

76 Downlighter

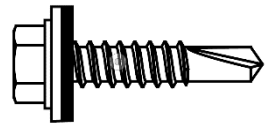


Installation Guide PN #608510

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.

UPDATED INSTRUCTIONS: Use PN 771520 - SCR TEK HWH #12X1 SHEETING, STL ZINC W/ WSHR to fasten the Downlighter Hood to the top of the ACM panel on canopy. The sheeting screws will be driven thru the pre-punched holes in the Hood to secure the Hood and ACM panel 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

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PACKING LIST - DOWNLIGHTER

QTY.	PART # / DRAWING #	DESCRIPTION	FINISH
<i>Varies per Site</i>	<i>581249</i>	<i>96" Downlighter Kit</i>	<i>Kit Item</i>
1	581046/6110446	96" Orange Downlighter Hood	Orange
1	577200/6110449	96" Orange LED & White Reflector Assembly	White
5	239847	K-Lathe Tek Screw #8x3/4	Stl Zinc
1	244769	Snap Bushing 7/8	Black

Varies per Site	581049/6110448	29" Orange LED & White Reflector Assembly	White
3	239847	K-Lathe Tek Screw #8x3/4	Stl Zinc
1	244769	Snap Bushing 7/8	Black

Varies per Site	577201A	Orange Downlighter End Cap Set – (2)	Orange
8	573610	K-Lathe Tek Screw #8x3/4	Orange

Varies per Site	577202A	Orange Downlighter Radius Cap Set – (2)	Orange
8	573610	K-Lathe Tek Screw #8x3/4	Orange

Varies per Site	582794	Orange Downlighter 12x12" Corner	Orange
8	573610	K-Lathe Tek Screw #8x3/4	Orange

Varies per Site	570610	LED Power Source w/ (2) 60W	
Varies per Site	570615	LED Power Source w/ (1) 60W	

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

Verification is vital in ensuring all canopy elements are installed properly

This product is intended to be installed in accordance with the requirements of Article 600 of the National Electrical Code and/or other applicable local codes. This includes proper grounding and bonding of the product. The location of the disconnect switch after installation shall comply with Article 600 (A)(1) of the National Electrical Code.

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






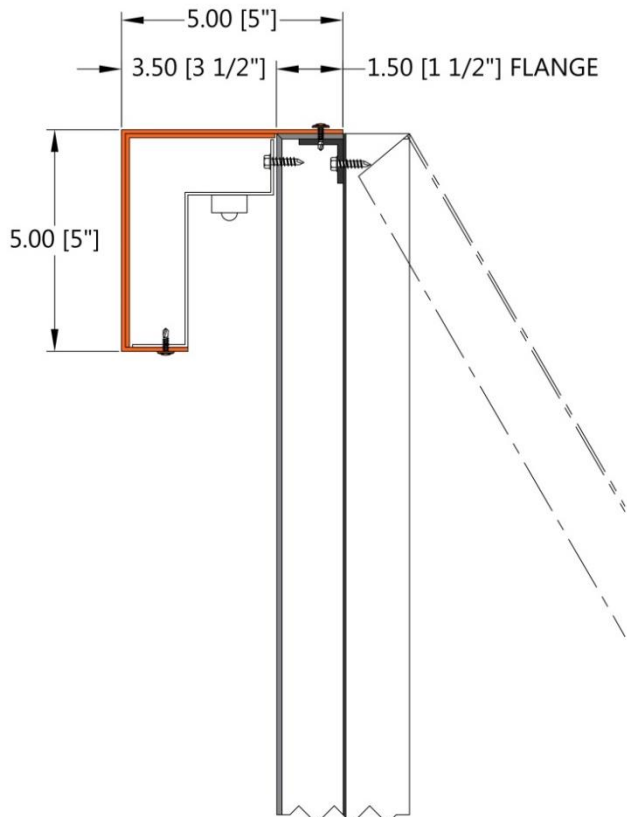
76 Downlighter Installation Guide



NOTE There are two different downlighter styles – with logo and without logo

Hardware

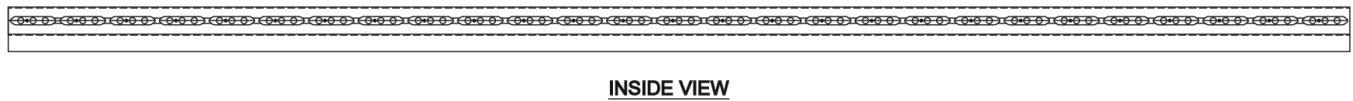
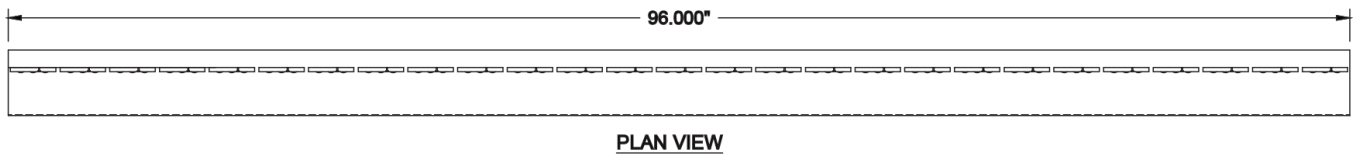
Name	Image	Application	Location
#10x3/4 Tek screw		Attach reflector strip to ACM	Top of reflector strip into ACM
#8x1/2 K Lath screw (orange)		Attach downlighter hood to ACM & reflector strip	Top of downlighter hood through ACM and mounting angle Bottom of downlighter hood through bottom of reflector strip
7/8" Snap bushing		Run LED wiring to power supply	Secured through LED reflector strip and silver ACM panel



