



by Signify

Linear

TruGroove Recessed Micro

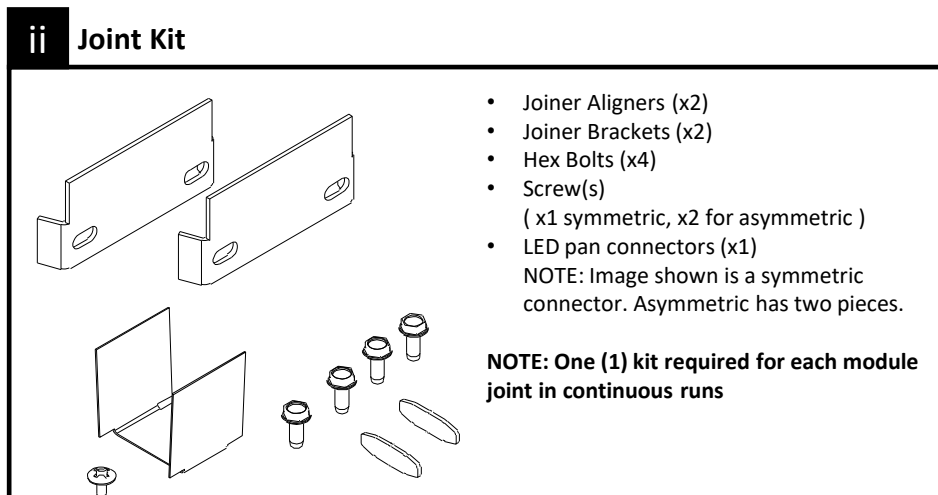
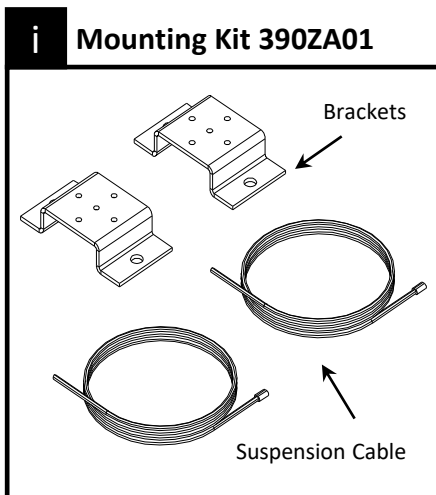
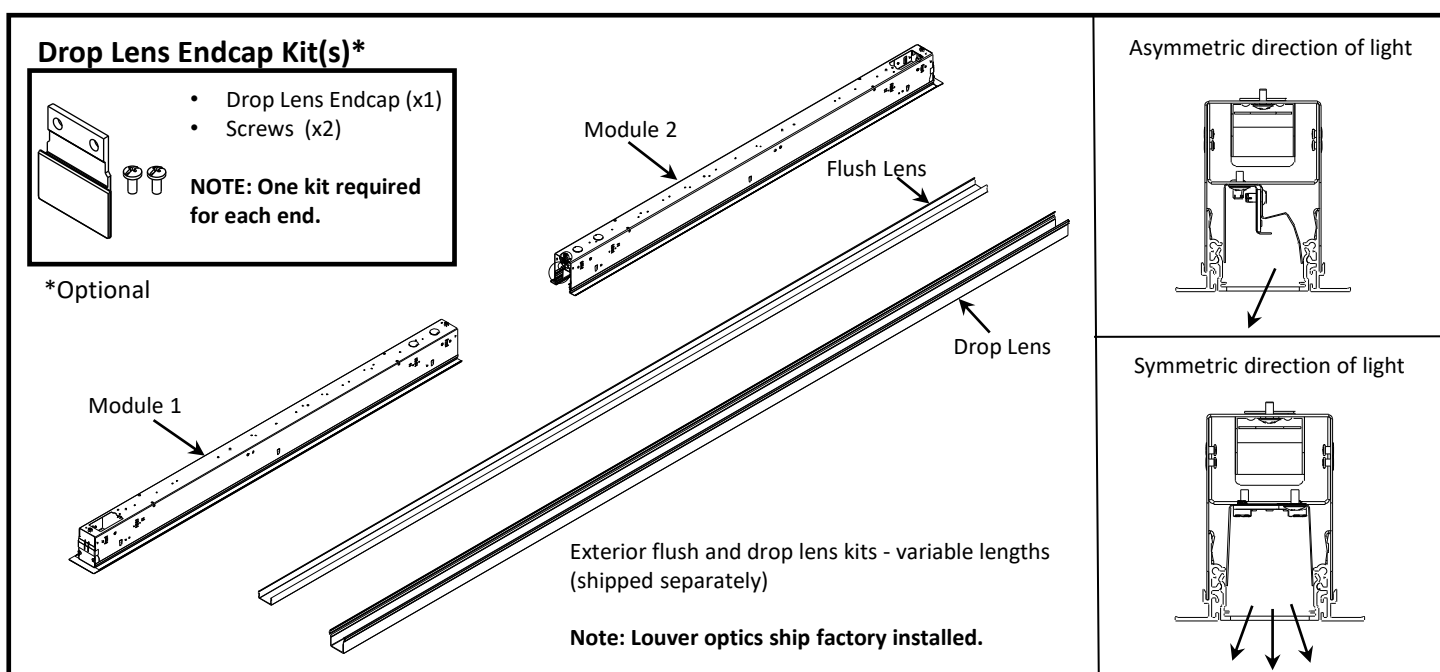
ID-23 Drywall Trim

