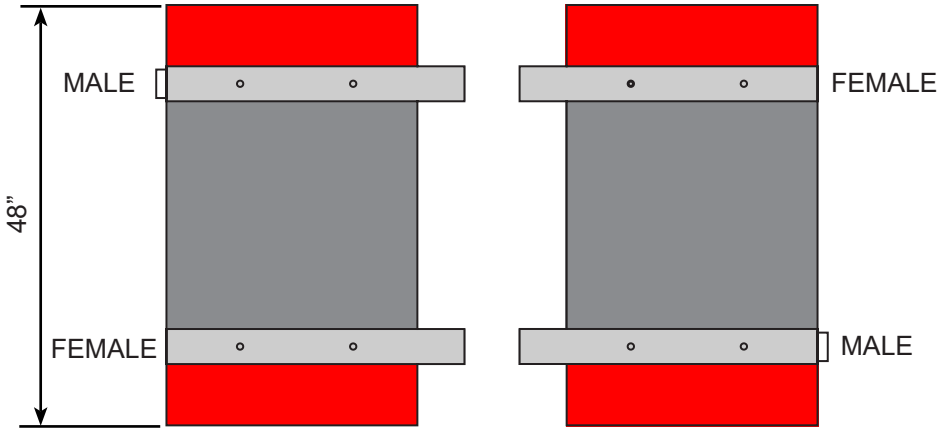
Rail mounted at bottom of ACM corner - LEDs on top



