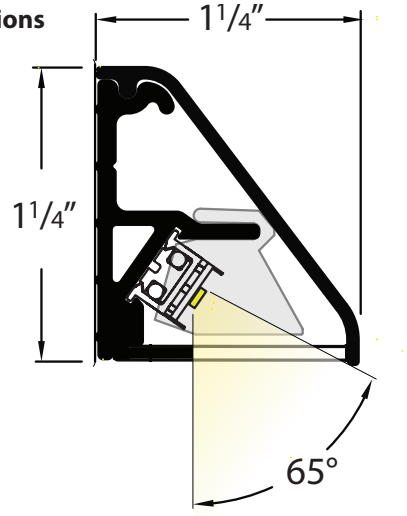
Profile Dimensions



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: Fantasma™ Series 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 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 fixture should be installed by a certified professional.

Installation Instructions

Preliminary

Fantasma™ Wall Light is delivered with Titanium LED Strand pre-installed. Fantasma™ Wall Light System is available in 4' and 8' lengths and may be cut to size in the field. Trim Base and Lens to fit location. Cut off modules and Wire Connectors to fit if components are field cut. Use Butt Connectors to re-connect wire that has been cut in the field. To cover corners and gaps between fixtures, see Joiner Cover options on page 5. Conduit and junction boxes should already be in place in wall before installing Fantasma™ Wall Lighting System. See Wiring options on Page 4.

Important: Determine which option will be used above the step areas. Choose the **Step** or **Slope** option. Become familiar with the spacing requirements for each type of Joiner Cover before starting installation. See Spacing Requirements section for detailed information (Page 3, Step Option / Page 4, Slope Option).

Installing the Base Sections

Step 1: Fantasma™ Base should be installed 10-14" above floor. Begin by snapping a chalk line along the wall using the dimensions shown in the diagram below.

Step 2: Align the bottom of the Fantasma™ Base Section with the chalk line and use the chalk line to determine where to cut the Base Sections to fit.

Note: Include space for Joiner Brackets and End Caps before starting to install Base Sections (See Spacing Requirements Section).

Step 3: Pre-drill 3/16" DIA. holes through Fantasma™ Base approximately every 18" OC.

Step 4: Drill 5/16" feed hole at start of run to route lead wire through wall, as shown. Hole must align with conduit already located in wall.

Step 5: Secure Base to wall with 1½" Pan-Head Walldog fasteners **TM-1-1/2** (provided).

Step 6: If Base is Field-cut, Drill a new hole at the end of the base to bring the wire up into the upper section (See Page 2).

Note: Occasionally, a mounting surface will require metal screws. Self-Drilling Metal Screws are available from Tivoli® as an option. Request Part Number **TM-2-3/8**.

Caution: When attaching base to wall, do not overtighten screws.

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2	Drill 3/16" mounting holes and a 5/16" Lead Hole.	Page 2
3	Install all Base Sections.	Page 2
4	Review Base Spacing Requirements, including Step and Slope	Page 3
7	Wire the system. Make connection to power Supply and interconnect Tivotape™ segments to the maximum run length. Every new run length must be wired back to the Power Supply and connected to a separate circuit.	Page 5
8	Install Lens Sections	Page 6
9	Install Joiner Covers, Straight, Step and Slope	Page 7
10	How To Remove Lens	Page 9
10	Replace LED Board	Page 9
11	LED Module Replacement	Page 10
12	Install Baffles	Page 11

Product Specification Guide		
Fantasma™ Titanium	**Watts per Foot**	**Max Linear Run**
1900°K - 4000°K	.55	65'
Amber	.63	55'
Red	.27	80'
Blue	.58	55'

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Installation Instructions: Installing Fantasma Base with Step Option

Installing the Base Sections

Note: All Base Sections are supplied with the Titanium Modules already installed. Vertical Riser Sections do not contain Light Modules.

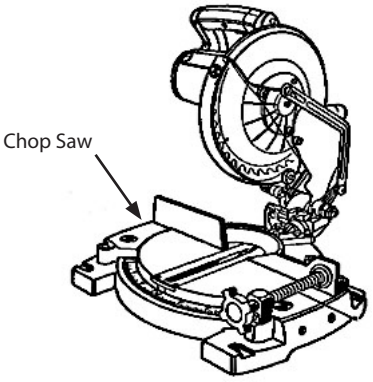
Step 1: Fantasma™ Base should be installed a minimum of 14″ above floor. A 14″ height will result in a field of illumination .2 foot candles 4 feet from wall. Begin by snapping a chalk line along the wall using the dimensions shown in the diagram below.

Step 2: Determine if any 8 ft base sections will need to be cut down to fit the space. Cut Base and Lens sections to matching lengths using a chop saw.
Note: If the Base is cut down, the Wire Connector will most likely need to be cut off, as well. Drill a new hole to bring the wire up into the upper compartment of the Base.

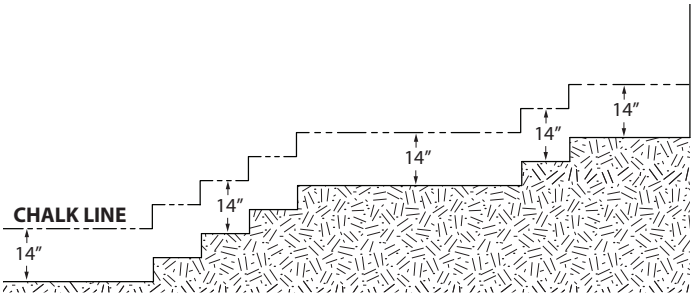
Step 3: Cut down Base and Lens sections for vertical Step Risers (See Page 3). Cut to 4⅝″ lengths (See Page 3 for applcation).
Note: There are no Light Modules or wiring in the vertical riser sections.

Step 4: Align the bottom of the Fantasma™ Base Section with the chalk line and use the chalk line to determine where to cut the Base Sections to fit.

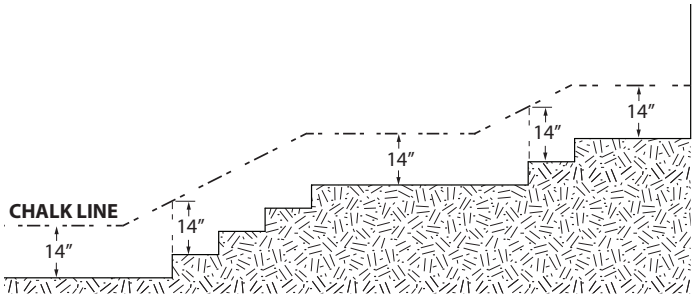
Note: Include space for Joiner Brackets and End Caps before starting to install Base Sections (See Spacing Requirements Section).