System Overview

These instructions review how to install drywall trim versions of TruGroove recessed micro fixtures. Please refer to layout drawings supplied by Ledalite in conjunction with these installation instructions. The graphic below shows the components required to install a run of TruGroove recessed micro fixtures in drywall ceilings.



IMPORTANT: Read all instructions including fixture/sensor wiring AND mechanical details **before** beginning installation.



Tools required: Phillips screwdriver, flat screwdriver, 5/16" nut driver.

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

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.

Important Notes

Installation Notes

- 'C' Channels (or equivalent) must be properly braced to ensure accuracy of cut-out in drywall.
- Use appropriate tools to outline specified dimensions of ceiling cut-out to ensure straightness of cutting.
- Lens will not insert properly if fixture trim has mud or paint build-up.

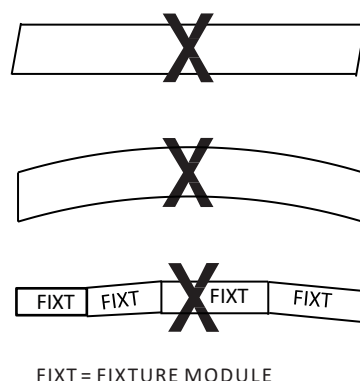
Warning, Shock Hazard

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

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



Avoid



The straightness and accuracy of the cut-out in the drywall is crucial in ensuring proper fit for the fixture.

NOTE: TruGroove recessed micro modules are designed for installation after ceiling construction.

Prepare Ceiling: Standalone Units

1 Determine Locations

- Determine fixture location and fixture type. Refer to figure A for cut-out length and mount locations. Install mount brackets and suspension cables as shown on page 3.
- Determine power feed location(s) - refer to figure A. Install power feeds as required and drop below installed ceiling height.
- Build ceiling frame around fixture cutout to 2-11/16" to 2-3/4" width as shown in figure A.

A Ceiling Cut-out Details

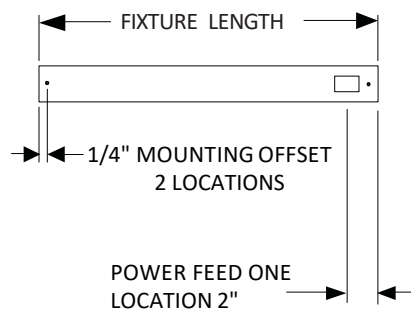
Cut-out Length:

2ft	23 - 7/8" + 1/4"	3ft	35 - 7/8" + 1/4"
4ft	47 - 3/4" + 1/4"	5ft	59 - 7/8" + 1/4"
6ft	71 - 5/8" + 1/4"	8ft	95 - 5/8" + 1/4"



Cutout Width:

MIN 2-11/16"
MAX 2-3/4"



Important: The cut-out **MUST** fall within the specified tolerances.

Important: For 2ft standalone fixtures, end framing members must be installed 1" beyond ceiling cut-out.

