

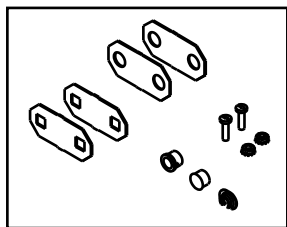


System Overview

These instructions review how to install TruGroove wall micro fixtures. Modules can be installed as individual 2ft, 2.5ft, 3ft, 3.5ft, 4ft, 5ft, 6ft, or 8ft standalone units, or they can be joined together to create continuous runs and patterns. The diagram below shows the components required to install a typical run of TruGroove wall micro fixtures.

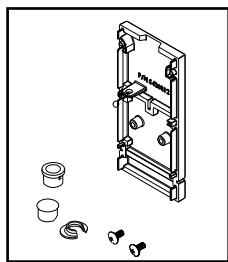
IMPORTANT: Read all instructions including fixture/sensor wiring AND mechanical details **before** beginning installation. **All mount brackets must be secured to wall structure (studs or cross-braces).**

Joiner Kit



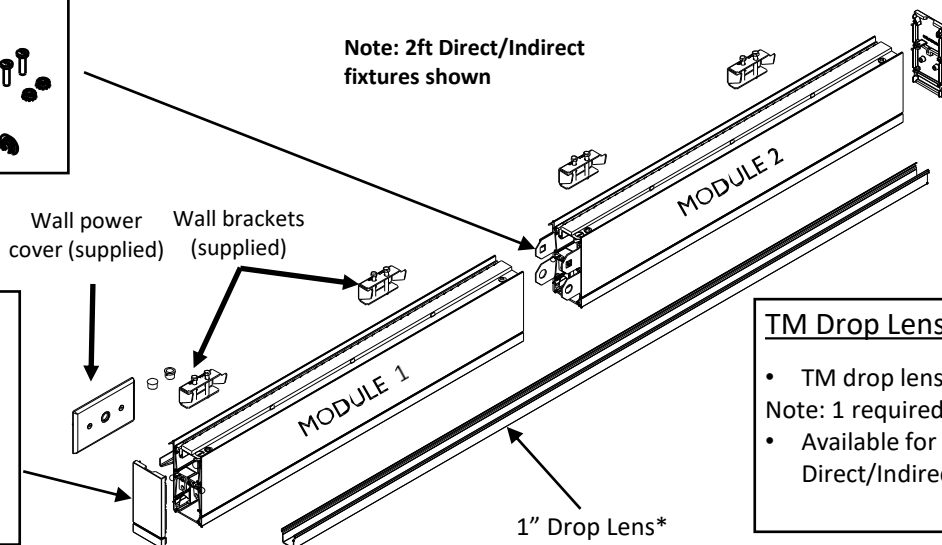
Note: 2ft Direct/Indirect fixtures shown

Endcap Kit



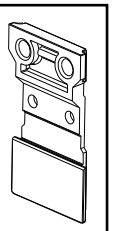
Wall power cover (supplied)

Wall brackets (supplied)



TM Drop Lens Endcap*

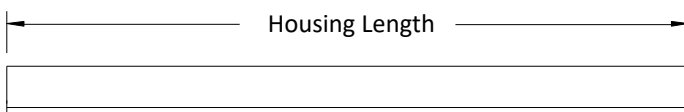
- TM drop lens endcap (x1)
- Note: 1 required for each capped end
- Available for Direct and Direct/Indirect



*Optional

Module Lengths

TruGroove wall micro fixtures come in the module lengths shown below. Add 0.25" for each endcap for accurate run length.



Length without endcaps	feet	2.0	2.5	3.0	3.5	4.0	5.0	6.0	8.0
	Inches	24.0	30.0	36.0	42.0	48.0	60.0	72.0	96.0
	mm	610	762	914	1067	1219	1524	1829	2438

Endcap Kits, Joiner Kits

See next page for endcap kits and joiner kits for Direct/ Indirect, Direct, and Indirect TruGroove wall micro fixtures.

Tools Required

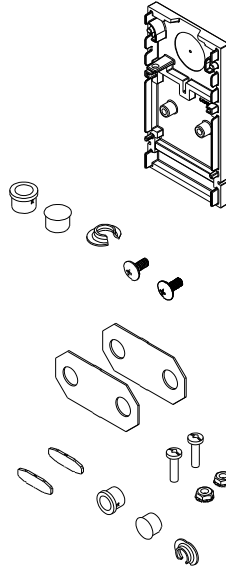
See next page for tools required for Direct/ Indirect, Direct, and Indirect TruGroove wall micro fixtures.

! ATTENTION: Install in accordance with local and national building and electric codes.

TM21 Direct

Direct Tools Required

- #2 Phillips screwdriver
- 3/8" nut driver
- Medium flat or #2 Robertson screwdriver
- Heyco PN0019(R12) crimping tool
- Small ratchet and 1/4" socket



Direct Wall Endcap Kit

- TM direct endcap (x1)
- #8-32 x 3/8" screw (x2)
- Cable strain relief (x1) (Heyco #7418)
- 1/2" bushing (x1)
- 1/2" plug (x1)

Note: 2 kits required for capped ends

Direct Wall Joint Kit

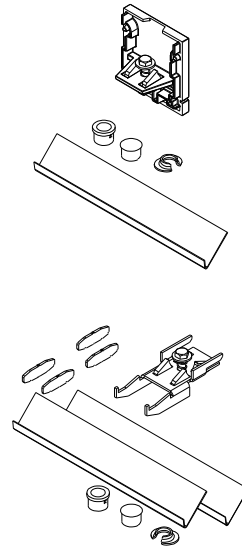
- Joiner aligners (x4)
- #10-24 x 9/16 screws (x2)
- #10-24 nuts (x2)
- Cable strain relief (x1)
- 1/2" bushing (x1)
- 1/2" plug (x1)

Note: 1 kit required per joint

TM23 Indirect

Indirect Tools Required

- 5/16" nut driver
- Small flathead screwdriver
- Heyco PN0019(R12) crimping tool



Indirect Wall Endcap Kit

- TM Indirect endcap (x1)
- Rail light block (x1)
- #8-32 x 3/8" screw (x2)
- Cable strain relief (x1) (Heyco #7418)
- 1/2" bushing (x1)
- 1/2" plug (x1)

Note: 2 kits required for capped ends

Indirect Wall Joint Kit

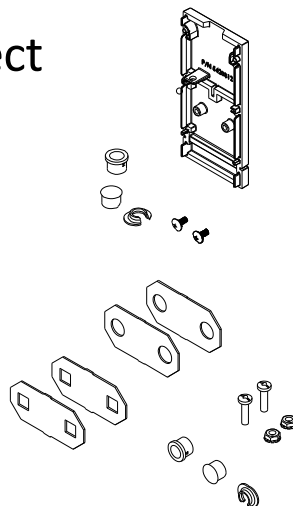
- Joiner aligners (x4)
- Joiner bracket (x1)
- Rail light block (x2)
- Cable strain relief (x1) (Heyco #7418)
- 1/2" bushing (x1)
- 1/2" plug (x1)

Note: 1 kit required per joint

TM25/TM26 Direct/ Indirect

Direct/Indirect Tools Required

- #2 Phillips screwdriver
- 3/8" nut driver
- Medium flat or #2 Robertson screwdriver
- Heyco PN0019(R12) crimping tool
- Small ratchet and 1/4" socket



Direct/Indirect Wall Endcap Kit

- TM direct/indirect endcap (x1)
- #8-32 x 3/8" screw (x2)
- Cable strain relief (x1) (Heyco #7418)
- 1/2" bushing (x1)
- 1/2" plug (x1)

Note: 2 kits required for capped ends

Direct/Indirect Wall Joint Kit

- Joiner aligners (x4)
- #10-24 x 9/16 screws (x2)
- #10-24 nuts (x2)
- Cable strain relief (x1)
- 1/2" bushing (x1)
- 1/2" plug (x1)

Note: 1 kit required per joint

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.