Step Option



Slope Option



Drill Feed and Mounting Holes

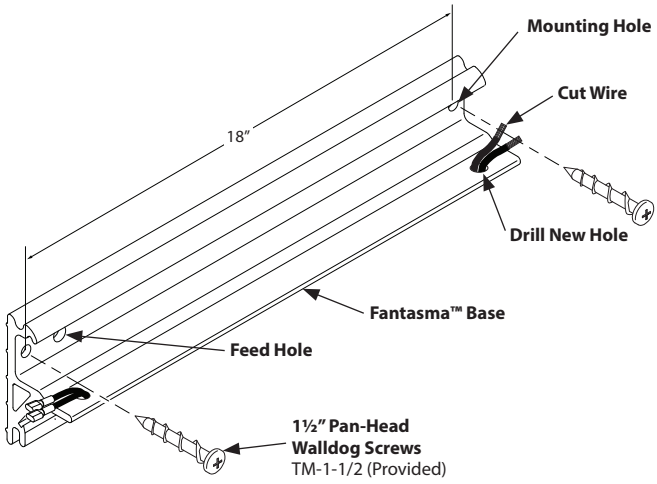
Step 5: Pre-drill 3/16″ DIA. holes through Fantasma™ Base approximately every 18″ OC for mounting.

Step 6: Drill mounting holes on 11″ Step Base and 4⅝″ Vertical Risers.

Step 7: Drill 5/16″ feed hole at start of run to route lead wire through wall, as shown. Hole must align with conduit already located in wall.

Step 8: Secure Base to wall with 1½″ Pan-Head Walldog fasteners **TM-1-1/2** (provided).
Note: Occasionally, a mounting surface will require metal screws. Self-Drilling Metal Screws are available from Tivoli® as an option. Request Part Number **TM-2-3/8**.

Caution: When attaching base to wall, do not overtighten screws.



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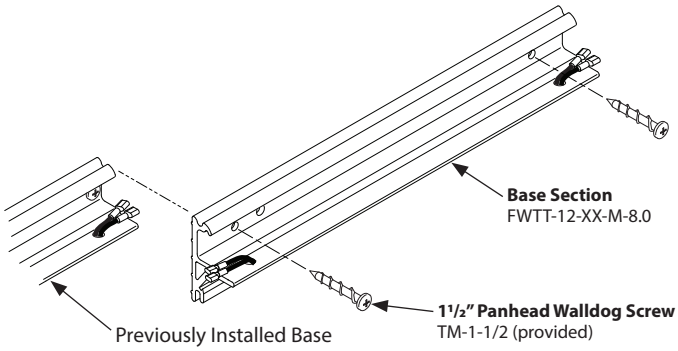
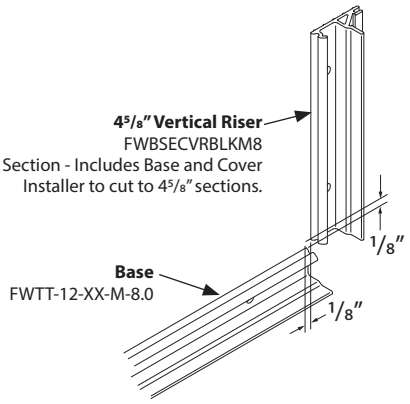
Spacing Requirements for Multiple Base Section Installation with Step Option

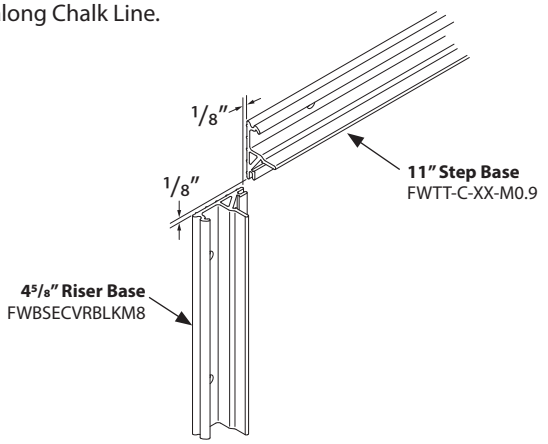
Inline Base Position
Step 5: To install multiple Base Sections in a line, butt each section against the end of the previous section.



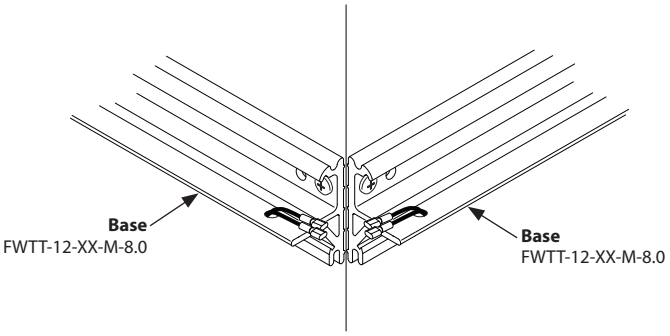
90° Step Riser Inside Corner
Step 6: Install 90° Step Riser Base vertically 1/8" above the horizontal Base and 1/8" away from the edge of the horizontal Base, as shown. Install bottom edge of Base units along Chalk Line.



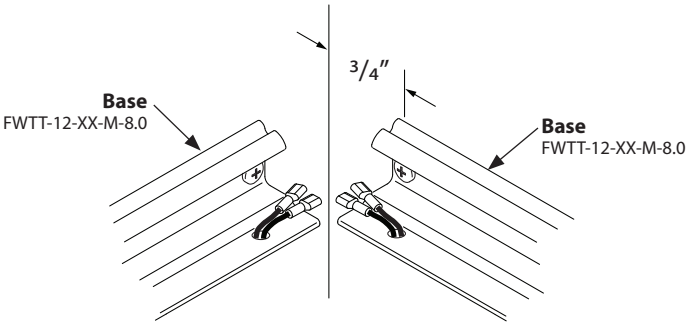
90° Step Riser Outside Corner
Step 7: Install Step Riser Base 1/8" below the 11"Step Base and 1/8" away from the side of the 11" Step Base. Install bottom edge of Base units along Chalk Line.



