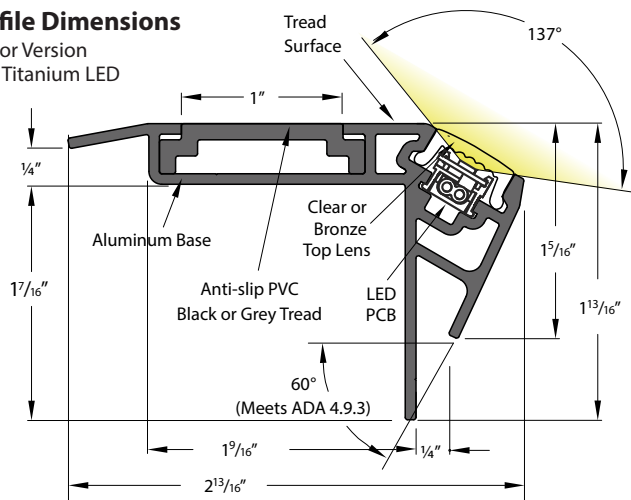
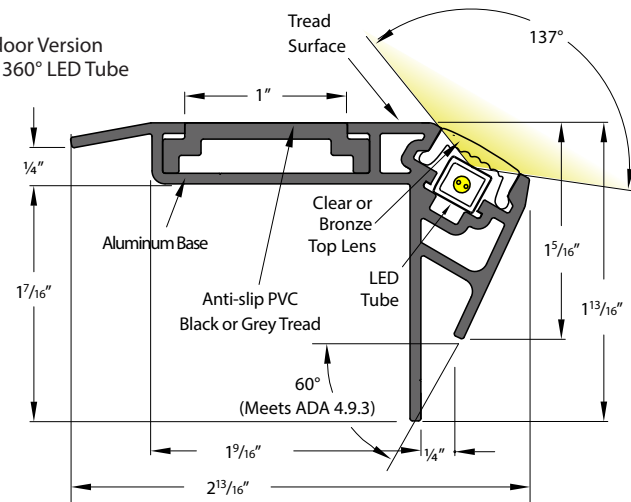


Profile Dimensions

Indoor Version
with Titanium LED



Outdoor Version
with 360° LED Tube



Please verify the contents of the packages!
Please read instructions entirely before starting installation
Be sure power is turned off before installing or modifying the system

Call Tivoli, LLC tech support with questions

Caution: Architectural Step Light™ is designed to work with listed Class 2 12V DC transformers only. Use of any other power source will cause damage, shorten the life of the fixture and will void the warranty.

Consult any and all applicable local and national codes for installation.

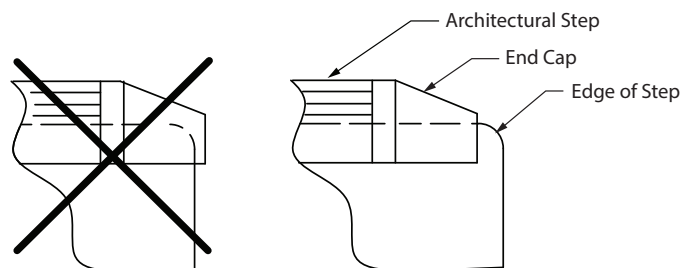
Do not conceal or extend exposed conductors through a building wall as per local electrical code.

Warning: With any luminaire for any application, basic safety precautions should always be followed to reduce the risk of fire, electric shock and personal injuries. This lighting system should be installed by a certified professional only.



Pre-Installation Notes: Read Before Installing

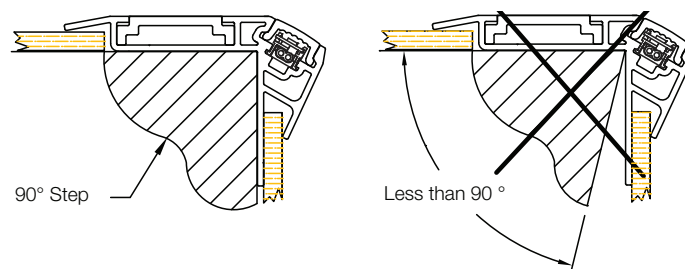
Note 1: Make certain that the End Caps will be on a flat surface when the Architectural Step assembly is installed. If End Caps extend over edge of step, trim extrusion according to the Field Trimming instructions.