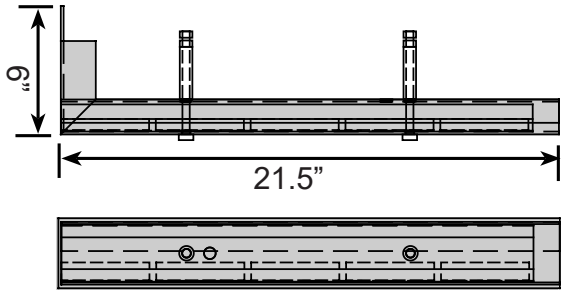
Female - Front View



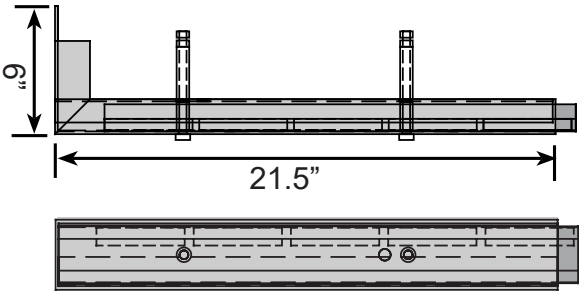
Male - Front View



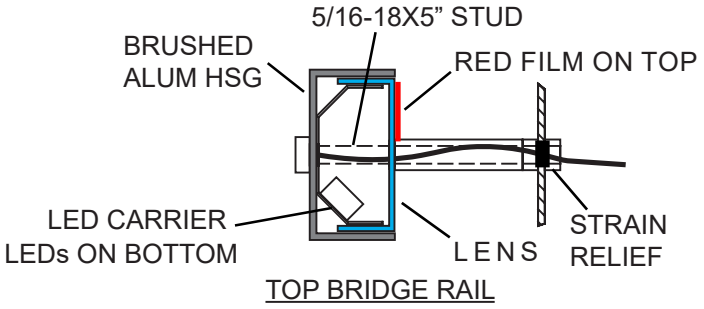
Installation of End Cap Rail Assembly



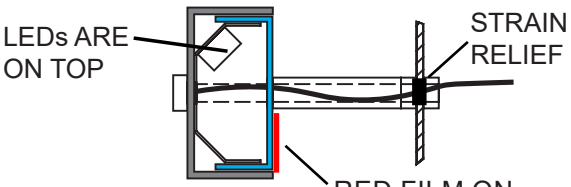
Female - Front View



Male - Front View

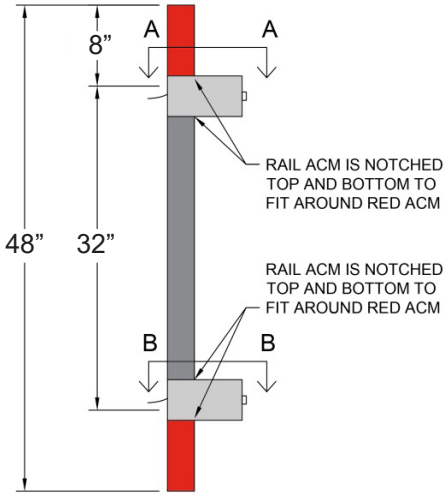


TOP BRIDGE RAIL

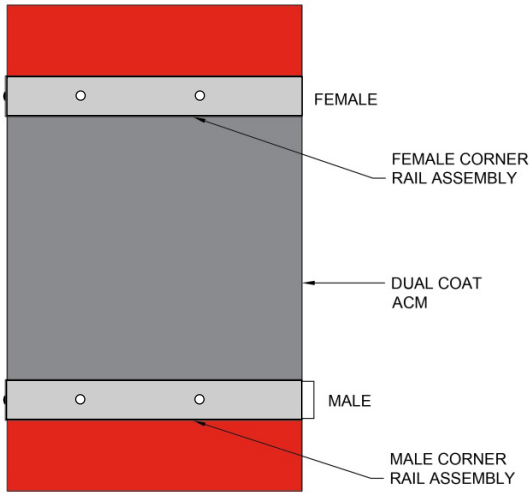


BOTTOM BRIDGE RAIL

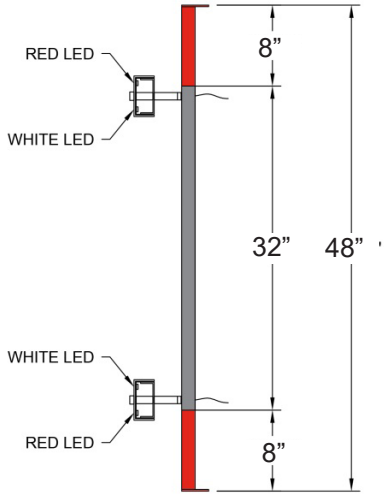
- Remove 5/16-18 washer and nut.
- Slide studs through appropriate holes in ACM and insert cable.
- Slide cable with molex connector through power hole, and secure strain relief bushing in ACM panel.
- Secure the rail to the ACM with the washer and nut, and silver K-lathe for the side.



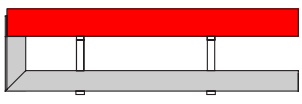
LEFT END VIEW



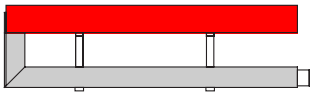
End cap on left end of canopy elevation is shown above.