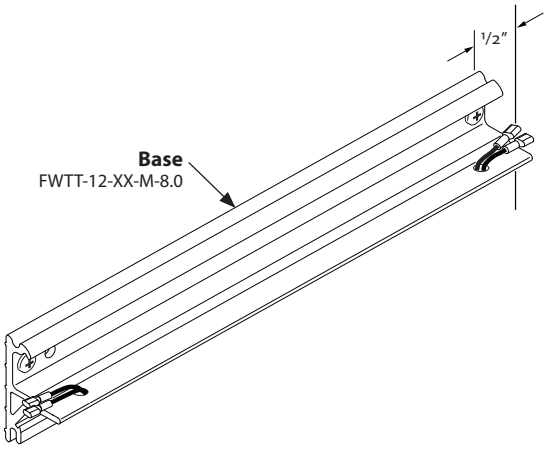
Outside Corner Position
Step 8: When two channels meet at an outside corner, use Outside Corner Covers to conceal the gap between sections.
Position each Base along the edge of the corner. No additional gap is necessary to use this cover.



Inside Corner Position
Step 9: When two channels meet at an inside corner, use an Inside Corner Cover to fill the gap between sections.
Leave a ¾" space from the end of each channel to the inside corner to make room for the Inside Corner Bracket.



End Cap Position
Step 10: If the project calls for End Caps at the ends of the run, leave a ½" space at the end of the run to provide space for the End Cap.



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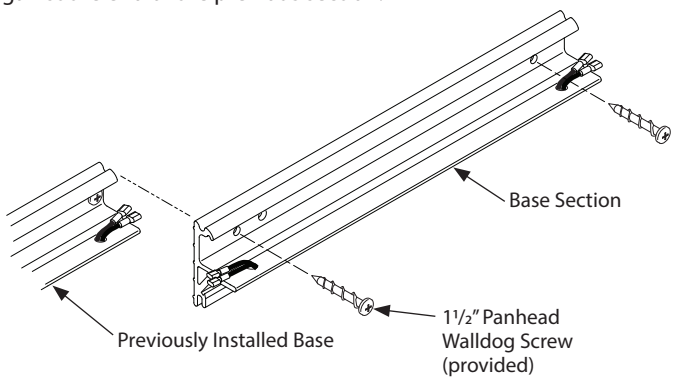
Spacing Requirements for Multiple Base Section Installation with Slope Option

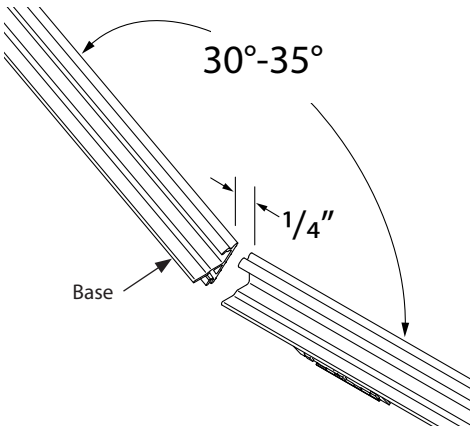
Inline Base Position

Step 5: To install multiple Base Sections in a line, butt each section against the end of the previous section.



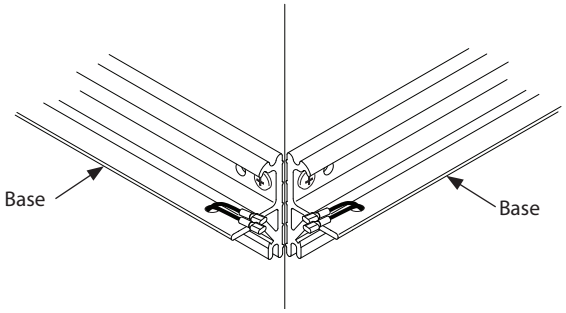
Upward Angle Base Postion

Step 6: Install upward angled Base Sections along stairways. Base Sections may be positioned at a 30°-35° angle to accomodate the Angled Joiner Covers. Leave a 1/4" gap between the top edge of Base Section and the top edge of the previously installed Base.



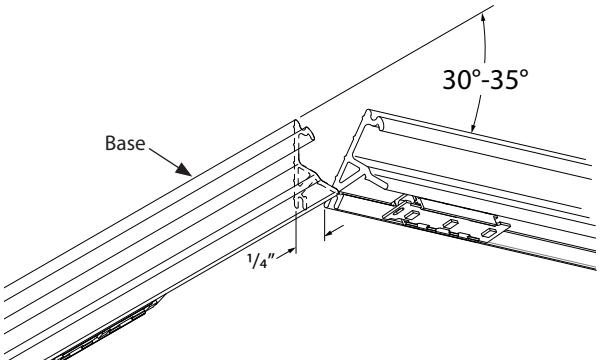
Outside Corner Position

Step 7: When two channels meet at an outside corner, use Outside Corner Covers to conceal the gap between sections.
Position each Base along the edge of the corner. No additional gap is necessary to use this cover.



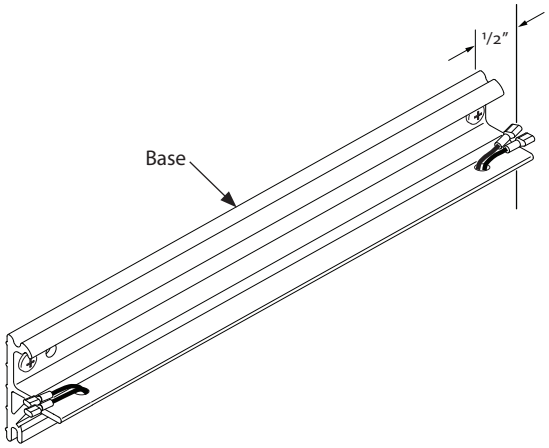
Downward Angle Base Position

Step 8: Install downward angled Base Sections at a 30-35 angle to accomodate the downward joiner Covers. Leave a 1/4" gap between the lower edge of both base sections.



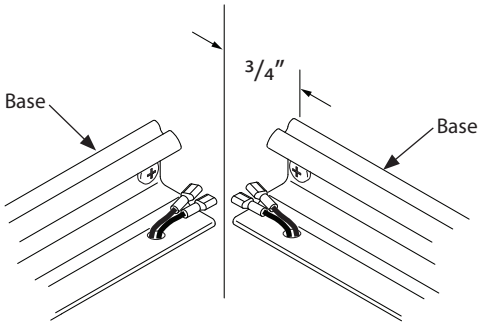
End Cap Position

Step 9: If the project calls for End Caps at the ends of the run, leave a ½" space at the end of the run to provide space for the End Cap.