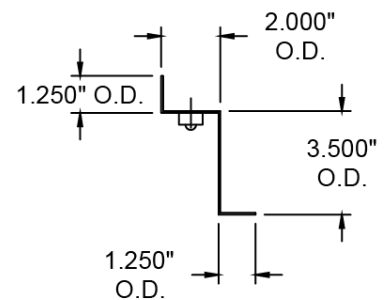
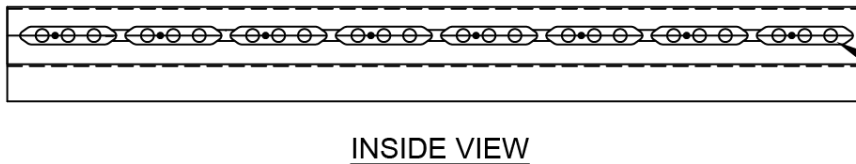
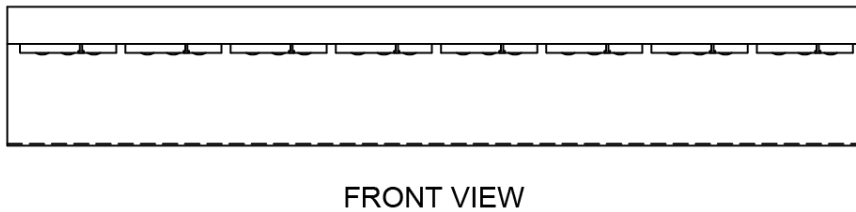
**DOWNLIGHT CROSS SECTION
DWG. 1**

Downlight Elements (vary depending on logo/no logo)

LED Reflector Strips



96" LED REFLECTOR STRIP – DWG. 2



STREETFIGHTER ORANGE
(8 REQUIRED)

29" LED REFLECTOR STRIP – DWG. 3

NOTE 29" reflector strips are only used for a downlighter side that has a logo, to fit between the edge of the canopy and the logo.

ELECTRICAL SPECIFICATIONS:

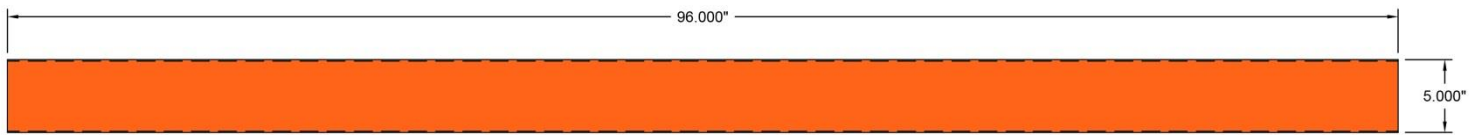
2.19w per ft (LEDs)

96" LED reflector strip – 17.6W

29" LED reflector strip – 5.2W

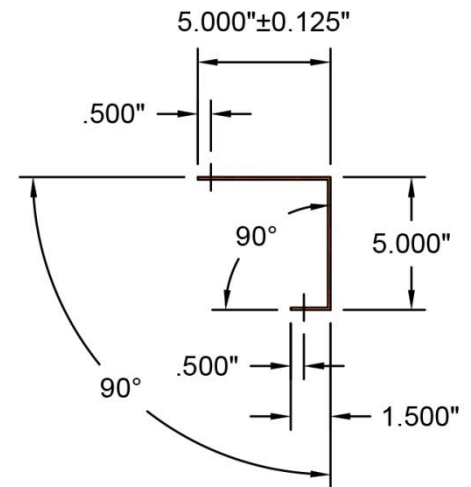
90 LEDs maximum per power
supply

96" Powder Coated Orange Aluminum Downlighter Hood (qty. varies per site)

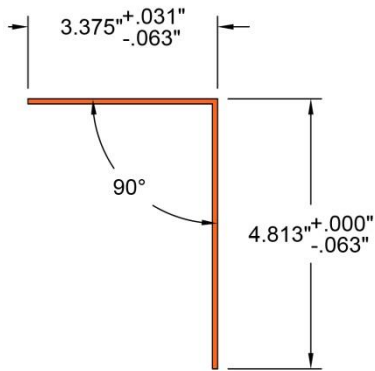


FRONT VIEW

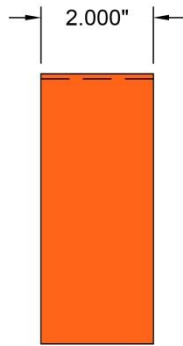
96" ORANGE DOWNLIGHT HOOD – DWG. 4



2" Splice Strip



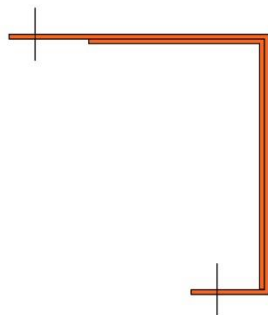
FORMED SIDE VIEW



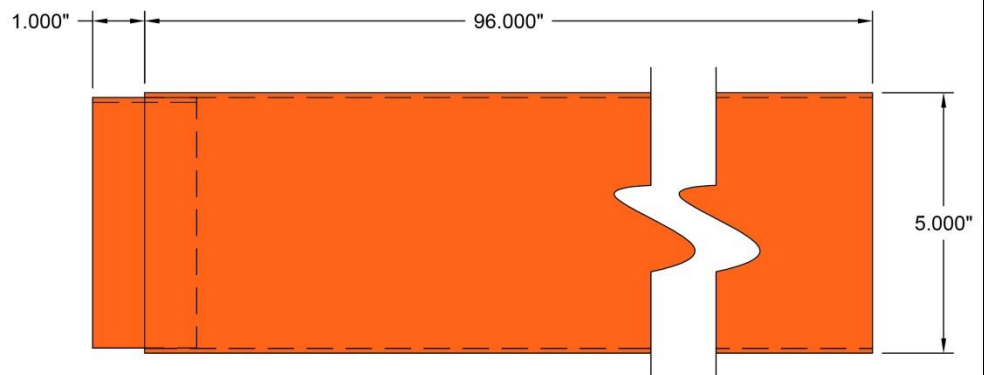
FRONT VIEW

Will be received: Attached to 96" hood, 1 loose with end caps, 1 loose with radius caps, and/or 1 loose with corner