RIGHT END VIEW

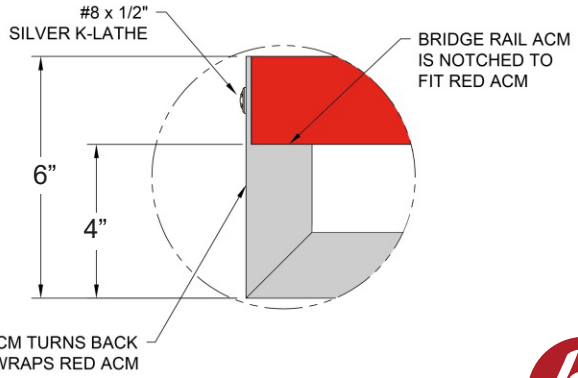


SECTION A-A

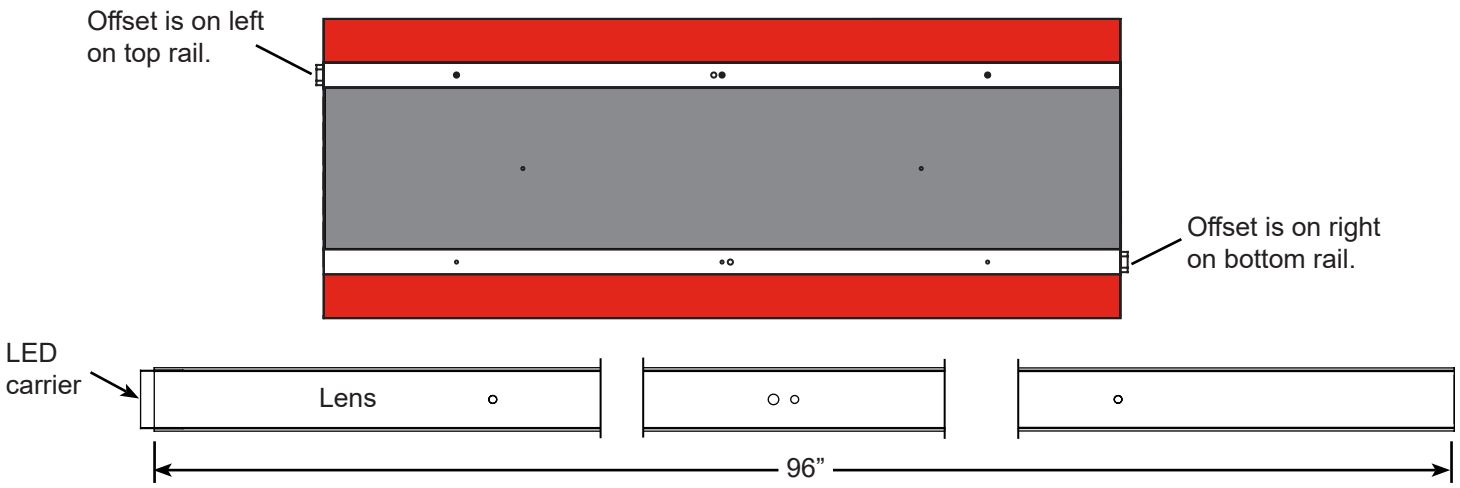


SECTION B-B

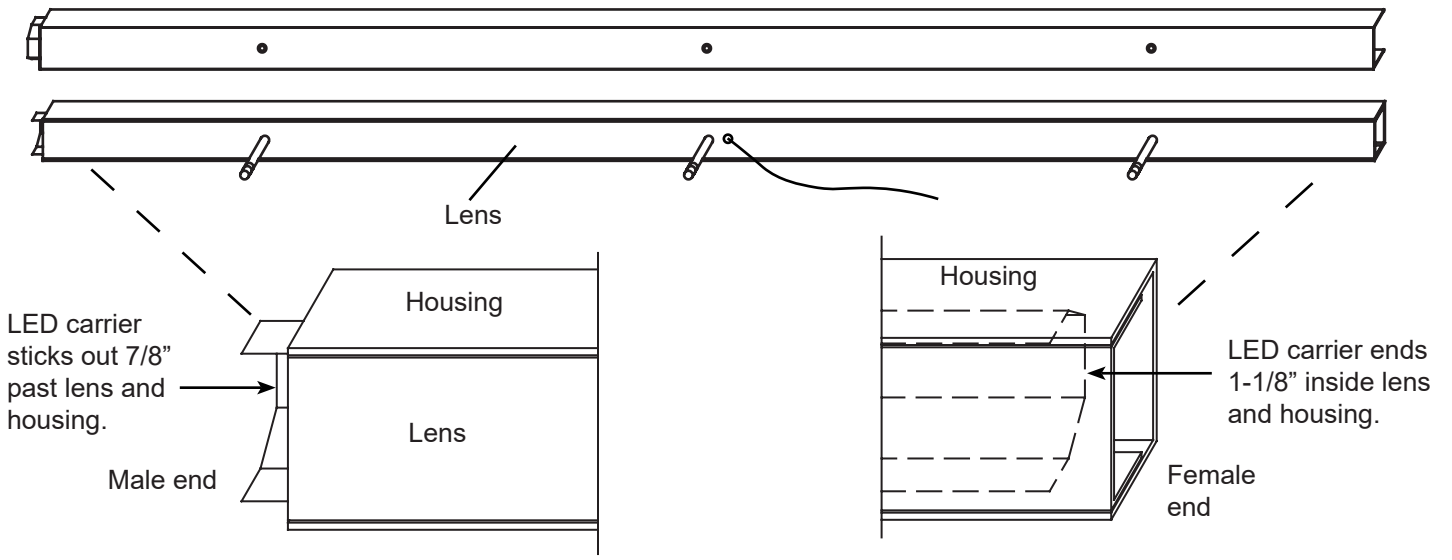
End cap and male/female rails are rotated 90 deg to place at right end of canopy elevation.