Inside Corner Position

Step 10: When two channels meet at an inside corner, use an Inside Corner Cover to fill the gap between sections.
Leave a ¾" space from the end of each channel to the inside corner to make room for the Inside Corner Bracket.



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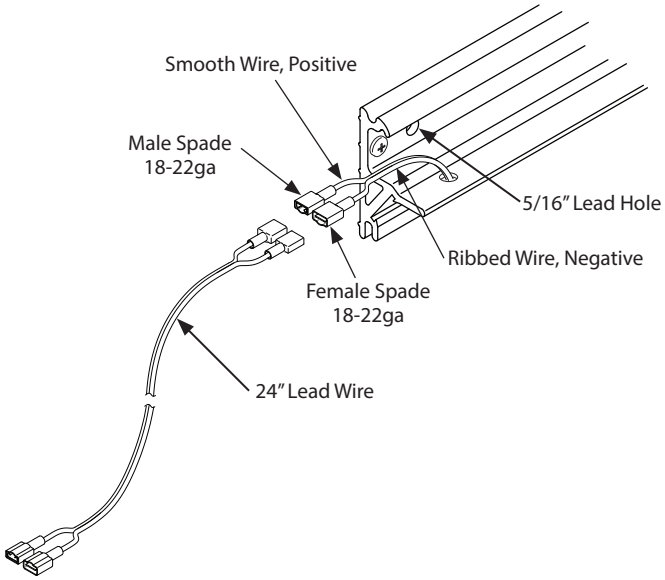
Wiring the System

Overview

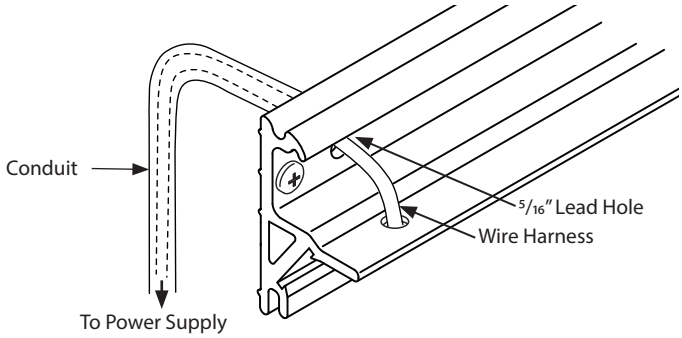
The Fantasma™ Wall unit is supplied with male and female spade connectors attached at wire ends to facilitate interconnection of fixtures. Connect multiple fixtures by joining male and female spade connectors together. Attach lead wires from unit to power cables using mating male and female spade connectors (18-22ga). Alternatively, the connectors may be cut off to allow the wires to be joined together using wire nuts. Maintain polarity by following the positive and negative identification labels on each wire. The smooth wire is Positive (+) and the ribbed wire is negative (-). The available 24" jumper wire may be used to connect the fixture to the power supply.



Step 1: Drill a 5/16" hole through the base near the lead end of the Fantasma™ Base to align with the end of the conduit, which should already be located in the wall (See Page 1).

⚠ **WARNING!** Danger of Electrical Shock. Be sure power is turned off before proceeding.

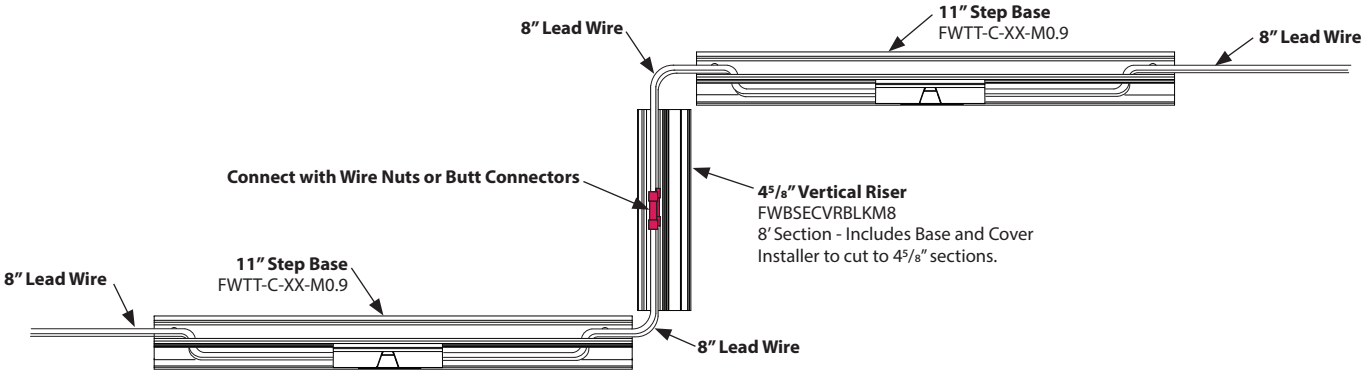
Step 2: Run wire to Junction Box and make connections using compatible spade connectors or wire nuts. See Page 4 for wiring options.



Product Specification Guide		
Fantasma™ Titanium	**Watts per Foot**	**Max Linear Run**
1900°K - 4000°K	.55	65'
Amber	.63	55'
Red	.27	80'
Blue	.58	55'

Step Section

Step 1: Each 11" Horizontal light segment has an 8" lead wire on either end. Run the wire up along inside the 4 5/8" vertical riser and run the lead wire from the section above it down along the inside of the same riser. Cut the wire as required and connect the two lead wires with Butt Connectors or Wire Nuts. Be sure to match polarity.
Step 2: Repeat process for each step.