2" SPLICE STRIP – DWG. 5



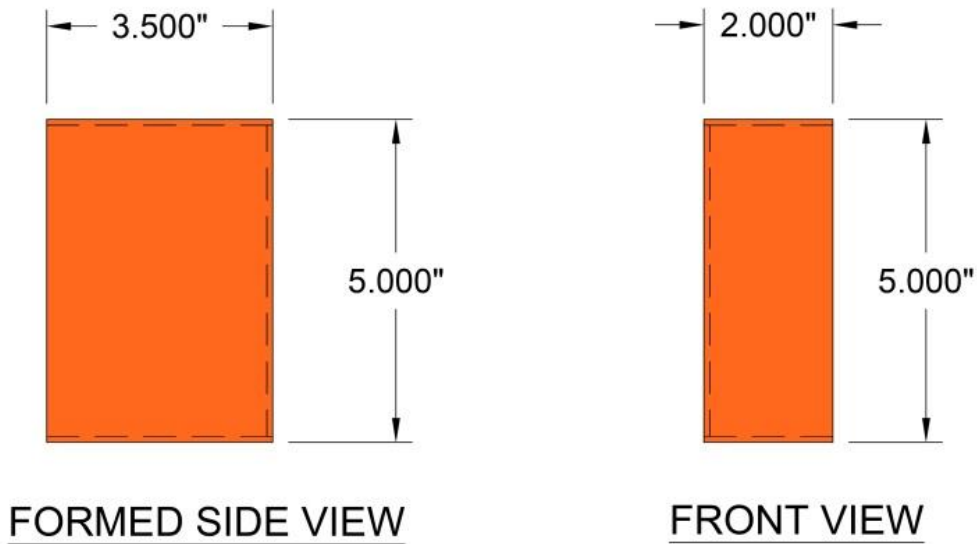
FORMED SIDE VIEW



FRONT VIEW

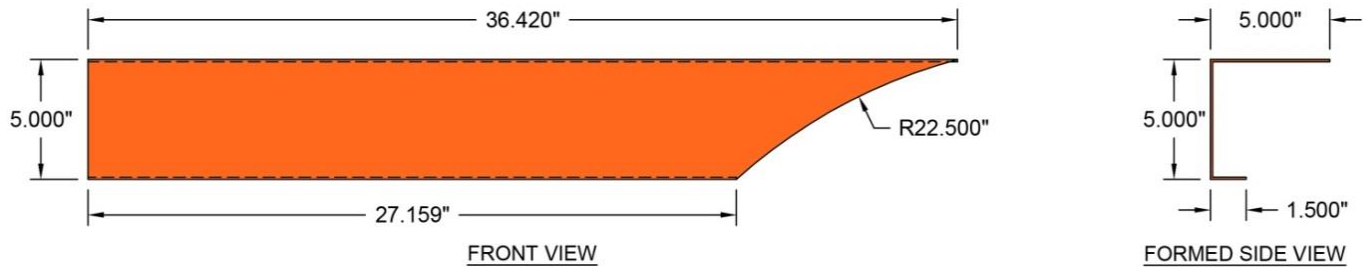
SPLICE STRIP ATTACHED TO 96" HOOD– DWG. 6

2" Universal End Cap Set (2 per set)



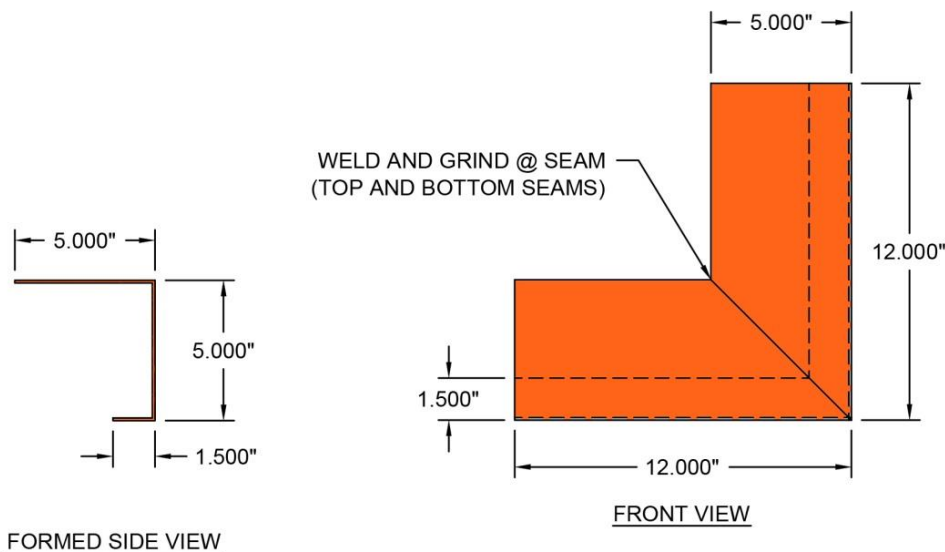
2" UNIVERSAL END CAP – DWG. 7

36.420" Radius Cap (left and right needed per side with logo)



RADIUS CAP (LEFT) – DWG. 8

12"x12" Downlight Corner



12"x12" CORNER – DWG. 9

2A. DOWNLIGHTER WITH NO LOGO

For a downlighter with no logo, the installer will receive:

- 76 96" LED Reflector Strips
- 76 96" Orange Downlighter Hoods
- 76 Splice Strip (one total)
- 76 2" End Cap Set