View from Front of Step

Note 2: Be sure to clean all mounting surfaces completely, using non-corrosive cleaning solvent to remove all grease and oils.

Note 3: Position the Architectural Step Assembly on the step, making sure the wire is located within the wireway inside the End Cap. Make sure the Architectural Step is positioned tightly against the tread and riser surface of the step. Concrete Step must be 90°. See placement illustrations for proper placement.



Note 4: For best results, install Architectural Step™ before carpet is installed. This Step light is designed for the carpet to fit under the raised edge of the base extrusion.

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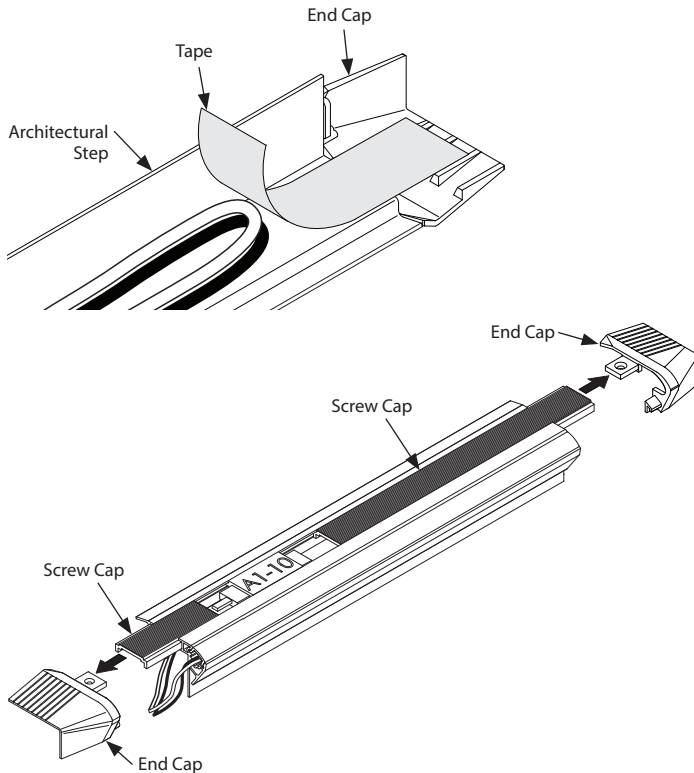
Installation Tools Required

1. Electric compound miter saw or handsaw and miter box.
2. Electric hammer drills, battery power does not work with this installation.
3. Cordless drills
4. 20" long tube caulk guns
5. Adhesive: Extrusion and End Cap Adhesive **ADH-MB-75AM-10** (available from Tivoli)
6. Concrete Screws: 3/16" x 1-1/4" Flathead Concrete Screws for step **ASL-TM-3/16** (available from Tivoli)
7. Drill Bits: Concrete Drill Bit, 5/32" Dia. **RONDB-5/32** (available from Tivoli), Concrete Drill Bit 1/8" Dia. **RONDB-1/8** (available from Tivoli)
8. Nails for Wireway installation, **ASL-TM-1/8** (available from Tivoli)

Installation Instructions: Installing Step Light and End Caps

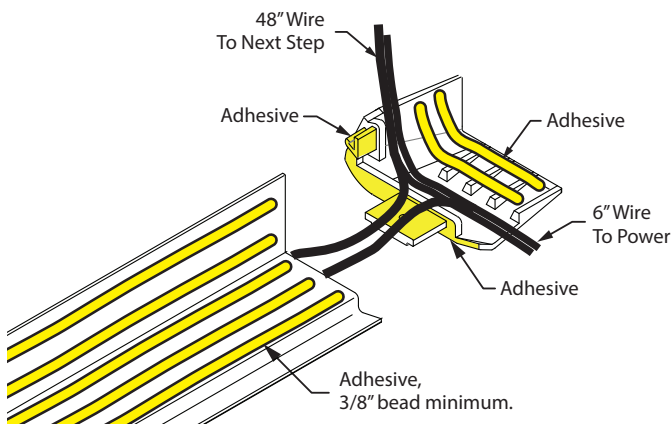
Step 1: Be sure to clean all surfaces completely, using non-corrosive cleaning solvent to remove all grease and oils.