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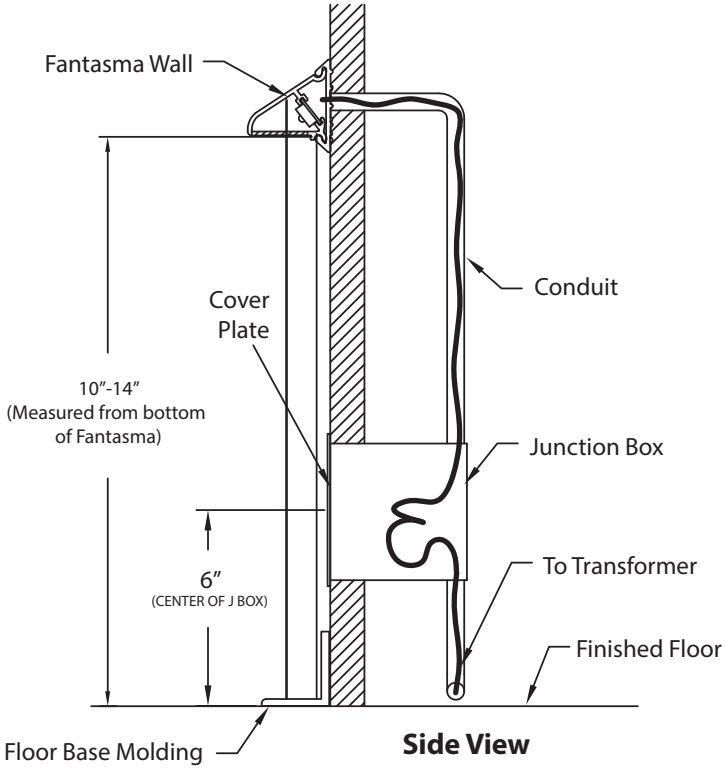
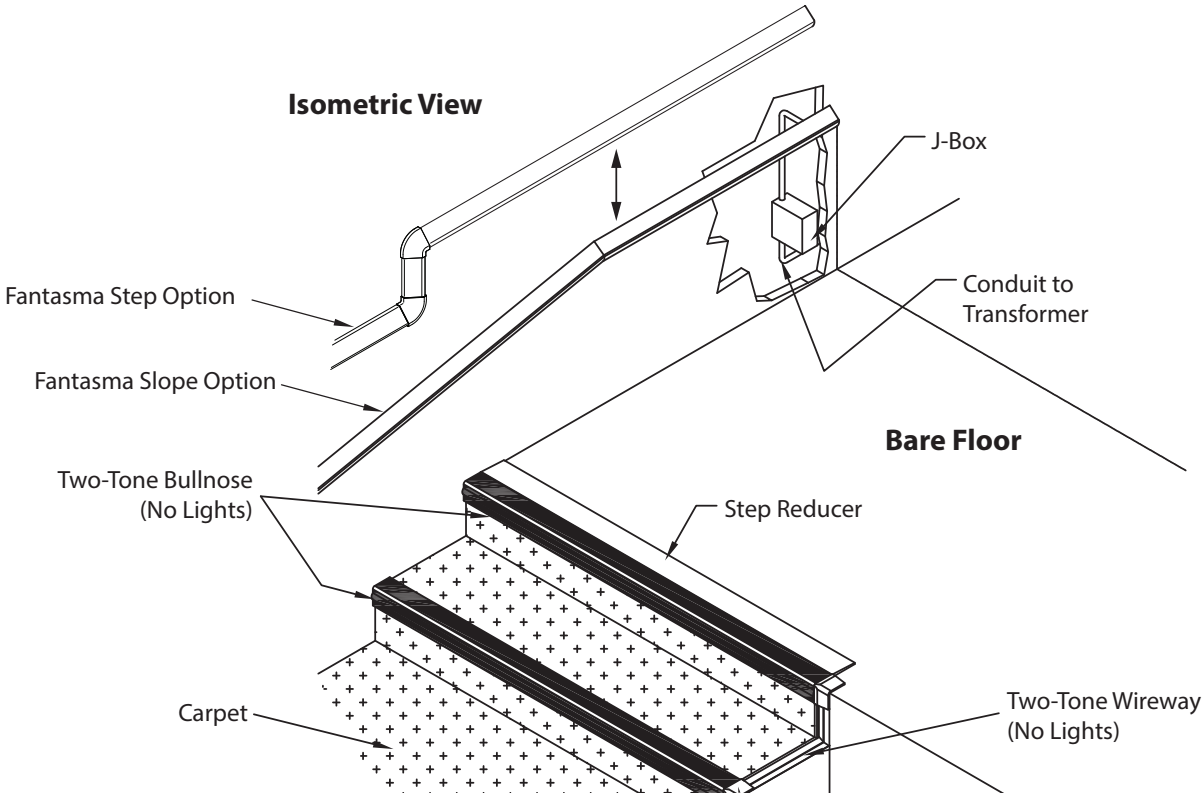
Wiring Options



Side View

Fantasma Wall Lights and J-Box Mounting Height



Isometric View

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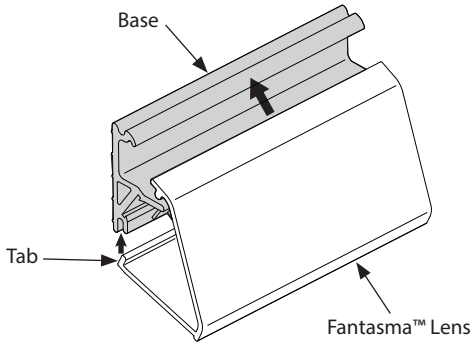
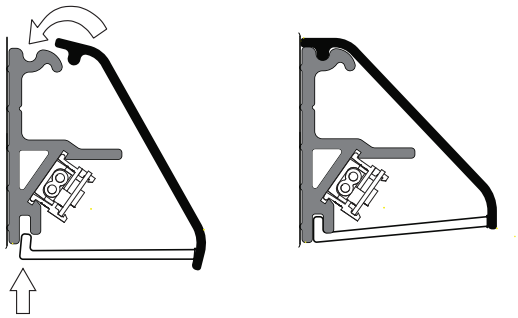
Install Fantasma™ Lens

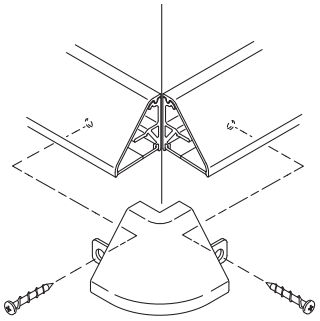
Step 1: Insert raised Tab at lower edge of Lens into slot at bottom of Fantasma™ Base.
Step 2: Rotate Lens upward until it snaps over the ridge at the top of the Base.