Warning! Shock Hazard!

IMPORTANT:
Disconnect or turn off power before attempting any installation, service or maintenance.



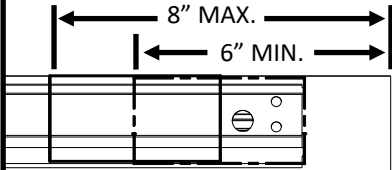
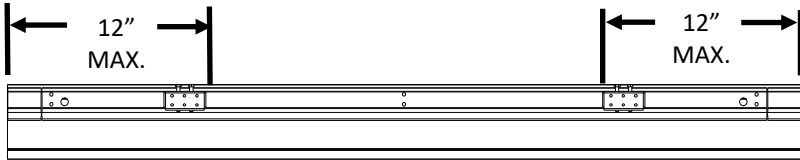
Warning! Shock Hazard!

Fixture must be connected to building ground via the provided ground wire before re-connecting to main power supply.



i Installation Notes

Utility boxes, 2"x4", supplied by others, are recommended to be installed a maximum of 8" (203mm) and a minimum of 6" (152mm) from the fixture end.

Wall brackets must be installed a maximum 12" (305mm) away from fixture ends.

! Power Label Location

For D/I symmetric and asymmetric fixtures, power labels can be found on light engine pans or under end louver modules.

For Direct and Surface symmetric and asymmetric fixtures, power labels can be found on upper pan.

! Mount Spacing

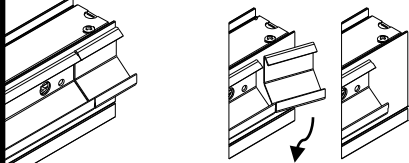
TruGroove wall micro fixture modules are designed to attach to supplied wall brackets.

Important: Use 2 brackets for modules 4ft and shorter and 3 brackets for modules 5ft and longer.

! Break Off Rail End Tabs

For TruGroove wall micro fixture modules in a standalone configuration or in the end condition, bend and snap rail end tab(s) to remove off housing.

Important: Do not remove at joints.



Joint Condition **End Condition**

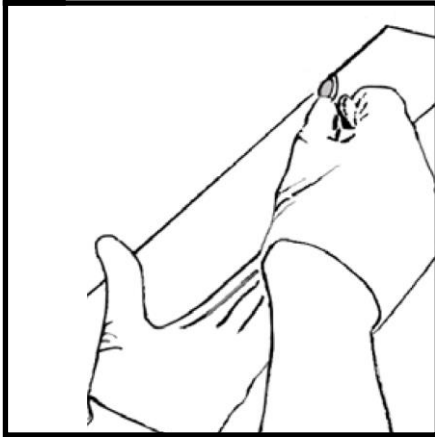
i Installation Notes

Arrange boxed fixtures on floor in specified mounting locations, based on supplied layout drawings. Remove fixtures from boxes.

! ATTENTION: Install in accordance with local and national building and electric codes.

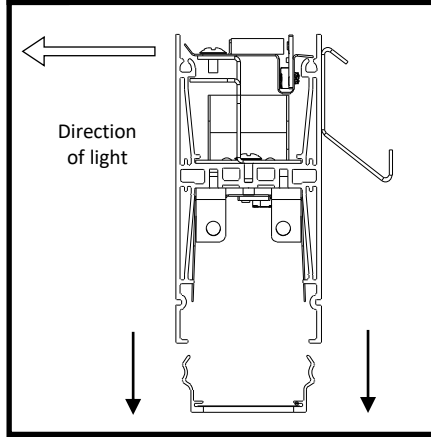
Lens Removal

1a Lens Removal



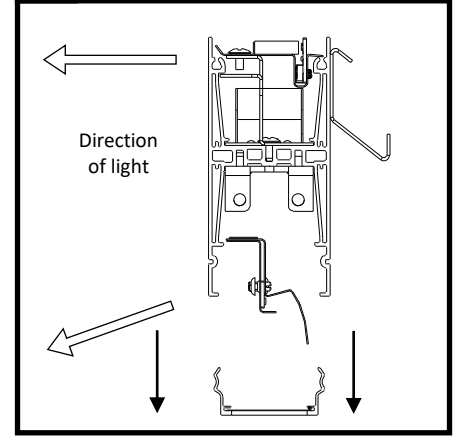
Lens Removal: To remove snap-in lens for maintenance purposes, insert a flat, smooth edged object between lens and housing (avoid screwdrivers). Twist to release pressure and remove lens.

1b Symmetric Fixture



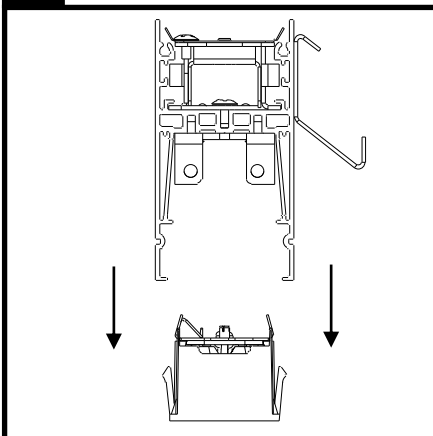
Remove lens from fixture and set aside until fixture installation is complete. Use cotton gloves to handle lenses and keep in a clean environment.
 Note: Optional Drop Lens is shipped separately.

1c Asymmetric Fixture



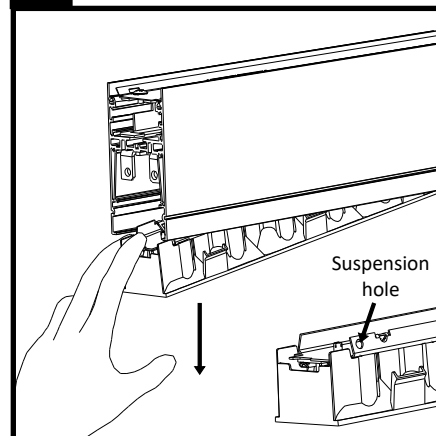
Remove lens and set aside until fixture installation is complete. Use cotton gloves to handle lenses and keep in a clean environment.
 Remove the 2 screws securing the lower light engine and temporarily support light engine in position below fixture.
DO NOT ALLOW LIGHT ENGINE TO HANG FROM ELECTRICAL WIRES.
 Save screws for re-installation later.

1d Fixture with Louvers



Remove one louver from end of fixture by pulling gently and temporarily suspend from available holes.
 Remaining louvers can be pushed to center for better access.