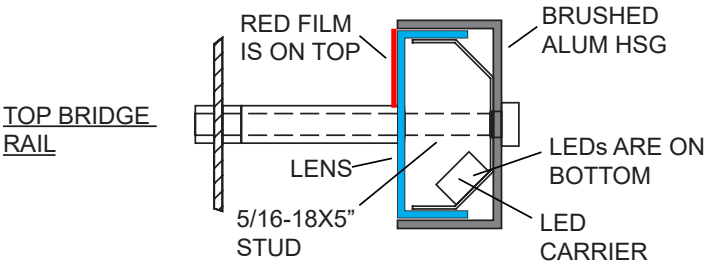


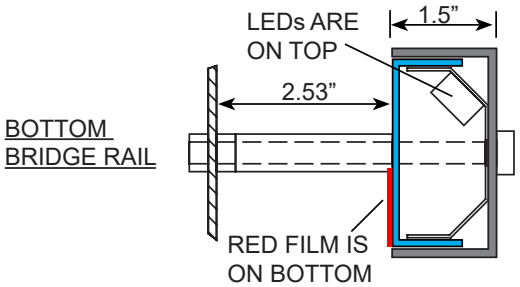
96” Rail Assembly



Rails are shipped fully assembled.







Keep in mind that there are two different ends to each rail – a male and a female. 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. Secure the strain relief bushing in the ACM panel, and then secure the rail with the washer and nut.