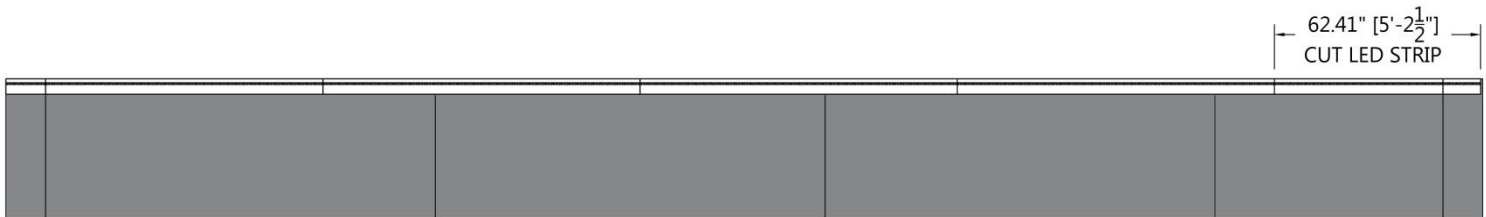
Applying the LED reflector strips

Begin by placing the first 96" LED Reflector at the starting end of the canopy. Be sure that the reflector strip runs flush with the top of the ACM – inability to do so will cause complications with downlighter hood installation. Continue to lay out LED reflector strips until the space for the next strip is less than 96".

Cut the final strip down to fit the remaining space. Make sure the LEDs go as close to the end of the canopy as possible – the goal is to achieve as much coverage as possible for the best result.

It is possible that two LED strips will need to be cut down in order to get maximum coverage or to prevent having too small of a strip applied at the end (generally anything less than 24").

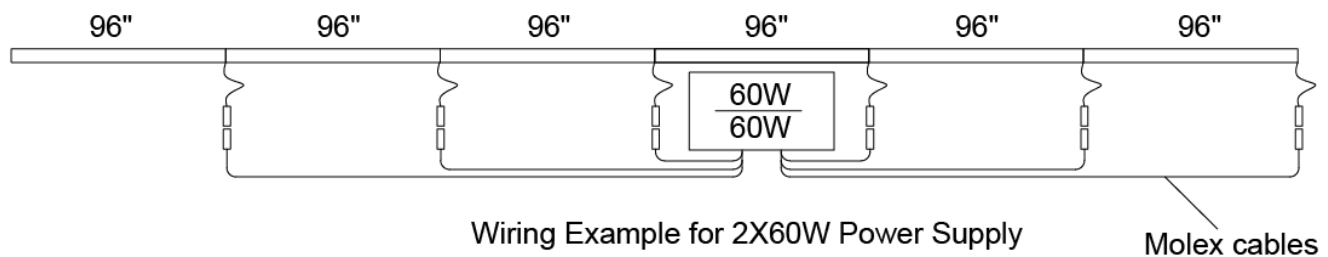
DO NOT CUT THE LEDs! Be careful when cutting the strip so as to not damage the LEDs as well.



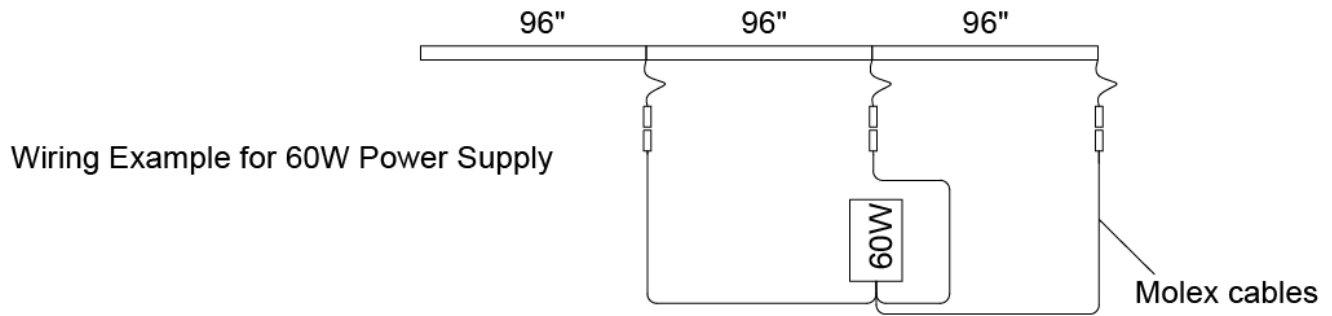
Drill a hole through the reflector strip and the ACM behind the strip for the LED wiring. Secure the snap bushing in place and run wiring through to the power supply behind.

Installers will receive the possibility of two different power sources:

Two 60W power supplies in one power supply box with six cables, 100-277VAC/12VDC, 2.2-.9A
Can run up to six 96" LED strips, or 54' 8" maximum of LEDs (27' 4" per power supply)