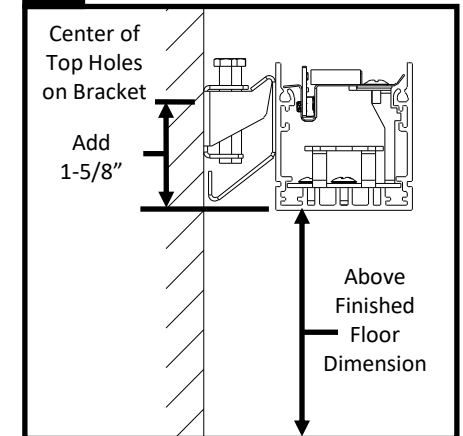
1e Fixture with Louvers



DO NOT ALLOW LOUVER TO HANG FROM ELECTRICAL WIRES.
 For louver-lens combinations, remove both louver and lens. Use cotton gloves to handle lenses and keep in a clean environment.

Install Wall Bracket

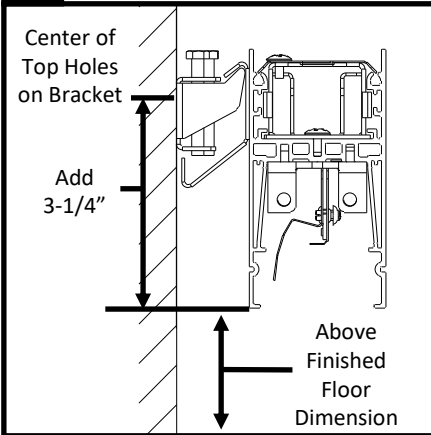
2a Indirect Cross-Section



Determine above finished floor dimension and add 1-5/8" (42mm) for indirect configuration. Draw center line through top holes on bracket, level and center wall brackets. Install to structure using appropriate hardware (by others).

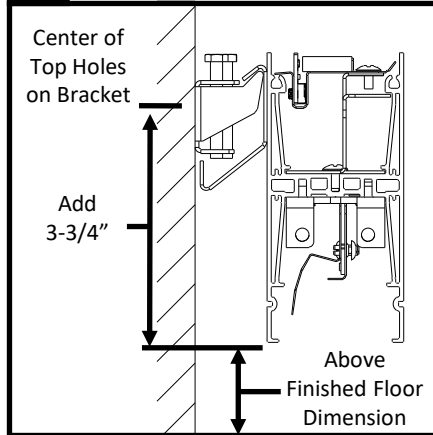
! ATTENTION: Install in accordance with local and national building and electric codes.

2b Direct Cross-Section



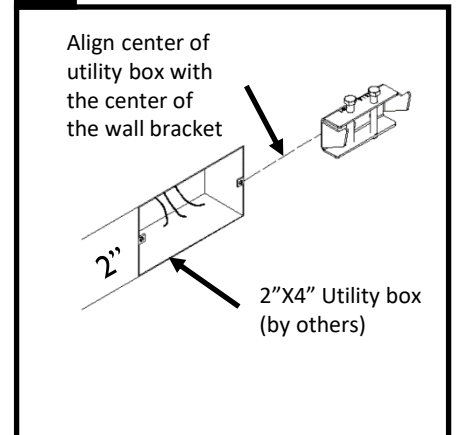
Determine above finished floor dimension and add 3-1/4" (83mm) for direct configuration. Draw center line through top holes on bracket, level and center wall brackets. Install to structure using appropriate hardware (by others).

2c Direct/Indirect Cross-Section



Determine above finished floor dimension and add 3-3/4" (96mm) for direct/indirect configuration. Draw center line through top holes on bracket, level and center wall brackets. Install to structure using appropriate hardware (by others).

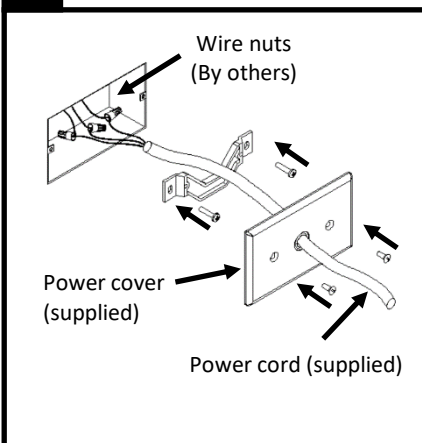
3 Utility Box Installation



Determine power location for 2"X4" utility box (by others). Prior to installation, ensure center of utility box is centered on wall bracket center line as shown.

Recommended position of utility box is 6" to 8" away from fixture end. See diagram on page 3.

4 Power Cord Installation

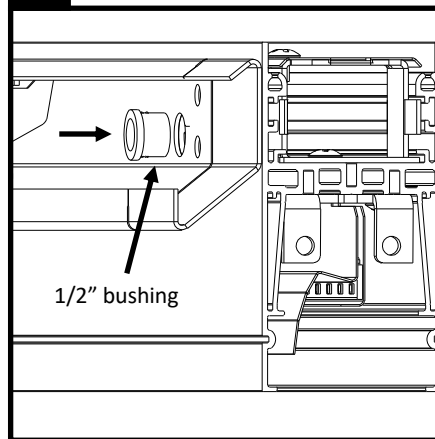


Complete wall power connections and attach supplied power cord through power cover. Attach cover to utility box.

IMPORTANT: WIRING INSTRUCTIONS

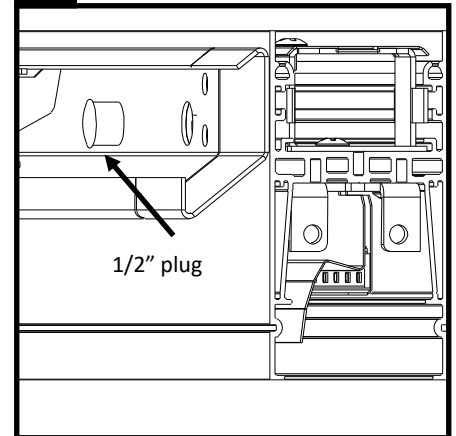
Quick wire connectors (supplied) are used for through wiring connections between fixtures. Wire nuts (by others) are used for connection of power wiring to fixture wiring.

5 Power Cord Installation



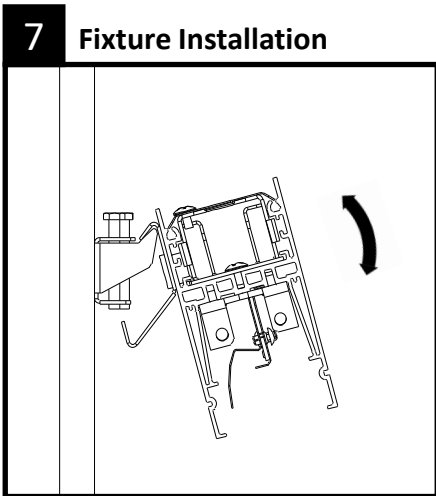
Determine power feed location on fixture. Attach supplied 1/2" bushing as shown.

6 Power Cord Installation

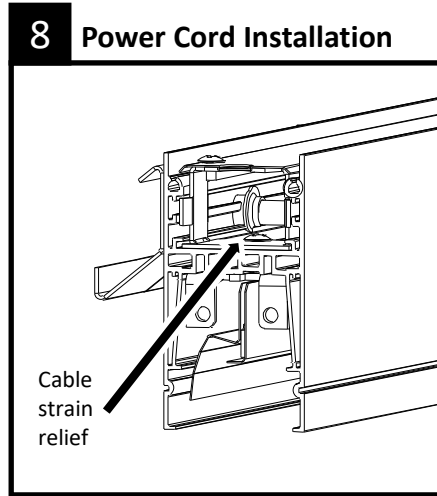


Install supplied 1/2" plug at opposite end of fixture housing.