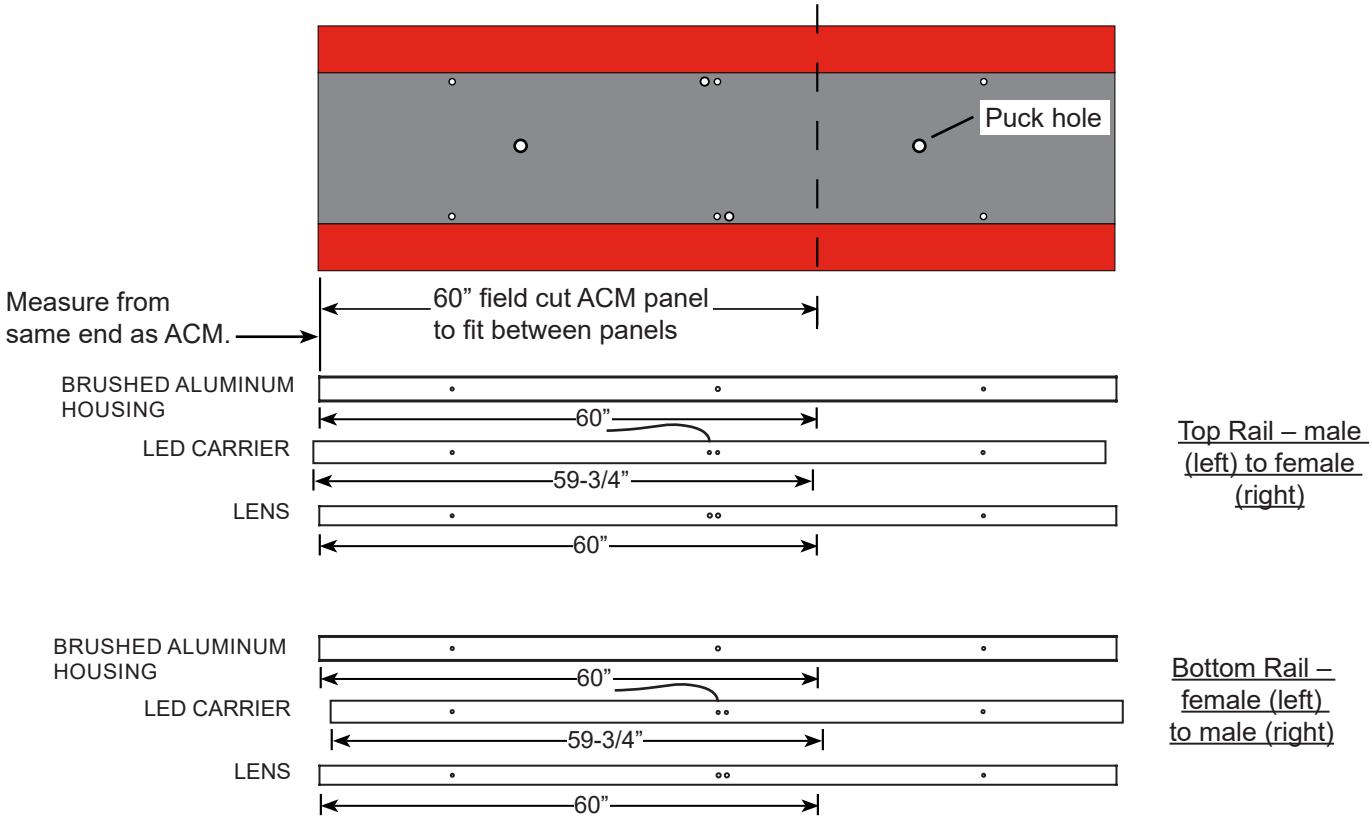
Cutting 96” Rail Assembly

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.

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.

Measure rail pieces from same end as ACM panel and cut by same distance as ACM was cut (measure 1/4” shorter on LED carrier). A field cut to fit a 60” gap between rails example is shown below.