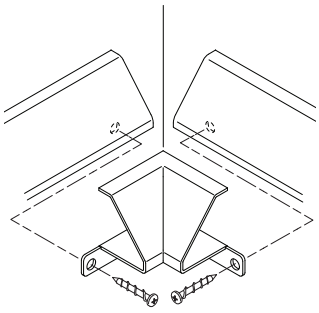


Using Fantasma™ Joiner Covers and End Caps Straight Channel Sections

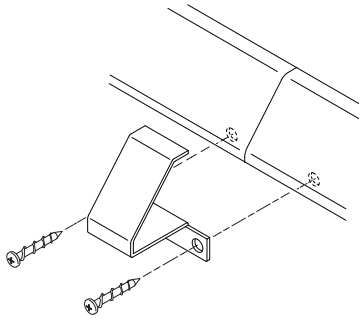
Fantasma™ Joiner Covers hide the gap between fixtures where they meet at corners or angles. Install Fantasma™ Wall fixtures first and place Joiner Covers over the gaps, as shown. Secure to wall with 1½" Walldog Fasteners (provided).



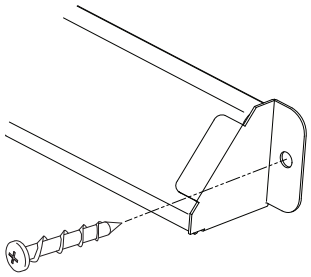
Outside Corner Bracket
(FWTT-O-CRNR)



Inside Corner Bracket
(FWTT-I-CRNR)

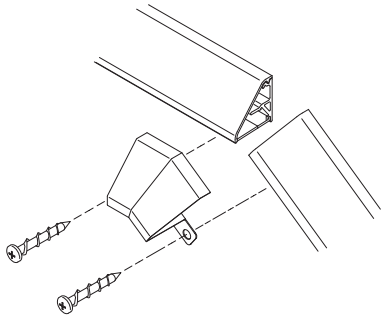


Straight Joiner Bracket
(FWTT-ST-JNT)

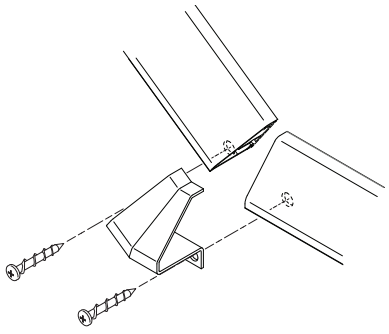


End Cap
(FWTT-EC-L, FWTT-EC-R)

Using Fantasma™ Joiner Covers for Slope Segments



Downward Angle Joiner Bracket (FWTT-D-JNT)



Upward Angle Joiner Bracket (FWTT-U-JNT)

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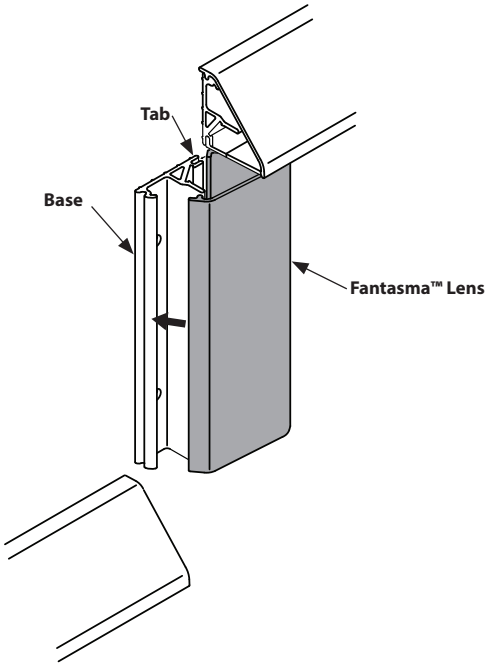
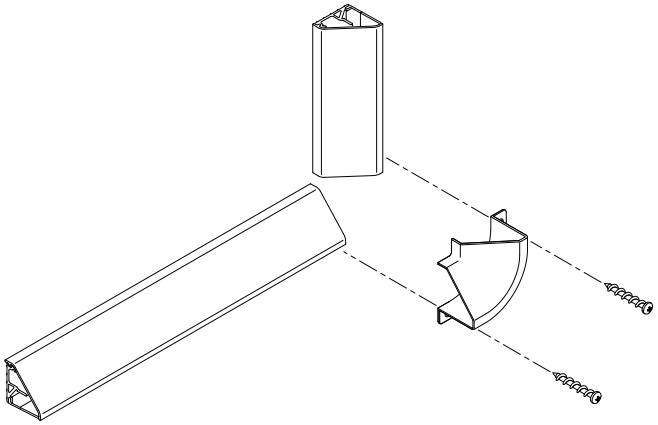
Install Fantasma™ Lens, Step Section

Step 1: Insert raised Tab at lower edge of Lens into slot at bottom of Fantasma™ Base.
Step 2: Rotate Lens upward until it snaps over the ridge at the top of the Base.
Step 3: Install Lenses on all vertical and horizontal Step Base segments.

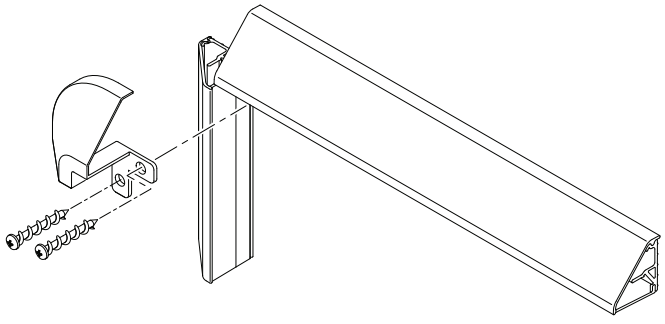


Using Fantasma™ Joiner Covers for Step Segments

Fantasma™ Joiner Covers hide the gap between fixtures where they meet at corners. Install Fantasma™ Wall fixtures first and place Joiner Covers over the gaps, as shown. Secure to wall with 1½" Walldog Fasteners (available separately).