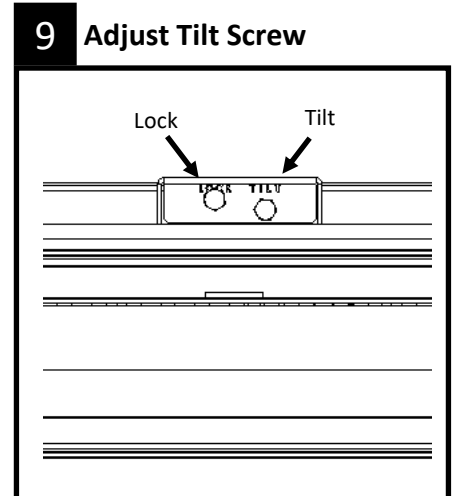
! **ATTENTION: Install in accordance with local and national building and electric codes.**



Hook fixture housing on top of wall bracket and gently rotate downwards while supporting housing. Housing should engage on all wall brackets and lock in position.

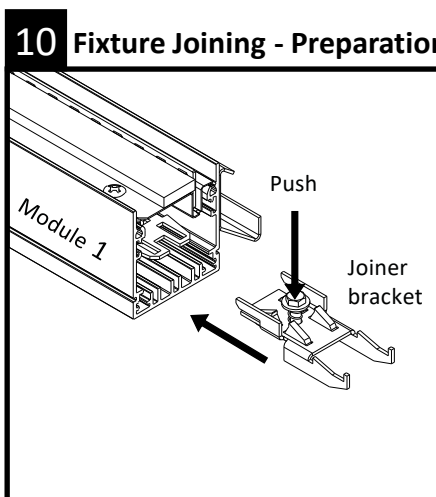


Feed power cord through 1/2" bushing installed in step 5. Crimp supplied cable strain relief to secure power cord inside fixture housing. Use a Heyco PN0019(R12) crimping tool to ensure proper installation.

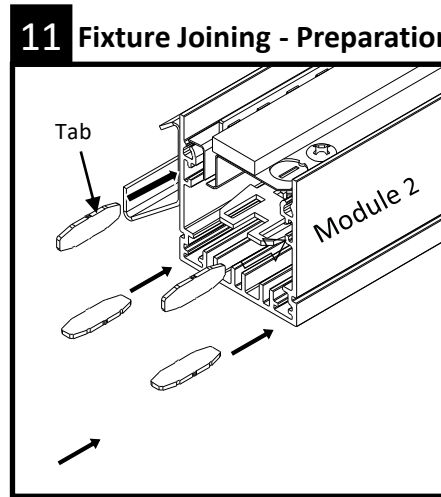


After module 1 is installed, adjust the tilt screw as required on each wall bracket to level fixture.

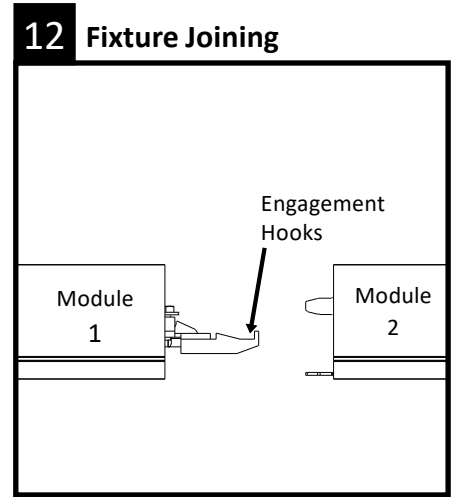
Indirect Fixture Joining – Steps 10-17



Slide joiner bracket into fixture bracket until it locks in position. Push down hex bolt and spring on joiner bracket to engage with internal bracket.



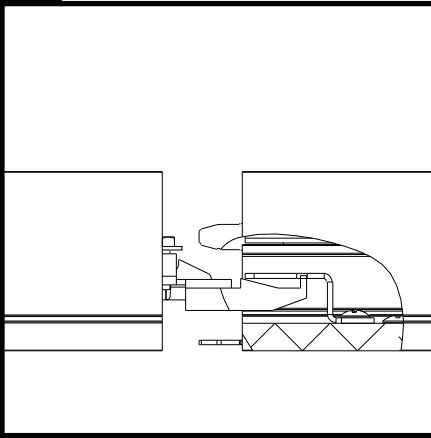
With module 2 on the ground, tap joiner aligners inside top and bottom screw chases as shown. To allow for proper joining, ensure aligner tab in the middle is fully inserted inside module 2 housing, approximately 1/4" past the middle point.



Raise module 2 to installed module 1 position.

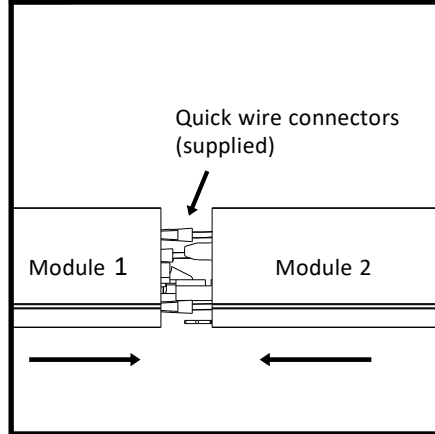
! **ATTENTION: Install in accordance with local and national building and electric codes.**

13 Fixture Joining



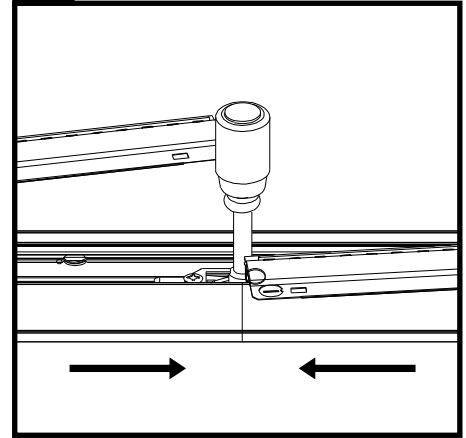
Bring modules together and engage joiner bracket in module 1 on fixture bracket in module 2. Ensure slots on module 2 fixture bracket lock on hooks of module 1 joiner bracket.

14 Wiring Connection



Bring modules close together, support module 2, complete wiring connections and tuck wires inside fixture wiring cavity. **IMPORTANT WIRING INSTRUCTIONS:** Quick wire connectors (supplied) are used for through wiring connections between fixtures. Wire nuts (by others) are used for connection of power drops wiring to fixture wiring.

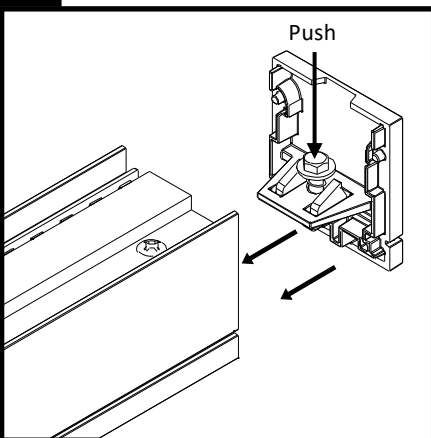
15 Fixture Joining



Ensure all connections are secure and all wires are fully tucked inside fixture wiring cavity. Slide fixture modules together gently. Insert 5/16" nut driver through 1/2" hole in top of reflector and tighten screw. Check that joint seam is tight. **NOTE:** Remove light engine pan before tightening joint.