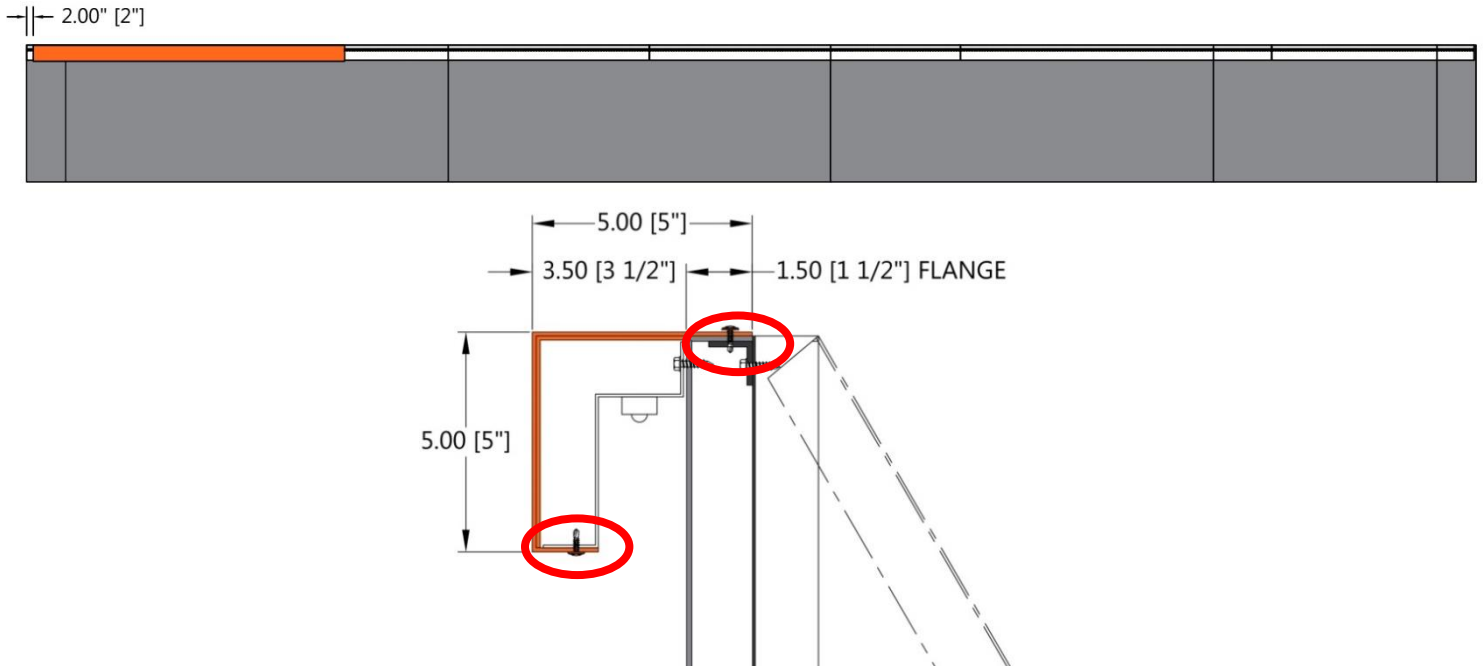
One 60W power supply in one power supply box with three cables, 100-277VAC/12VDC, 1.1-.45A
Can run up to three 96" LED strips, or 27' 4" maximum of LEDs



The single 60W power supply is often used at the end of a run of LED strips, when there are two or less strips requiring power.

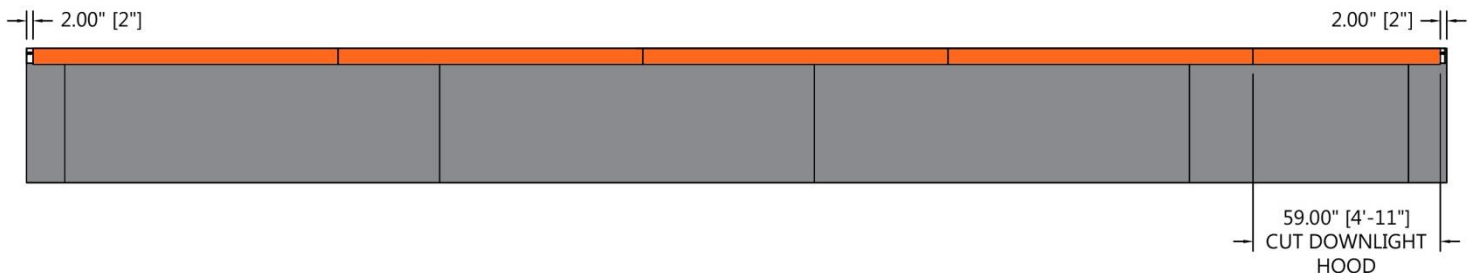
Applying the orange downlighter hood

Begin by installing the first 96" downlighter hood 2" from the end of the canopy (this is the end of the downlighter section, **NOT** from the end of the splice strip). The downlighter will be attached with an orange #8x $\frac{1}{2}$ K-Lath screw through the 1 $\frac{1}{2}$ " flange overlapping the top of the silver ACM. Secure the bottom flange of the downlighter with a #8x $\frac{1}{2}$ K-Lath screw into the bottom of the LED reflector strip.



Continue placing 96" hoods until the side is complete. Depending on the direction of installation, either the splice strip will slide behind the end of the previously installed hood to secure the downlighter hoods together or will slide over the splice strip of the previously installed downlighter hood. The last hood should end 2" from the end of the canopy to leave space for the end cap. Cut the last downlighter hood to fit if necessary.

If the last downlighter hood will be less than 24", two hoods will need to be cut.



Install the universal 2" end caps, using orange #8x $\frac{1}{2}$ K-lath screws. The left hand end cap should slide over the splice strip from the 96" downlighter hood and butt up against the downlighter, coming flush with the edge of the canopy fascia. Apply the splice strip to the right end cap, securing it in place. The splice strip should slide underneath the downlighter hood, butt up against it, and come flush with the edge of the canopy fascia as well.