90° Vertical Outside Corner Bracket (FWTT-OV-CRNR)



90° Vertical Inside Corner Bracket (FWTT-IV-CRNR)

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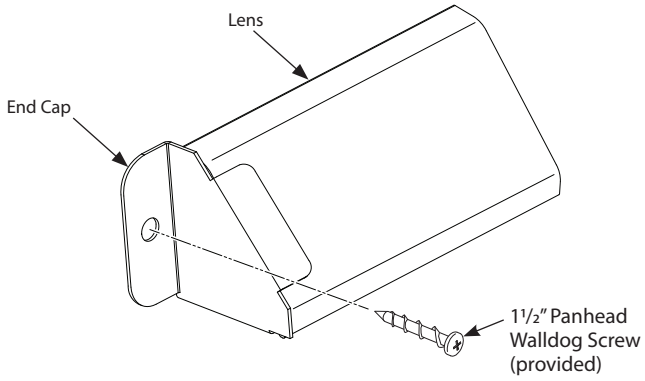
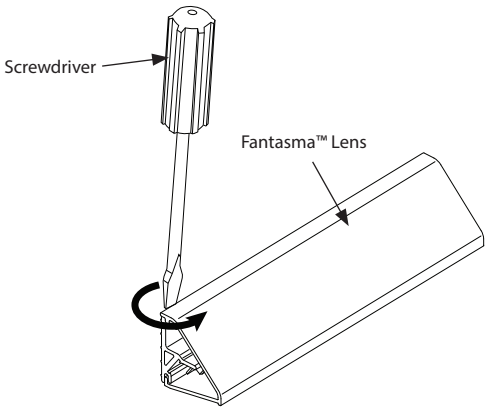
Fantasma™ Lens Removal Procedure

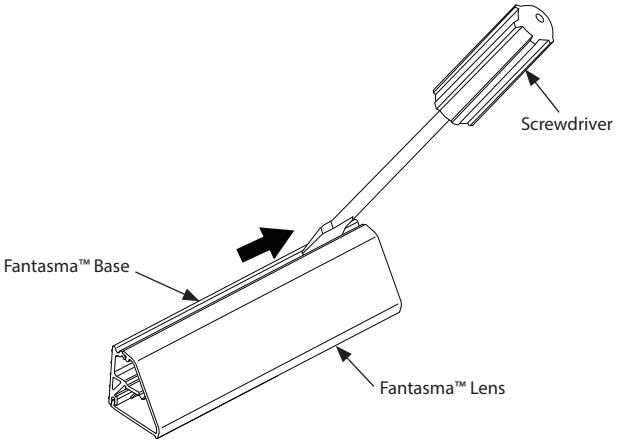
Step 1: Remove End Cap, if used.



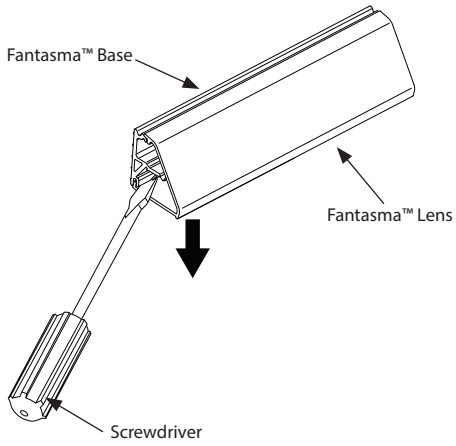
Step 2: Insert screwdriver blade behind Lens at one end of the Lens and twist screwdriver to pry end of lens away from the Base Channel. Use this method if the lens is at the end or in a middle position.



Step 3: Slide blade of screwdriver along top groove of channel to finish removing the top edge of the lens.



Step 4: Position the blade of the screwdriver between the bottom surface of the lens and the lower edge of the channel and pry in a downward motion. The Lens will pop off the lower groove of the Base Channel.

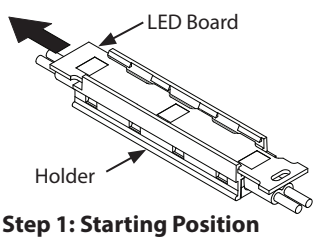


Removing and Installing the LED Board

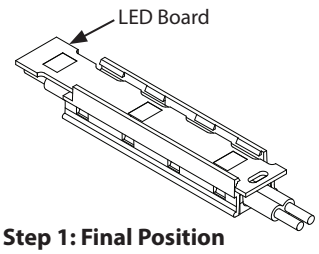
⚠ **WARNING!** Danger of Electrical Shock. Be sure power is turned off before proceeding.

Step 1: Remove Joiner Covers, Lens and Baffle.

Step 2: Slide 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 1: Starting Position

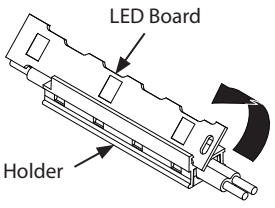


Step 1: Final Position

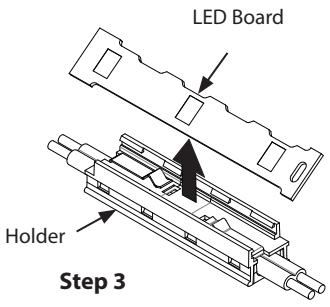
Step 3: Rotate top edge of board upward, as shown.

Step 4: Remove board.

Installation: Reverse steps to install .



Step 2



Step 3

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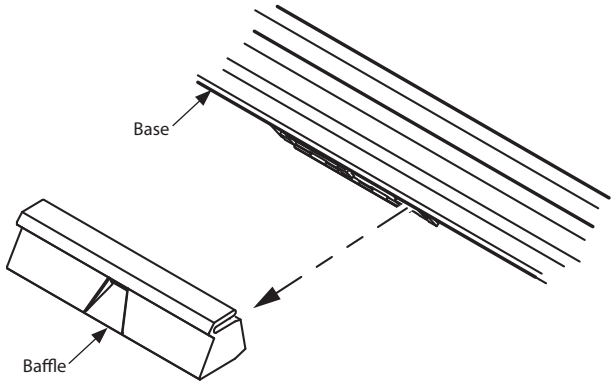
Replacing a Module Strand

Step 1: Turn off power to Fantasma Lighting System.

Step 2: Remove End Cap and Lens as previously shown.

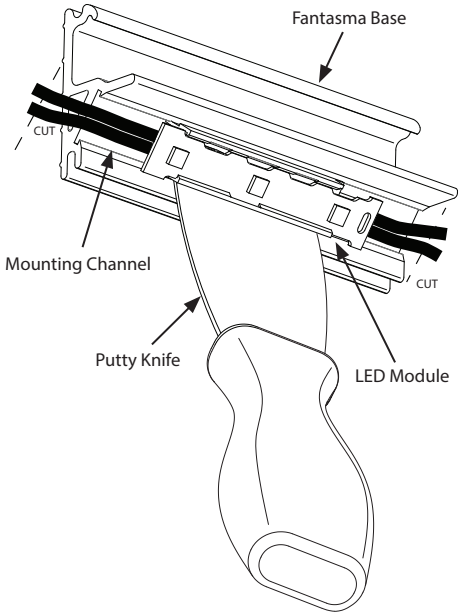
Step 3: Remove Baffle.