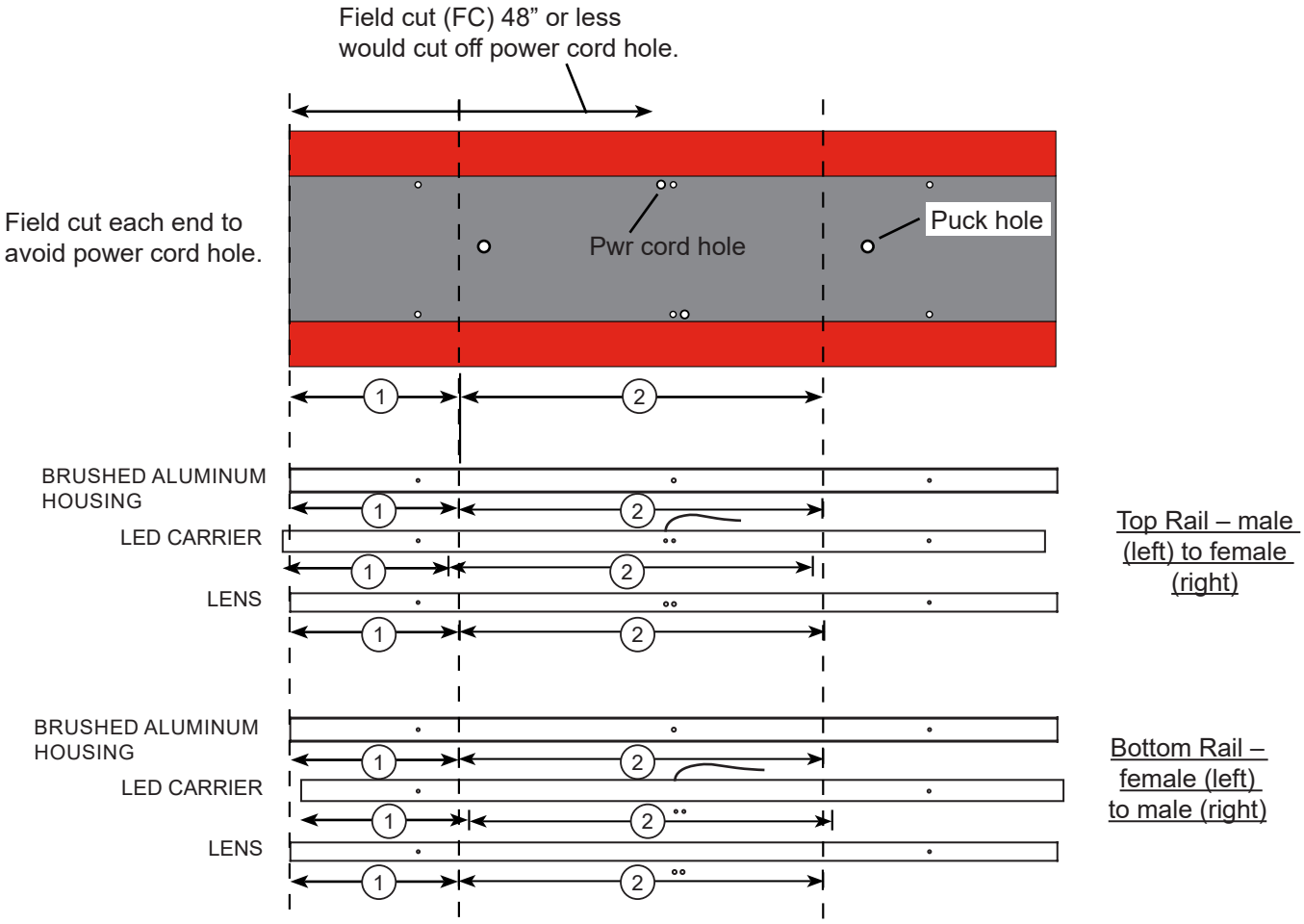


Cut each piece to the measured dimension. For the ACM, be sure to flatten and secure the section that is to be cut. When cutting LED carrier, **DO NOT cut an LED module**. If an LED module is cut, then cut wires to damaged module and put a dab of silicone on wires from last good module as electrical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

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

Cutting 96” Rail Assembly

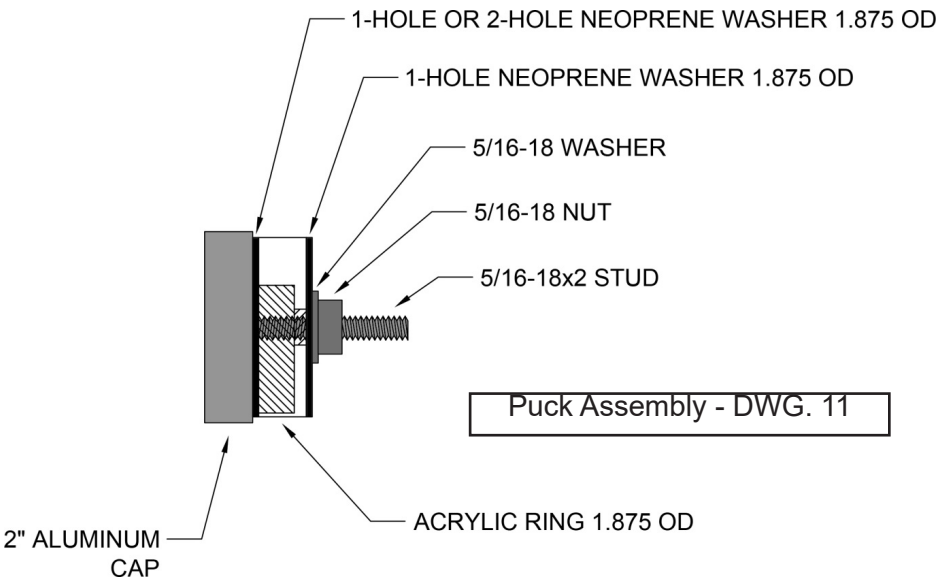
- If the required field cut length of ACM is so short that the power cord hole would be cut off, then both ends of the ACM panel and both ends of the bridge rail assembly should be cut to keep the power cord hole somewhere inside the cuts.