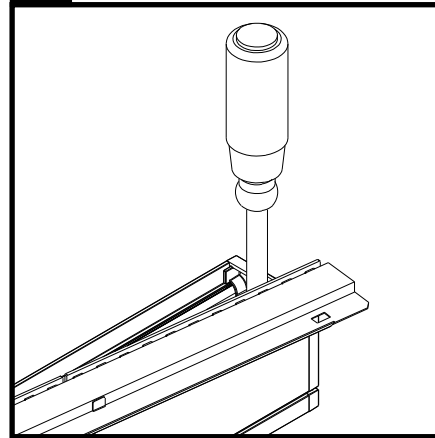
Important: Modules must be level relative to each other when joining of sections is required

16 Endcap Installation



NOTE: Remove light engine pan before installing endcap. Slide endcap towards fixture bracket until it engages and clicks in place. Push down on bolt to help engage if needed.

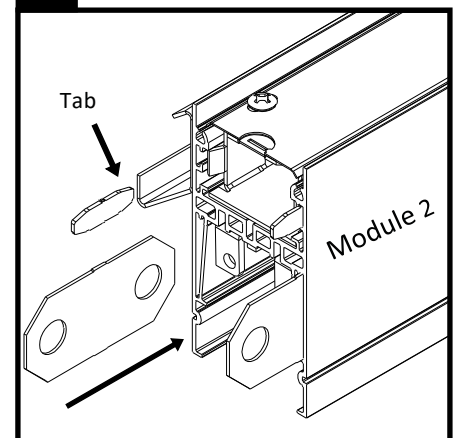
17 Endcap Installation



Insert 5/16" nut driver and tighten screw until endcap seam is tight. **NOTE: Do not overtighten.** Reinstall light engine.

Direct Fixture Joining 18-24

18 Fixture Joining - Preparation

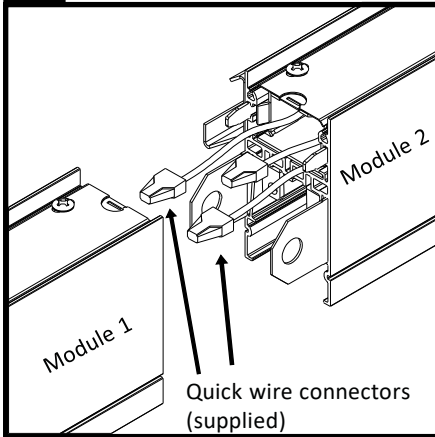


With module 2 on the ground, tap small joiner aligners inside top screw chase. Insert larger joiner aligners inside lower screw chase as shown.

IMPORTANT: To allow for proper joining, ensure each center aligner tab is fully inserted inside module 2 housing, about 1/4" past the middle point.

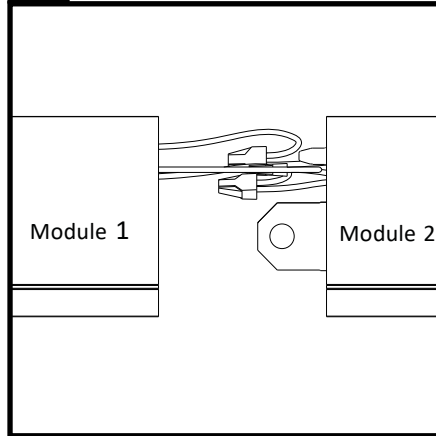
! ATTENTION: Install in accordance with local and national building and electric codes.

19 Fixture Joining - Preparation



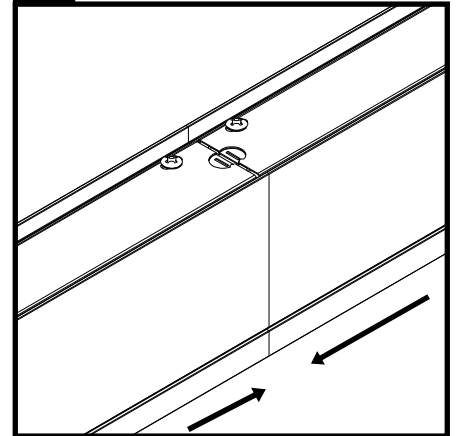
Raise module 2 to installed module 1 position. **IMPORTANT WIRING INSTRUCTIONS:** Quick wire connectors (supplied) are used for through wiring connections between fixtures. Wire nuts (by others) are used for connection of junction box wiring to fixture wiring.

20 Wiring Connection



Bring modules close together, support module 2, complete wiring connections and tuck wires inside fixture wiring cavity. Engage joiner aligners from module 2 inside module 1.

21 Fixture Joining

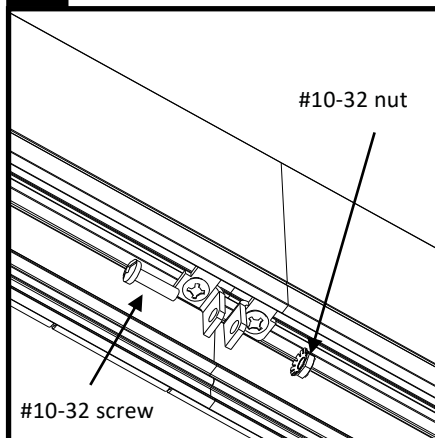


Ensure all connections are secure and all wires are fully tucked inside fixture wiring cavity. Slide fixture modules together gently. Level fixtures.



FIXT = FIXTURE MODULE

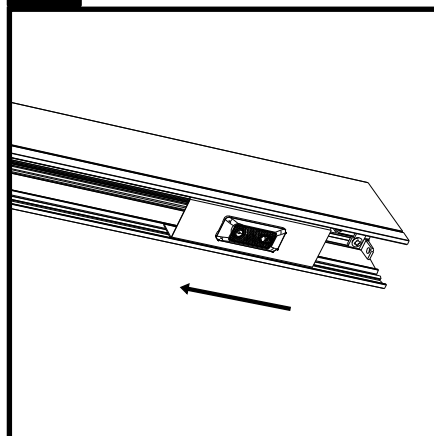
22 Fixture Joining



Secure fixture modules together using the two #10-32 machine screws and the two self-locking #10-32 nuts supplied. Tighten until joint seam is tight.

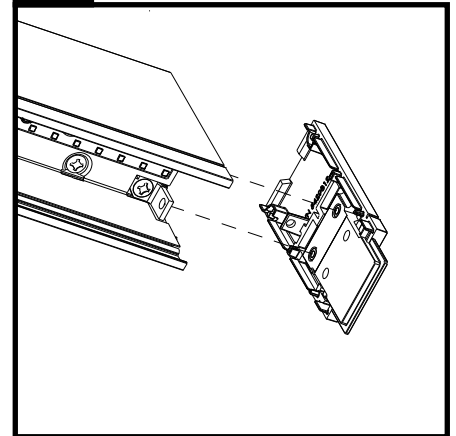
IMPORTANT: Do not overtighten.

23a Endcap with Sensor



Before installing the endcap, slide the sensor towards the center of the fixture to gain access. Proceed with endcap installation, step 24.