Step 2: Architectural Step™ is shipped with End Caps and Screw Cap in place. Remove tape holding both End Caps in place and slide the End Caps and Screw Cap out of the extrusion, as shown. There may be two Screw Caps if optional Row Indicators are present. Remove any additional tape holding the Wire Harness in place.



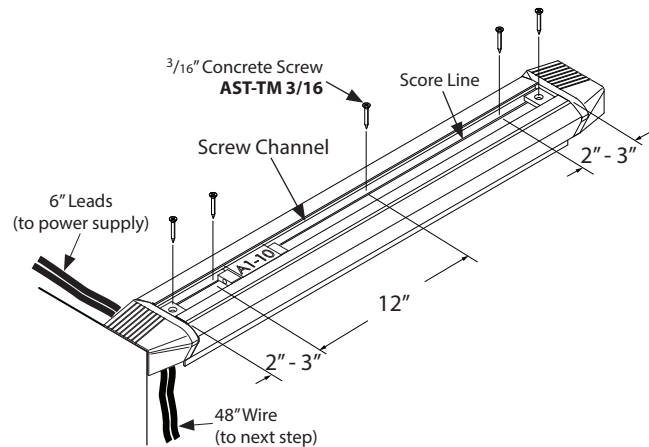
Step 3: Apply ADH-MB-75AM-10 Adhesive to left and right side End Caps and install flush and tight to the aluminum base.

Step 4: Apply ADH-MB-75AM-10 Adhesive to inside surface of Architectural Step and to the inside ribs of each End Cap using a 3/8" minimum size bead, as shown.

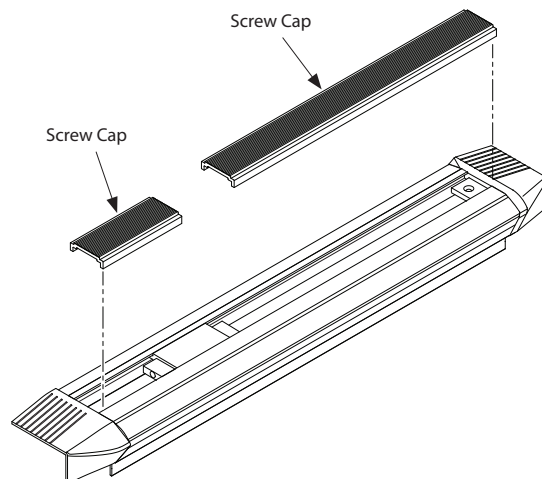


Step 5: Position the Architectural Step™ Assembly on the step, making sure the wire is located within the wireway inside the End Cap. Ensure the 6" leads are positioned toward the power supply and the 48" leads are directed toward the next step. Make sure the Architectural Step is positioned tightly against the tread and riser surface of the step. Concrete Step must be 90°. See placement illustrations on Page 1 for proper placement. If tread riser in not 90°, consult factory.

Step 6: Hold Architectural Step™ assembly tight against the tread and riser surface. Using a 5/32" bit, drill a hole through the hole in the End Cap, if present, making sure the End Cap is square and tight against the step before tightening Screws. If no End Cap is present Drill screw holes in screw channel 3" from both extrusion ends. If Row Indicators are present, it may be necessary to adjust hole location. Place additional holes approximately every 12" along extrusion in channel. Do not over-torque screws. Allow adhesive to cure for at least 24 hours or as per manufacturer's instructions.

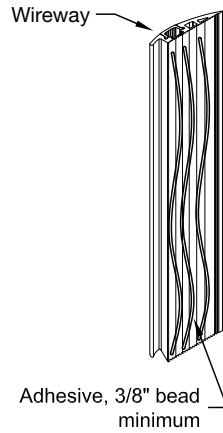


Step 7: Position one side of the Screw Cap in the Channel and press the opposite side into place. Start at one end and push the bottom edge of the Screw Cap inside the Channel and then press Screw Cap down into position. A blade screwdriver or Putty Knife may help to push the flange inside the Channel. Move along the Screw Cap pressing the cap into place as you go. A plastic or rubber mallet may be helpful.