1. Cut ACM panel and bridge rail elements from the same end and by the same amount.
2. Cut the ACM panel and bridge rail elements to the same length as each other to complete the field cut. Note that the LED carrier will be 1/4” shorter than the other bridge rail elements.

A field cut panel is not allowed to be less than 30”. If the required field cut would be less than 30”, then two panels would need to be cut instead.

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

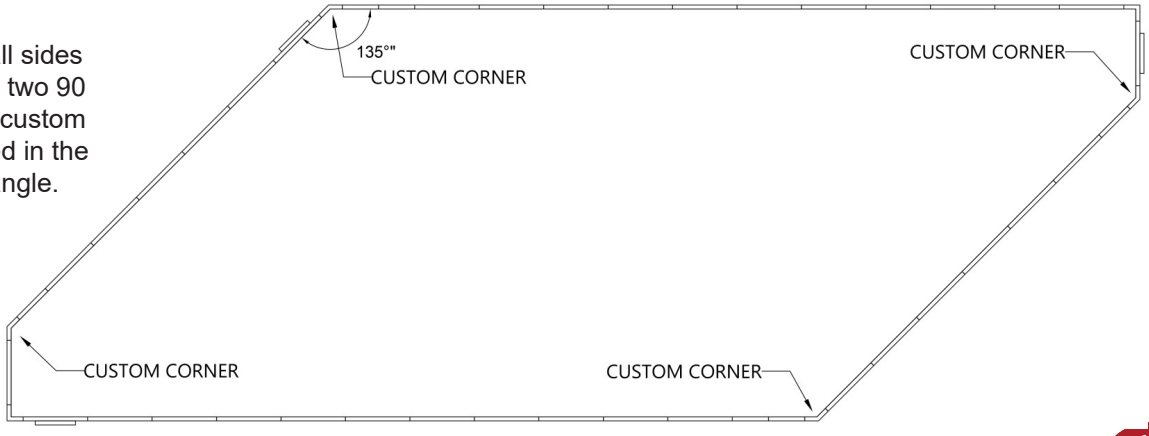
If the canopy corners are not all 90 degrees (partial or fully illuminated), custom corners will be shipped – it is possible to receive both standard and custom corners for one site.

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.



NOTE: ELECTRICIAN NEEDS THIS PAGE FOR WIRING.

Electrical Wiring of Rails to Power Supplies

Power Supplies (logos)
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

33" logo	45" logo	60" logo
.093 white polycarbonate face	.093 white polycarbonate face	.093 white polycarbonate face
Painted red and black as required	Painted red and black as required	Painted red and black as required
23 LED Sloan VL plus white long	36 LED Sloan VL plus white long	74 LED Sloan VL plus white long
.36W 40 LM each	.36W 40 LM each	.36W 40 LM each
Total 8.28W/ 920 lm	Total 12.96W/ 1440 lm	Total 26.64W/ 2960 lm
60W power supply 1.0A	60W power supply 1.0A	60W power supply 1.0A
120VAC/12VDC	120VAC/12VDC	120VAC/12VDC
7.8 sq ft cr area	14.3 sq ft cr area	25 sq ft cr area

Power Supplies (bridge rails)
96W power supplies in one box - 100-277VAC/12VDC, 1.1A-0.45A

Illuminated Rails
3mm ACM rail with .093 polycarbonate lens
1½" stand-off
White LED modules
5000K bright white
2.55W/ft of rail (5.1 W/ft of ACM panel)

Circuits
20A circuit x 80% = 16A

For the rail assembly, 96W power supplies are provided:
-One 96W power supply in a box can run rails on two 8 ft panels (or rails on one 8 ft panel plus one 4 ft panel plus one corner panel). One 96W power supply can run 18.8 ft of panels.