23b Drop Lens Endcap Installation

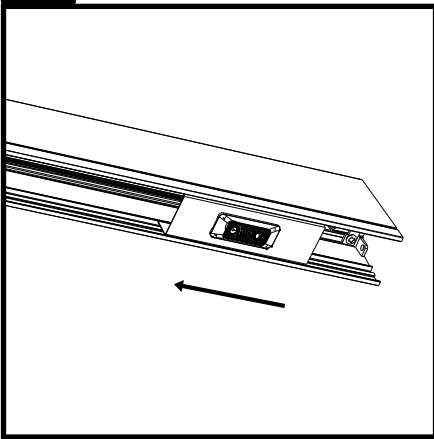


Place drop lens endcap as shown over the emboss of endcap and proceed with endcap installation of endcap, step 24.

Important: Modules must be level relative to each other when joining of sections is required

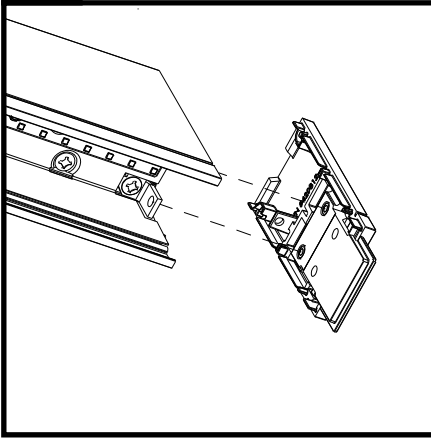
! ATTENTION: Install in accordance with local and national building and electric codes.

30a Endcap with Sensor



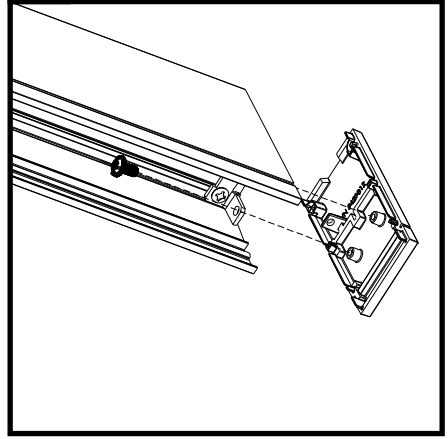
Before installing the endcap, slide the sensor towards the center of the fixture to gain access. Proceed with endcap installation, step 31.

30b Drop Lens Endcap Installation



Place drop lens endcap as shown over the emboss of endcap and proceed with endcap installation of endcap, step 31.

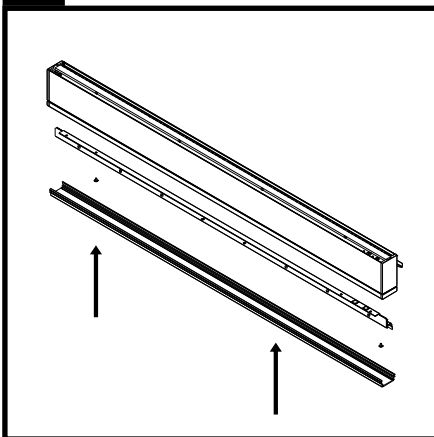
31 Endcap Installation



Slide endcap onto end of fixture module and secure from below using two #8-32 X 3/8" screws. Use ratchet to tighten screws until endcap seam is tight.

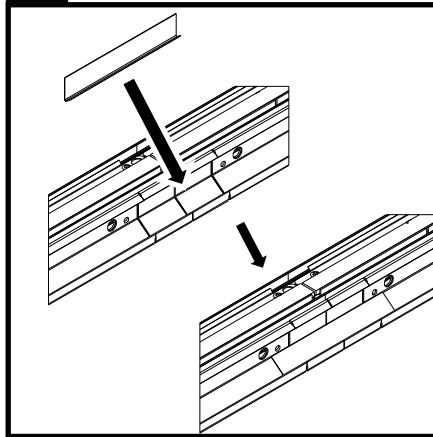
IMPORTANT: Do not overtighten.

32 Re-Install Light engine



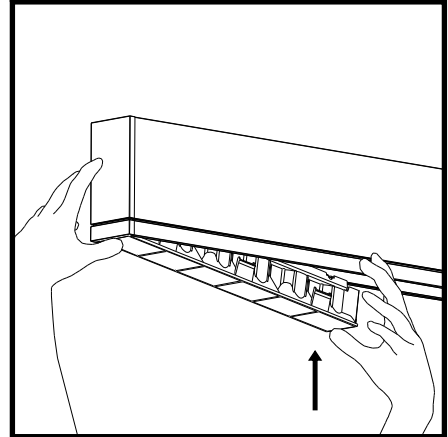
Reinstall the lower led pans with the screws provided. Ensure direction of light is as shown on layout drawings.

33 Indirect Fixtures Only

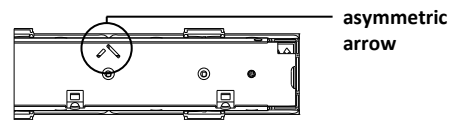


To indirect fixtures, add rail light block at joints or gaps in rail to prevent downlight. Discard any extra rail light block pieces.

34 Louver Installation



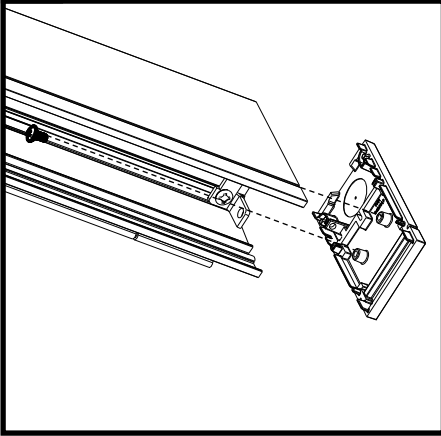
Installation Tip: For easier installation, start on one end of the louver pressing gently on side tabs. **IMPORTANT:** For asymmetric louver fixtures, orient the arrows on the louver pan to point at the label on the outside of the housing.



! **ATTENTION: Install in accordance with local and national building and electric codes.**

Direct/Indirect Fixture Joining – Steps 25-31

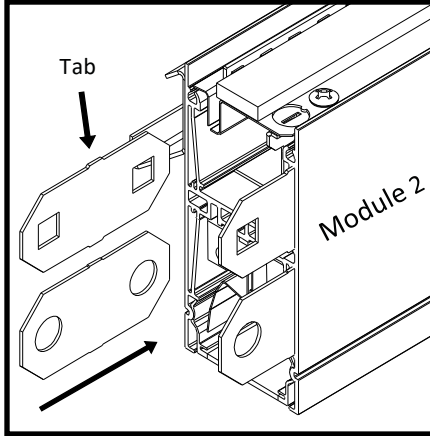
24 Endcap Installation



Slide endcap onto end of fixture module and secure from below using two #8-32 x 3/8" screws. Use ratchet to tighten screws until endcap seam is tight.

IMPORTANT: Do not overtighten.

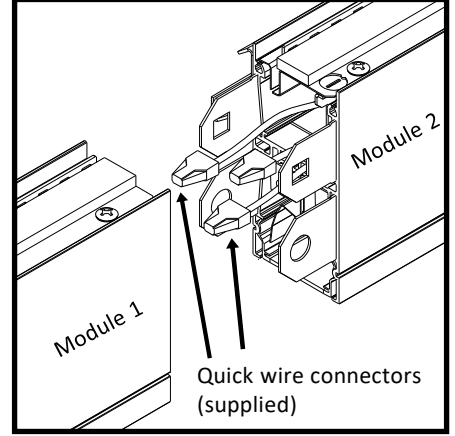
25 Fixture Joining - Preparation



With module 2 on the ground, tap joiner aligners inside top and bottom screw chases as shown.