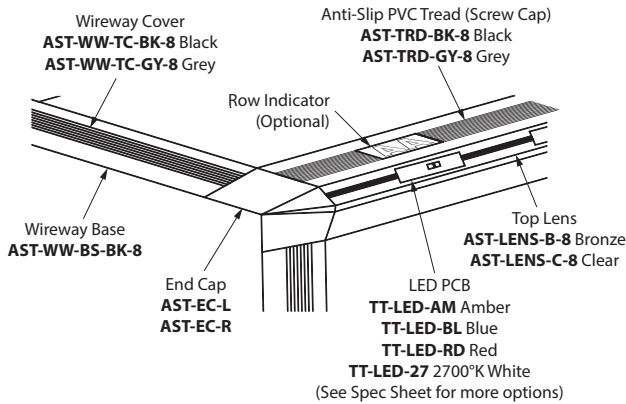
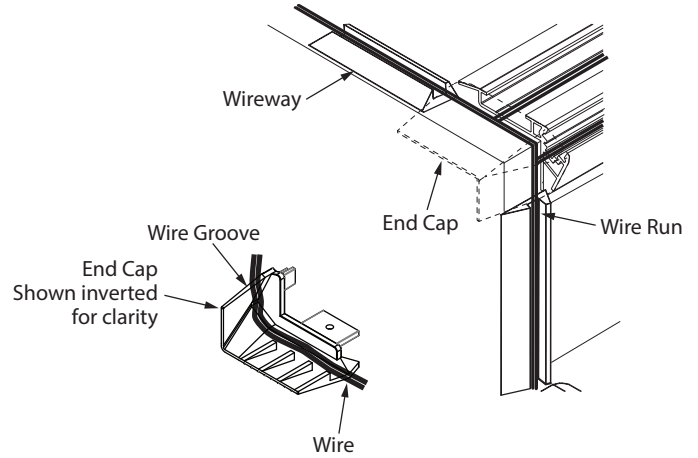


Installation Instructions: Installing Wireways

Step 1: Cut and miter wireway, with cover attached, to desired length. Remove cover and glue wireway to floor surface using **ADH-MB-75AM-10** Extrusion Adhesive. (using Tapcon flat screws $\frac{3}{16}$ " x $1\frac{1}{4}$ " to secure wireway is optional.)



Step 2: Run power feed through wireway channel and make wiring connections. Be sure polarity of connections is correct.



Step 3: Snap wireway cover into place.

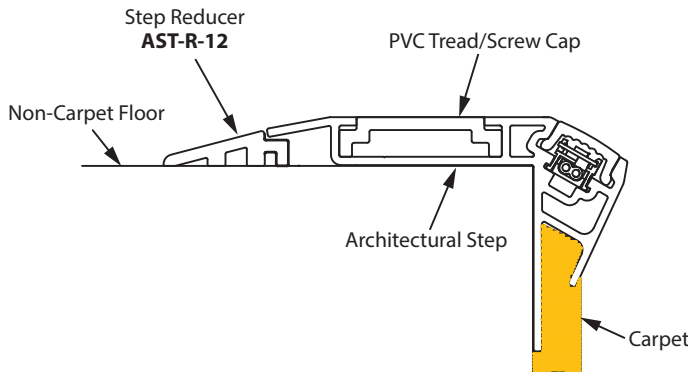
Installation Instructions: Using Step Reducer on Concrete Floors

Note: Step Reducer is applied to concrete floors only (where there is no carpet) and is used in conjunction with the Architectural Step.

Step 1: First, install Architectural Step Light to step. See Page 2.

Step 2: Apply liberal amount of **ADH-MB-75AM-10** Extrusion Adhesive to bottom of Step Reducer.

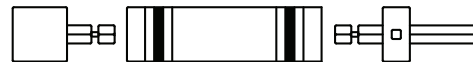
Step 3: Insert Step Reducer under lip of the Architectural Step extrusion, as shown.