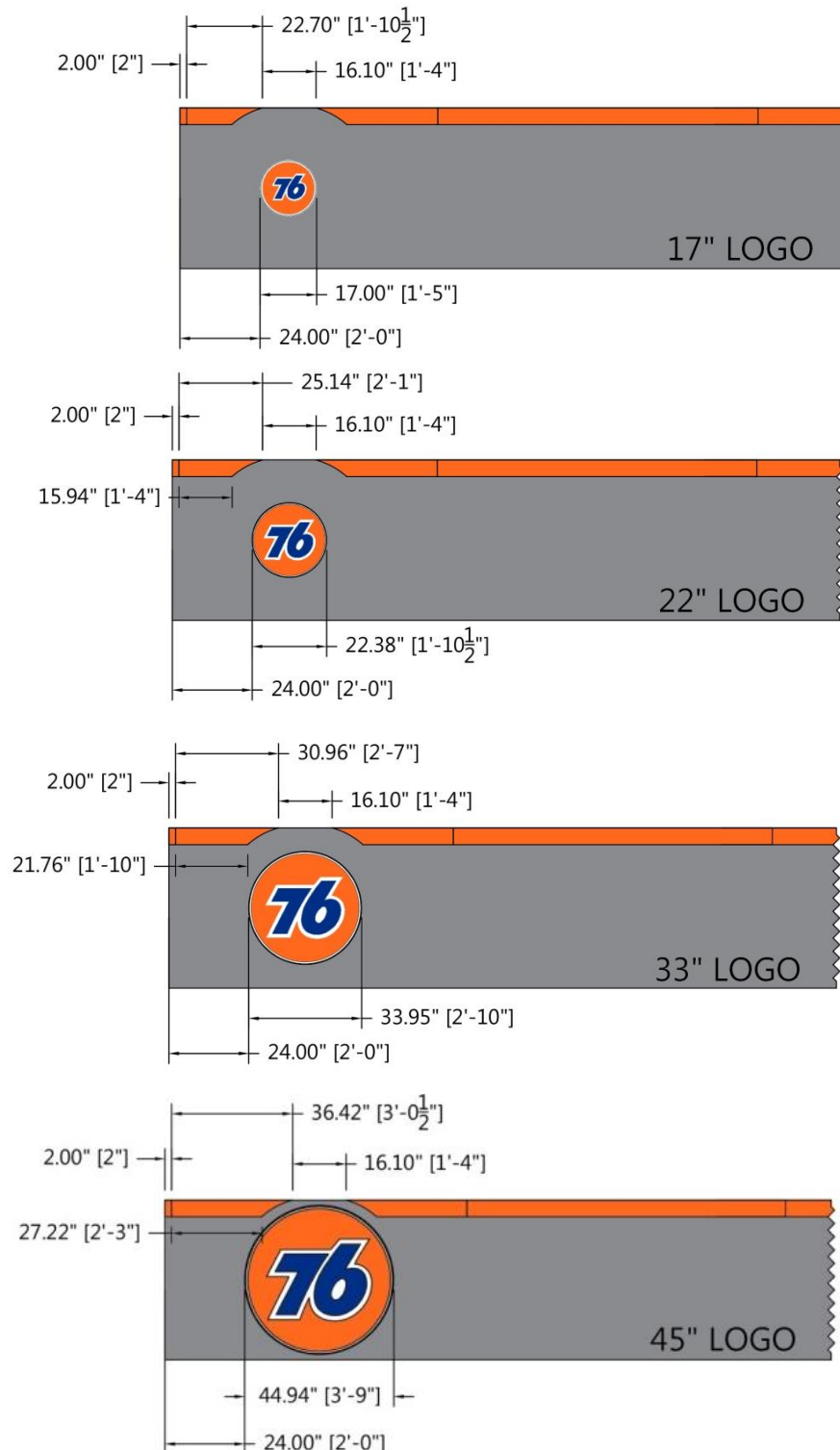


2B. DOWNLIGHTER WITH LOGO

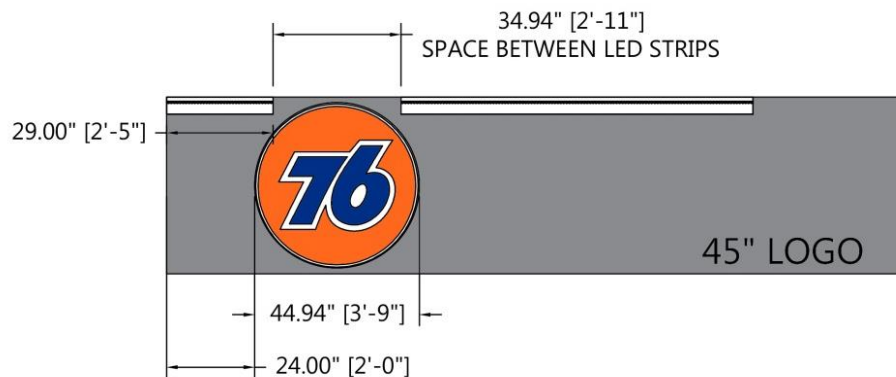
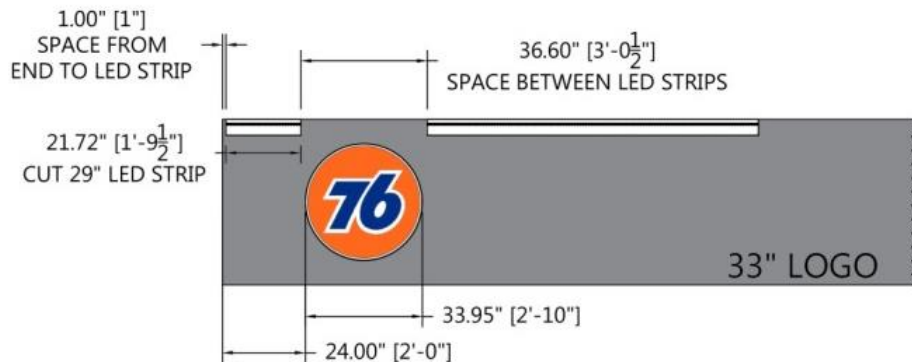
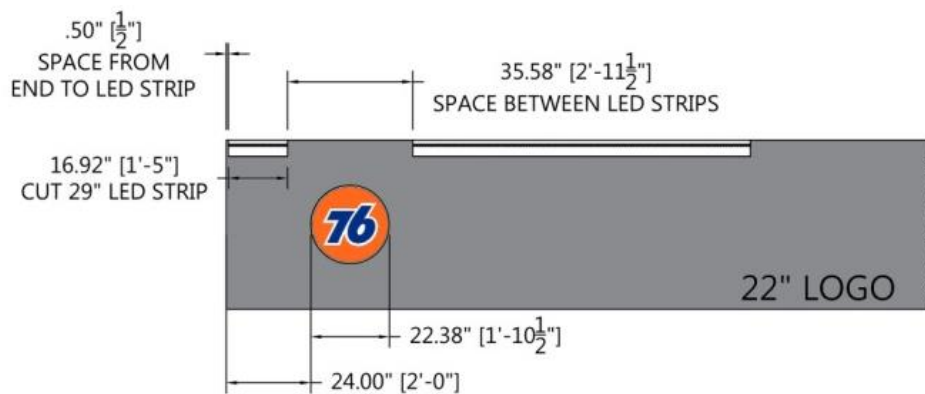
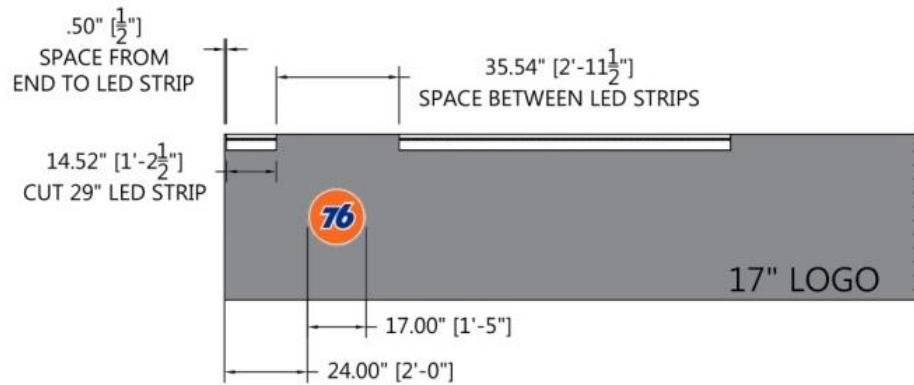
For a downlighter with logo, the installer will receive:

- 76 96" LED Reflector Strips
- 76 29" LED Reflector Strip
- 76 96" Orange Downlighter Hoods
- 76 Splice Strips
- 76 2" End Cap Set
- 76 Radius Cap Set (Left and Right)

RADIUS CAP LENGTHS – DWG. 10



29" LED STRIP LENGTHS & SPACING BETWEEN 29" AND 96" LED STRIPS – DWG. 11



Applying the LED reflector strips

The 29" LED strip is ONLY used for a downlighter side that has a logo.

Reference Dwg. 11 to determine what length the 29" LED strip will/will not need to be cut down to. The 29" LED strip will be cut down for all logo sizes EXCEPT the 45" logo. However, unlike the radius cap, the strip will **NOT** be cut down if on a side with a 12"x12" downlighter corner.

If the cut 29" LED strip is less than the desired space to fill (i.e. 21" to fit a 23" space), center the LED strip within the available area for best coverage once illuminated.

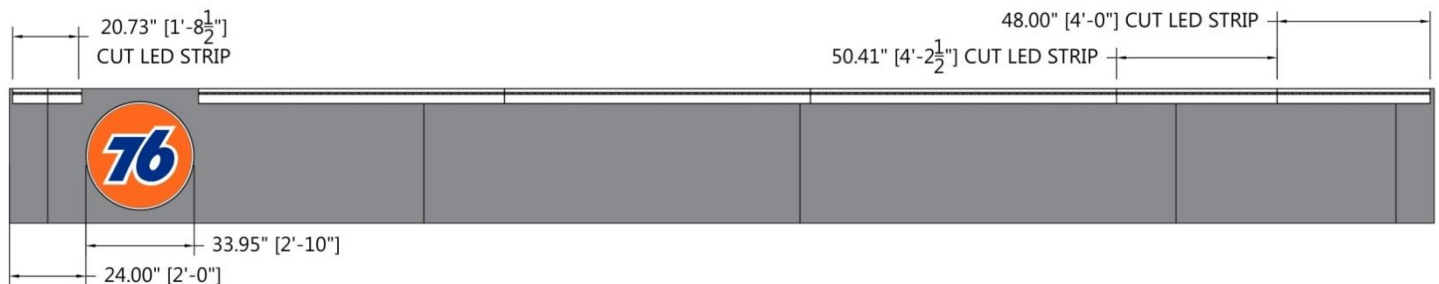
There will be a gap between LEDs for the radius ends and logo. Please reference Dwg. 11 for spacing between the 29" LED strip and the first 96" LED strip. The 29" & 96" LED strips should be spaced evenly around the logo for when the radius caps are installed over the strips.

Place the first 96" LED reflector strip starting at the other end of the designated gap. Continue to lay out LED reflector strips until the space for the next strip is less than 96".

Cut the final strip down to fit the remaining space. Make sure the LEDs go as close to the end of the canopy as possible – the goal is to achieve as much coverage as possible for the best result.

It is possible that two LED strips will need to be cut down in order to get maximum coverage or to prevent having too small of a strip applied at the end (generally anything less than 24").

DO NOT CUT THE LEDs! Be careful when cutting the strip so as to not damage the LEDs as well.



Drill a hole through the reflector strip and the ACM behind the strip for the LED wiring. Secure the snap bushing in place and run wiring through to the power supply behind.

Installers will receive the possibility of two different power sources:

Two 60W power supplies in one power supply box with two cables, 120VAC/12VDC, 2.2-.9A

Can run up to six 96" LED strips, or 54' 8" maximum of LEDs (27' 4" per power supply)

One 60W power supply in one power supply box with one cable, 120VAC/12VDC, 1.1-.45A





Can run up to three 96" LED strips, or 27' 4" maximum of LEDs

A 5' jumper cable will be provided to connect the 29" LED strip to the first 96" LED strip. Generally, these two LED strips combined will be run on one 60W power supply, for ease of installation.

When connecting the electrical, a full 29" LED strip can be included with (2) 96" LED strips on one 60W power supply.