Step 4: Cut the wires outside of the defective light strand on either end, as shown.

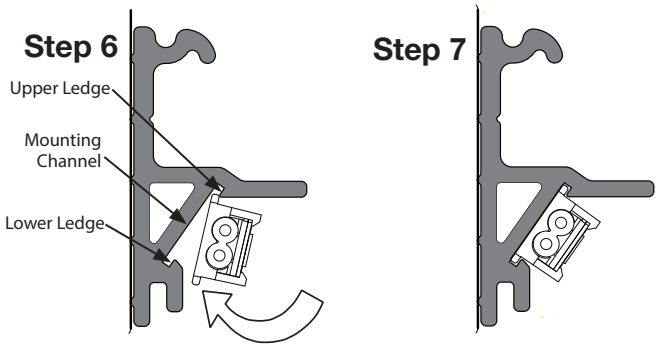
Step 5: Position a Putty Knife between the LED module and the mounting channel. Gently pry LED module up and out of the channel.

Step 6: Repeat removal procedure for all defective modules.



Step 7: Insert the upper mounting tab of the first replacement module under the top ledge of the channel opening.

Step 8: Rotate the module down until it makes contact with the lower ledge of the mounting channel. Continue to gently press the module into the channel until the lower mounting tab snaps into place under the lower ledge of the mounting channel.



Step 9: Repeat installation process for all new modules in the strand.

Step 10: Use 18-22ga Butt Connectors to connect the wiring from the replacement strand to the existing strand wiring.

Step 11: Replace any Baffles that were removed.

Step 12: Replace the Lens.

Step 13: Re-establish power to the lighting system.

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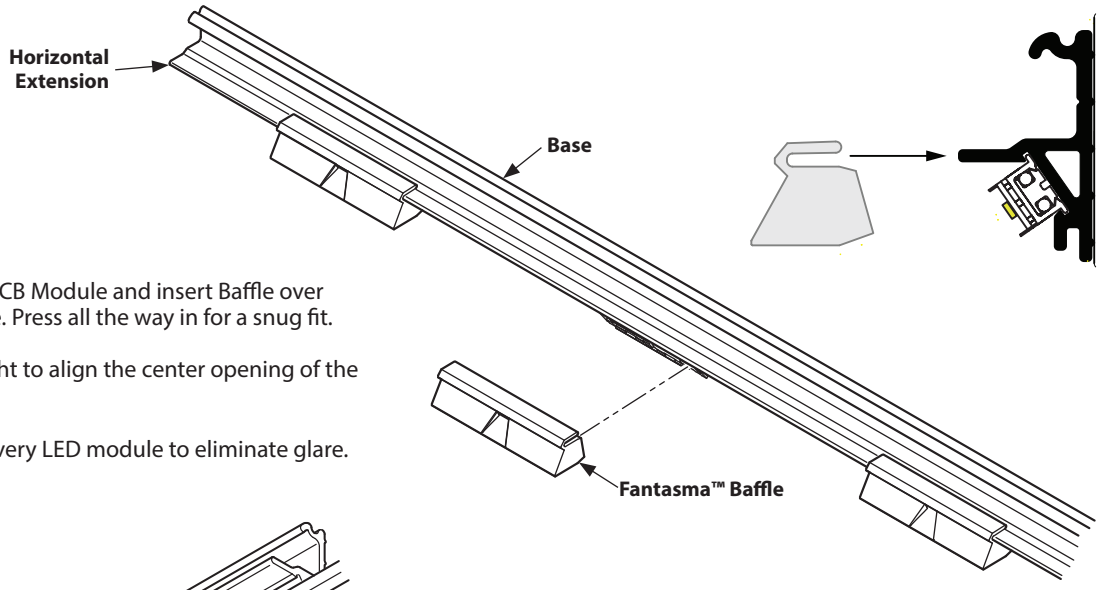
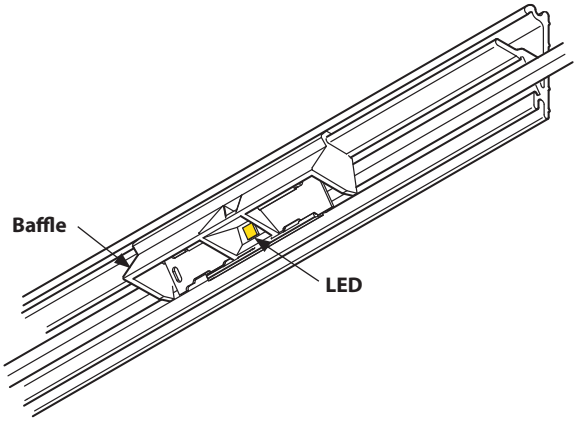
Install Fantasma™ Baffle



Step 1: Position Baffle over PCB Module and insert Baffle over Horizontal Extension on Base. Press all the way in for a snug fit.

Step 2: Slide baffle left or right to align the center opening of the Baffle with the LED.

Step 3: Install a Baffle over every LED module to eliminate glare.

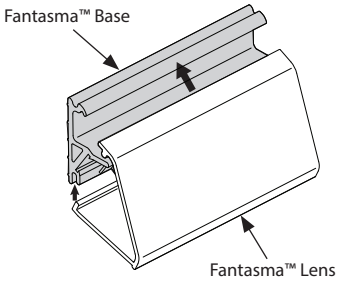


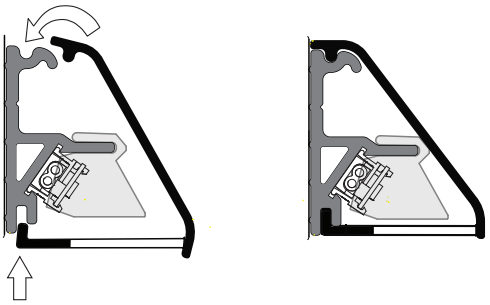
Note: The Light Baffle should not be used with Red or Amber LEDs.

Replacing Fantasma™ Wall Lens

Step 1: Insert raised Tab at lower edge of Lens into slot at bottom of Fantasma™ Base.

Step 2: Rotate Lens upward until it snaps over the ridge at the top of the Base.





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