Concrete Applications

Tivoli® recommends securing the base extrusion to the floor with flat head phillips Tapcon or Tapmark masonry screws $\frac{3}{16}$ " x $1\frac{1}{4}$ " long. Drill pilot holes inside channel with a $\frac{5}{32}$ " carbide masonry bit.

Caution: Do not use concrete nails or ramsets. The direct impact of a hammer or fastener will damage the base extrusion. Improper installation will void the warranty.



Optional Installation Tool



Carbide Masonry

$\frac{5}{32}$ " x $3\frac{1}{2}$ "



Flat Head Phillips Concrete Screw

$\frac{3}{16}$ " x $1\frac{1}{4}$ "

Installation Instructions: Connecting To Power Source

⚠ WARNING! Danger of Electric Shock.
All secondary wiring must be enclosed in conduit up to the feed point of the light string. Do not run open secondary wiring under carpets or have them otherwise unprotected.

Step 1: Connect step light to power source. LED lamps require Class 2 12 Volt DC transformer. Be sure wire is sized to compensate for voltage drop over distance and color coded for accurate polarity. Black wire is positive (+), white wire is negative (-). Do not exceed 5 amps (60W) maximum per circuit.

Configuration	Indoor		Outdoor	
LED Spacing O.C.	4"	6"	4"	6"
*Watts/ft.	0.005	0.004	0.78	0.58

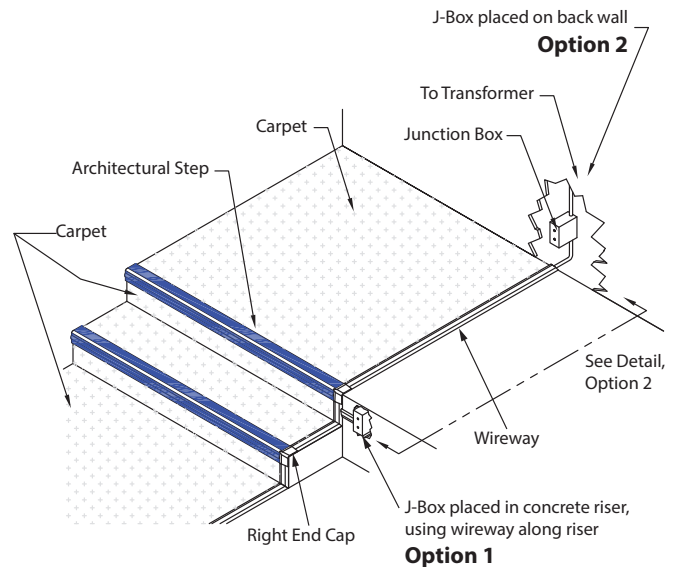
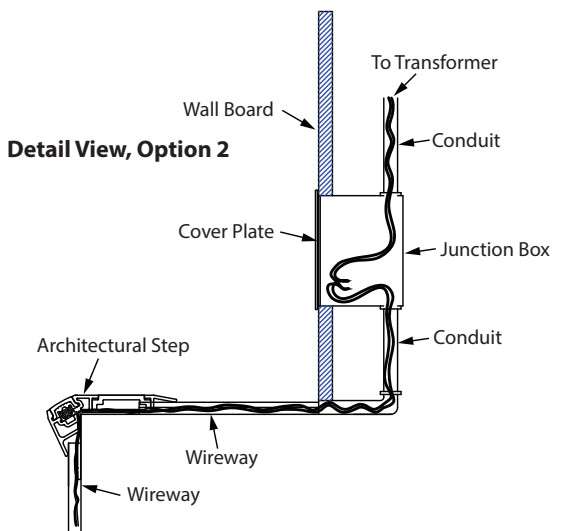
Note: Row Indicator LED is .36 watt.