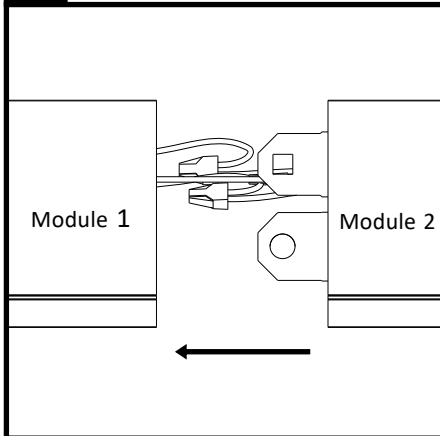
IMPORTANT: To allow for proper joining, ensure each center aligner tab is fully inserted inside module 2 housing, about 1/4" past the middle point.

26 Fixture Joining - Preparation



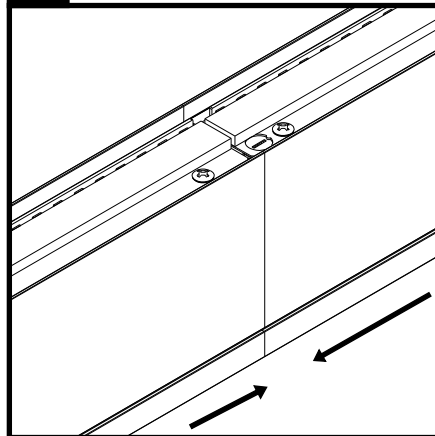
Raise module 2 to installed module 1 position. **IMPORTANT WIRING INSTRUCTIONS:** Quick wire connectors (supplied) are used for through wiring connections between fixtures. Wire nuts (by others) are used for connection of power junction box wiring to fixture wiring.

27 Wiring Connection



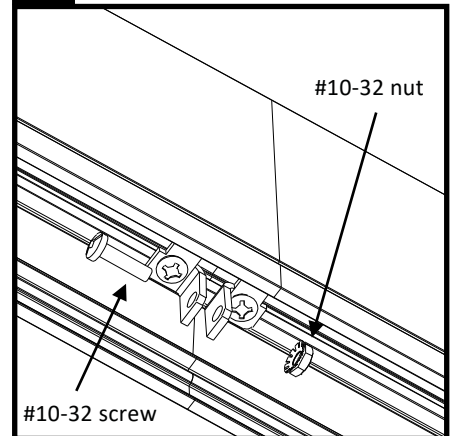
Bring modules close together, support module 2, complete wiring connections and tuck wires inside fixture wiring cavity. Engage joiner aligners from module 2 inside module 1.

28 Fixture Joining



Ensure all connections are secure and all wires are fully tucked inside fixture wiring cavity. Slide fixture modules together gently. Level fixtures.

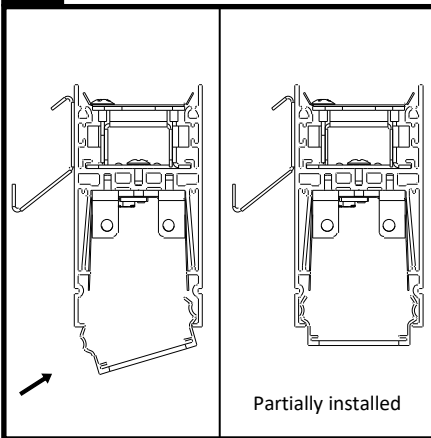
29 Fixture Joining



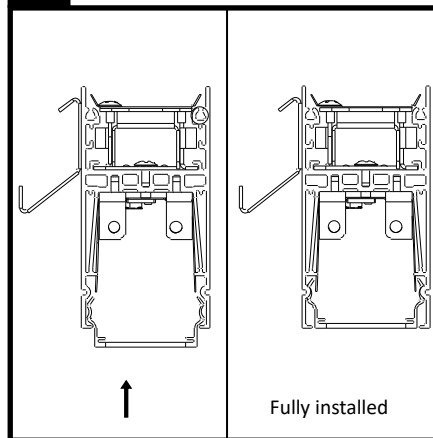
Secure fixture modules together using the two #10-32 machine screws and the two Self-locking #10-32 nuts supplied. Tighten until joint seam is tight.

IMPORTANT: Do not overtighten.

! **ATTENTION: Install in accordance with local and national building and electric codes.**

35 Fixture Lens Installation

Install lenses removed in step 1.
 Installation Tip: For easier installation, start at a housing end or a joint by placing lens at an angle and squeezing in slightly from the other side to guide inside housing.

36 Fixture Lens Installation

Once lens is positioned inside housing, starting on one end or joint, push upwards gently and work outward to complete the run.
Note: Flush lens and drop lens are installed the same way. Flush lens is shown for reference.

37 Finishing

- Ensure all fixtures are level and in line with each other.
- If horizontal leveling is required, adjust tilt screw shown in step 9, level fixture and re-tighten screw. Lock all wall bracket screws shown in step 9 to secure fixtures to wall brackets.
- Check that all joint or endcap screws are installed, and all seams are tight.
- Use spare 1/2" plug(s) provided to close any open 1/2" electrical knockout location(s).
- Install lenses (if applicable).



ATTENTION: Install in accordance with local and national building and electric codes.

PRF/PRA Interact Pro Foundation/Advance Install & Setup

**not for Enterprise or Signify Commissioned projects*

To configure a lighting system with Interact sensors or RF nodes;

- Ensure the luminaires are installed and powered on.
- Download the Interact Pro app from either Apple's App Store (for iOS) or Google's Play Store.

Download the Interact Pro app



- Register by tapping **Request access** on the login screen in the app.
- **Click** or **scan** the QR codes below to view instructions for setup.

Interact Pro Foundation Quick Start Guide



Interact Pro Advanced Quick Start Guide



Interact Pro Documentation



Interact Pro Setup Video



Contact Us 1-800-555-0050



! ATTENTION: Install in accordance with local and national building and electric codes.

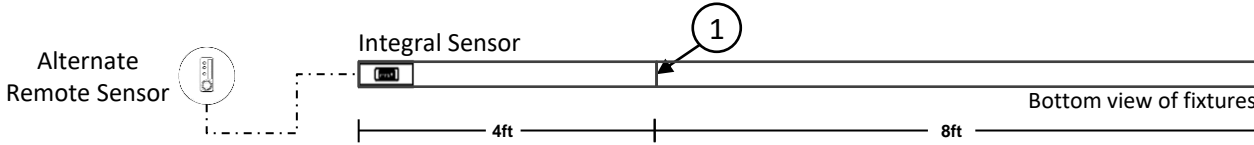
Sensors in Rows

Single Sensor Controlling Whole Row

1. Purple & brown (or purple & grey/pink) control wires **MUST** be connected between fixtures.

Note:

- A maximum of 8 drivers can be wired to one sensor; confirm fixture driver count with factory.