Applying the orange downlighter hood

Radius Cap Guidelines:

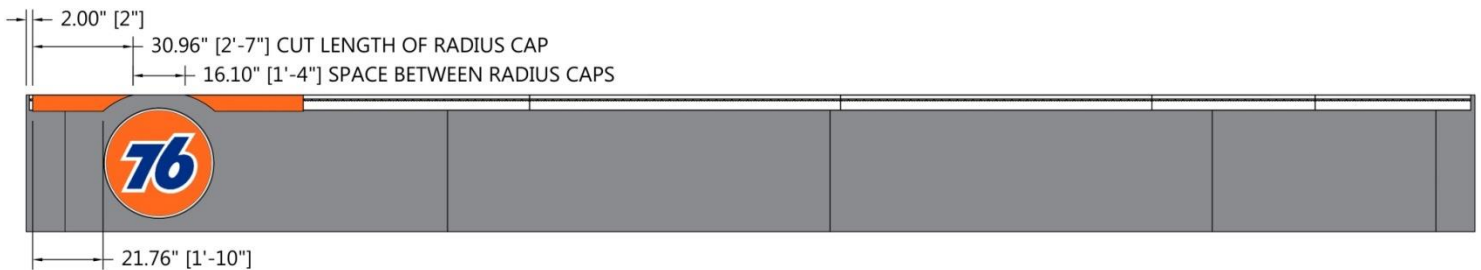
-  The only cap that will ever need to be cut will be the radius cap next to an end cap.
-  The radius cap adjacent to the corner will always stay 36.42", regardless of what the other has been cut.
-  If the radius cap is against a 12"x12" downlighter corner, then the radius cap against that corner will need to be cut an additional 6.5".
-  Please note that the radius caps on the 45" logo require no cutting. The exception is if the cap is against a 12"x12" corner – 6.5" will need to be cut from the cap against the corner.

Apply the splice strip to the left hand radius cap before installation, 1" extended from the edge.

Install the first radius cap, which will be the one nearest the end of the canopy. The radius cap should be offset 2" from the end of canopy to leave space for the end cap. Attach the radius cap with a #8x¹/₂ K-Lath screw through the 1 ¹/₂" flange overlapping the top of the silver ACM.

Secure the bottom flange of the downlighter with a #8x¹/₂ K-Lath screw into the bottom of the LED reflector strip.

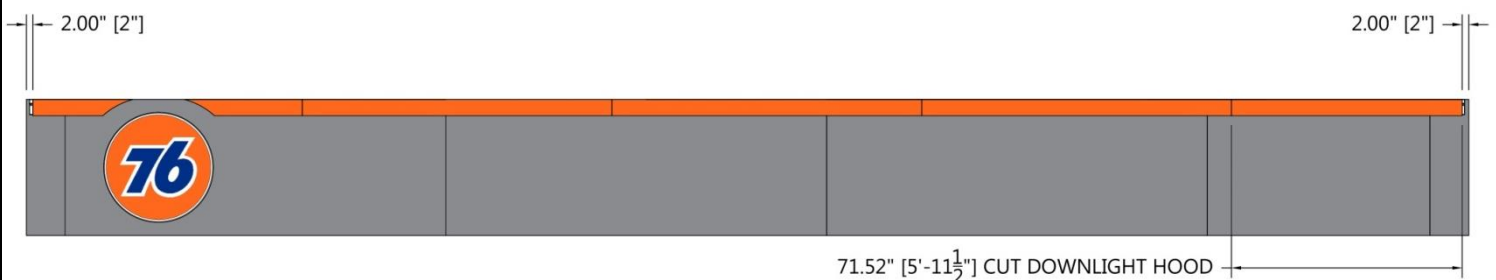
Install the second radius cap. There will be a gap between the pointed ends of the radius caps. The gap is a consistent 16.10" regardless of logo size or ACM height.



Place the first 96" downlighter hood flush with the radius cap. The splice strip will slide either behind the radius cap panel or behind the 96" downlighter hood to secure both downlighter hood and end cap together.

Continue placing 96" hoods until the side is complete. Depending on the direction of installation, either the splice strip will slide behind the end of the previously installed hood to secure the downlighter hoods together or will slide over the splice strip of the previously installed downlighter hood. The last hood should end 2" from the end of the canopy to leave space for the end cap. Cut the last downlighter hood to fit if necessary.

If the last downlighter hood will be less than 24", two hoods will need to be cut.



Install the universal 2" end caps, using orange #8x½ K-lath screws. The left hand end cap should slide over the splice strip from the 96" downlighter hood and butt up against the downlighter, coming flush with the edge of the canopy fascia. Apply the splice strip to the right end cap, securing it in place. The splice strip should slide underneath the downlighter hood, butt up against it, and come flush with the edge of the canopy fascia as well.



Applying the downlighter corner

A downlighter corner will be applied when the downlighter wraps around the canopy fascia in a 90 degree fashion. It takes the place where an end cap would be used on a side.

The downlighter corner is the first hood element to be installed, once the LED strips have been installed. The corner will lay flush against the canopy fascia at the 90 degree corner, with an inner dimension of 8.5"x8.5".

If a logo is present on a connecting corner side, follow the instructions as you would for installing downlighter on a logo side, substituting the corner for the end cap. Remember that if a radius cap butts against a corner hood, there will be a 6.5" difference in the length of that cap from Dwg. 10.

The downlighter corner will be attached with a #8x½ K-Lath screw through the 1 ½" flange overlapping the top of the silver ACM.

Secure the bottom flange of the downlighter with a #8x½ K-Lath screw into the bottom of the LED reflector strip.

Exceptions

If the canopy has corners that are not 90 degrees and the downlighter wraps around that corner, then the 96" downlighter hood will need to be mitered in the field. The two pieces will butt against each other to create a continuous image around that corner.

If the canopy is a "T" shape, and the downlighter hood is continuous into the inverted 90 degree corners, the two downlighter pieces that meet at that corner will need to be mitered in the field to create a continuous image into that corner and allow for maximum lighting coverage.

Appendix

9/8/2021 - Added updated instructions (yellow box) to use PN 771520, #12X1 sheeting screws to fasten Light Bar (for more strength in high wind).