Wire Size Selection

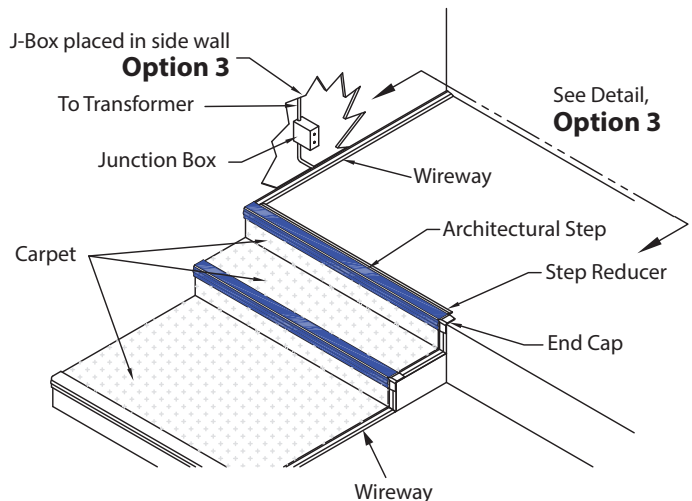
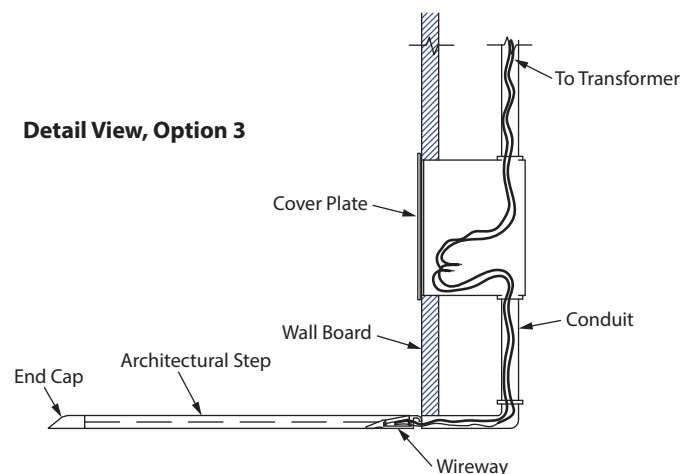
In order to operate Class 2 lighting system properly, it is important to select wires with the right gauge to minimize significant voltage drop. Following are two charts providing a reference for determining the wire size according to the maximum wire length from power supply to lighting fixtures.

12V Class 2 Lighting System	
Wire Gauge	Max. Wire Run
18	90
16	95
14	100
12	105

Power Feed, Option 1 and 2



Power Feed, Option 3



Recommended Power Supplies

CAT NO	APPLICATION	PRIMARY AND SECONDARY	TOTAL WATTAGE / AMPS PER BREAKER	LISTING	DIMENSIONS	ELECTRONIC OR AC MAGNETIC
JT-60-1-5-12-D	Indoor/ Outdoor	120V AC / 12V DC	60 / 1X5A	cETLus	4.25"W X 8.50"L X 3.25"D	Magnetic
JTH-60-1-5-12-D		277V AC / 12V DC	60 / 1X5A	cETLus	4.25"W X 8.50"L X 3.25"D	Magnetic
JT-240-4-5-12-D		120V AC / 12V DC	240 / 4X5A	cETLus	8.50"W X 16.00"L X 4.50"D	Magnetic
JTH-240-4-5-12-D		277V AC / 12V DC	240 / 4X5A	cETLus	8.50"W X 16.00"L X 4.50"D	Magnetic

Replacing LEDs

Remove and Replace LED Boards

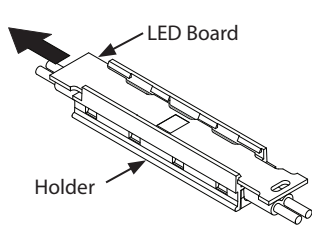
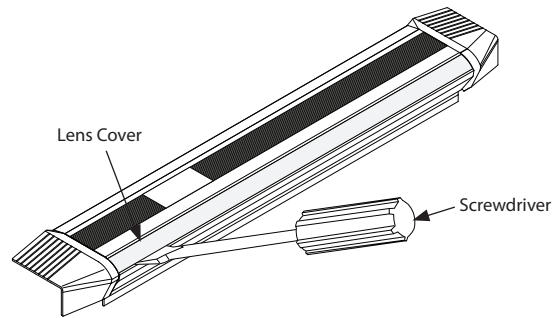
Step 1: Use a small screwdriver or putty knife to lift up the module strand Lens Cover by starting at one end. Once the end of the Lens Cover is out of the channel, continue to pull up carefully by hand until the lens is removed from the extrusion.