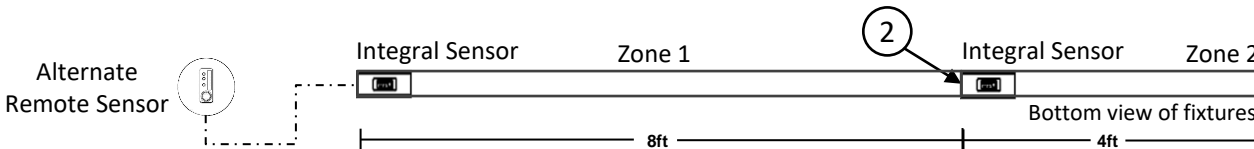


Multiple Sensors Controlling Separate Zones in a Row

2. Purple & brown (or purple & grey/pink) control wires **MUST NOT** be connected between zones.

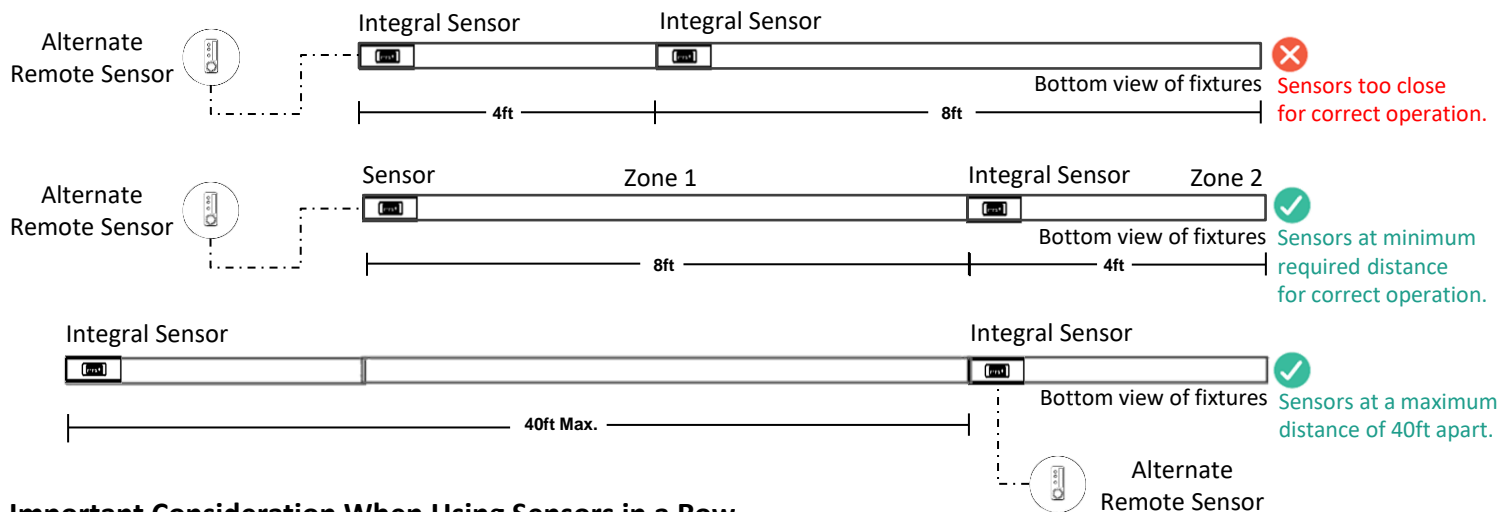
Notes:

- A maximum of 8 drivers can be wired to one sensor; confirm fixture driver count with factory.
- Only one sensor is allowed on a wired zone. (Sensors can be paired together wirelessly via a mobile app).



Sensor Spacing

- For correct operation, sensors should be placed a minimum distance of 8ft apart.
- Wireless sensors should be placed no further than 40ft apart for good wireless signal connection.



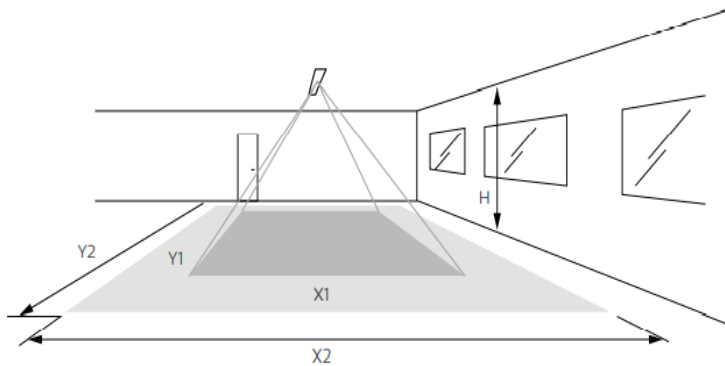
Important Consideration When Using Sensors in a Row

- For fixtures with wireless sensors (CS, SB or RA options):
DO NOT connect fixture purple & brown (or purple & grey/pink) control wires to an external dimming switch. Fixture mains wiring should not be connected to a circuit with an external on/off switch.
- For best aesthetic condition, place sensors at ends of row only so as not to break the continuous lens.
- For better occupancy coverage in longer rows, sensors may be placed mid run, but keep in mind this will break the continuous lens into discrete sections. Alternatively, remote sensor may be used, note the same wiring rules will apply.

! ATTENTION: Install in accordance with national and local building and electrical codes.

Occupancy Sensor Coverage:

Note: Longer dimension of detection area (Y1, Y2) is parallel to longer dimension of the luminaire.



Height	Minor movement		Major movement	
h	X1	Y1	X2	Y2
2.4 m (7.9 ft)	1.9 m (6.2 ft)	2.9 m (9.5 ft)	2.9 m (9.5 ft)	4.3 m (14.1 ft)
3 m (9.8 ft)	2.4 m (7.9 ft)	3.6 m (11.8 ft)	3.6 m (11.8 ft)	5.4 m (17.7 ft)

The detection area for the movement sensor can be roughly divided into two parts:

- Minor movement (person moving $\leq 3\text{ft/s}$ or 0.9m/s).
- Major movement (person moving $\geq 3\text{ft/s}$ or 0.9m/s).

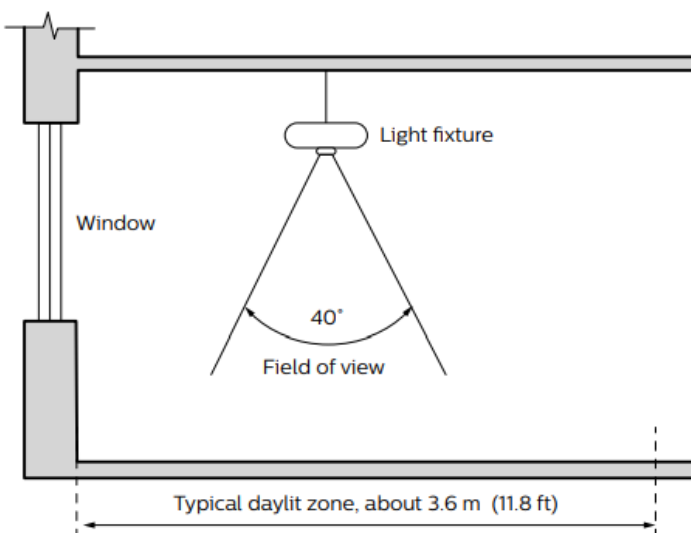
Daylight sensor

The light sensor measures the total amount of light in a circular field of approximately 80% of the PIR detection area. The following aspects should be observed during installation:

- Minimum distance from the window $\geq 2\text{ft}$ (0.6m).
- Prevent light reflections from outside entering the sensor (for example sunlight reflection on a car hood) as this will lead to incorrect light regulation.

As a guideline the formula $0.72 \times H$ can be used to calculate the minimum distance between the window and sensor whereby H is the height from the bottom of the window to the sensor.

Photosensor spatial response



! ATTENTION: Install in accordance with local and national building and electric codes.