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 from one panel to different power supply boxes.

Four 96" bridge rails on two 96" ACM panels require one 96W power supply. Cut sections/corners can be combined onto one 96W power supply, but must not exceed 96W.

Get as close as possible to maximizing the power supply potential for optimum efficiency. DO NOT EXCEED THE MAXIMUM WATTS!

Circuit Specifications:
The power supply is multi-volt (100 to 277V AC) – nominally 120V AC.
120VAC, 20A circuit = 16A (80%) = (14) 96W power supplies or (7) 2X96W power supplies (15.4A).
240VAC, 30A circuit = 24A (80%) = (53) 96W power supplies or (26) 2X96W power supplies (23.4A).
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. signs).

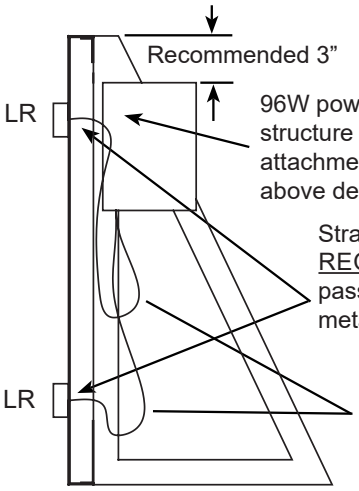
Acceptable conduit – rigid (EMT) and flexible weatherproof (Sealtite); do not use romex.
In some areas, a cable rated for exterior exposure can be used – check local codes for further information.

(14) 96W power supplies at 16 ft apart = 224 ft. If 16 ft cable from light rail is not enough, spliced cable must accommodate voltage drop and be weatherproof with weatherproof wire nuts.

3/10/2025 - Date created.
3/19/2025 - Added order of installation overview and panel/rail orientation on pp. 8-9.

NOTE: ELECTRICIAN NEEDS THIS PAGE FOR WIRING.

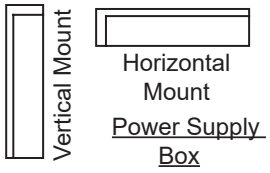
Electrical Wiring of Rails to Power Supplies



96W power supply box. Mount to canopy structure or back of ACM, minimum 3 points attachment. Can also place horizontally above deck.

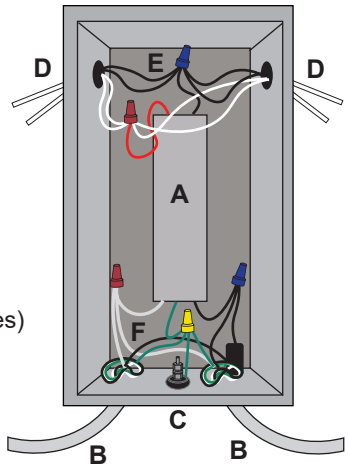
Strain relief grommet/bushing REQUIRED AT EACH POINT cable passes thru ACM or metal to prevent metal cutting insulation.

Cables from rail thru pre-drilled hole in ACM into power supply box. Drip loop required to prevent water from dripping down to rail.



Power Supply Box

A - 96W power supply
B - AC power (external and between power supply boxes)
C - Switch (turn on)
D - LED power cord
E - DC power out
F - AC power



-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 all wires going to the power supply box and wires going to LEDs.
-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.
-Tie strain relief knot inside box in external AC wires and in DC wires going to LED modules to prevent them from pulling out of box.
-External (source) AC 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/canopy 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 building/canopy 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’s/power supply boxes must be fastened to solid structure using fasteners/cable ties and not be hanging loose.