Step 2: Slide LED board to the left as far as it will go. Insert a pointed object, such as a pen tip, into the slot at the end of the LED board to slide it more easily.

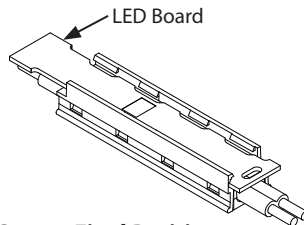
Step 3: Rotate top edge of board upward, as shown.

Step 4: Remove board.

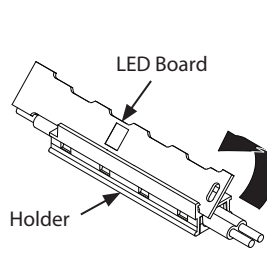
Installation: Reverse steps to install .



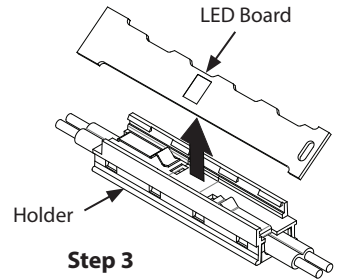
Step 1: Starting Position



Step 1: Final Position



Step 2



Step 3

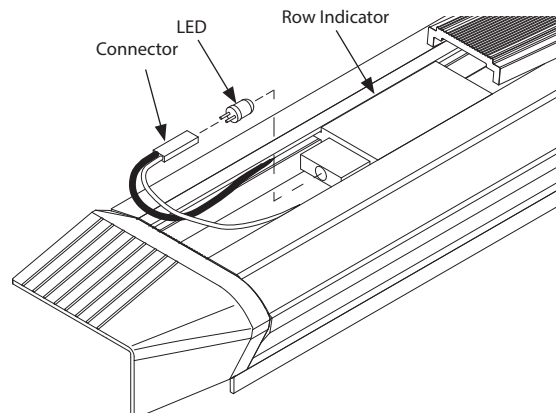
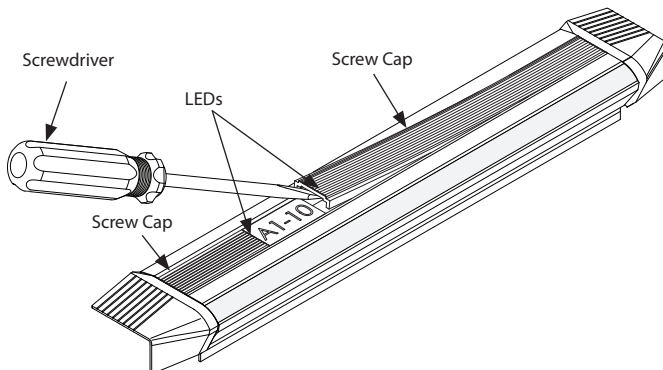
Remove and Replace Row Indicator LEDs

Step 1: A Row Indicator may have either one or two LEDs. Lift up the Screw Cap next to the side of the Row Indicator with the defective LED, as shown.

Step 2: Pull the LED out of Row Indicator lens.

Step 3: Remove the LED from the connector.

Step 4: Insert a new LED into the connector and slide into receptacle in Row Indicator Lens.



Step 5: Replace Screw Cap and make sure not to pinch the wires.

Installation Instructions: Field-Trimming and reversing side of power feed

Note: Architectural Step is pre-cut and fully assembled from the factory. Reversing the side of the power feed and trimming the fixture to fit is simple to do in the field. Execute the following steps before permanently attaching the step light in place.

Field Trimming

Step 1: With End Caps removed, determine which side will be the power feed side.

Step 2: On the end opposite the power feed end, trim base to desired length. Also, trim Screw Cap to match.

Note: Be sure lamps and wire are clear of cut and that no bare wire is left exposed.

Step 3: Install End Caps and complete installation. (See page 2)

Reversing Power Feed

Step 1: With End Caps removed, slide lamp strand with power feed out of the base extrusion.

Step 2: Re-install lamp strand from opposite side.

Step 3: Install End Caps and complete installation.

Installation Instructions: Parts List