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

Prepare Ceiling: Continuous Runs

2 Determine Locations

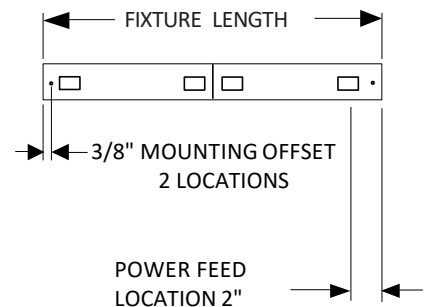
- Determine fixture location and fixture type. Refer to figure B for mount locations and cut-out length. Install mount brackets and suspension cables as shown below.
- Determine power feed location(s) - refer to layout drawings. Install power feeds as required and drop below installed ceiling height.
- Build ceiling frame around fixture cut-out to 2-11/16" to 2-3/4" width as shown in figure B. Refer to layout drawings for ceiling frame length.

B Ceiling Cut-out Details



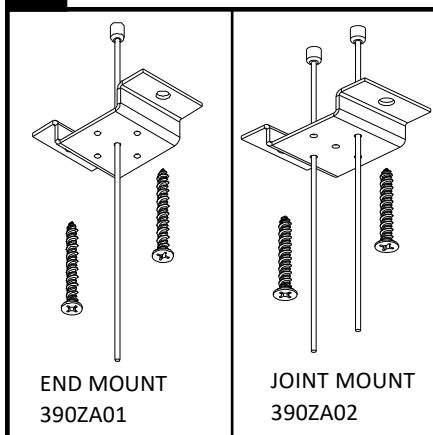
Cutout Width: **MIN 2-11/16"**
MAX 2-3/4"

For continuous run fixtures, the cut-out in the drywall ceiling should be the same size as the overall fixture run length indicated on the layout drawings + 1/4".



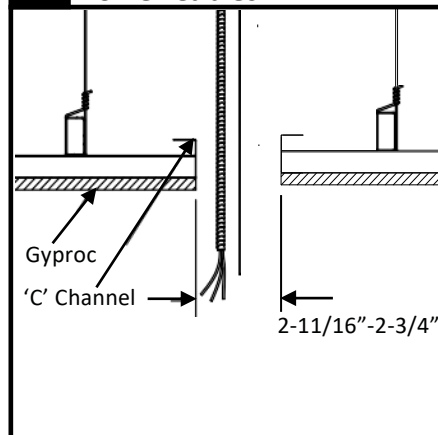
Installation Preparation

3 Mount Kit



Install mounting brackets, suspension cables and power feed(s) at required locations. Mounting hardware (screws/ fasteners) are supplied by others. Maximum screw size # 10 (.190").

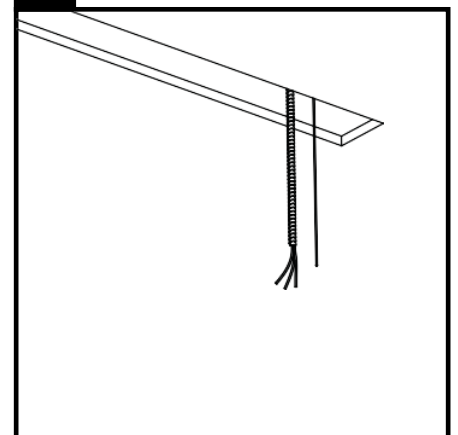
4 Install Mounts and Power Cables



Install a 'C' channel perimeter around the ceiling cutout.

Important: See ceiling cut-out details on page 2 & 3.

5 Install Drywall Ceiling



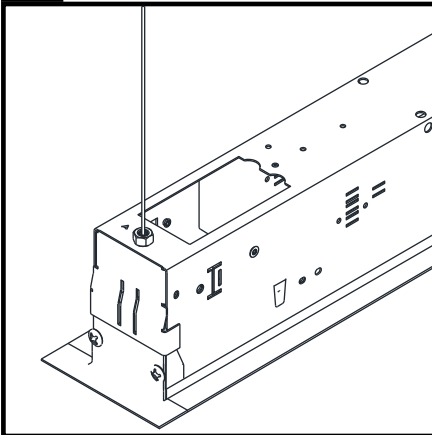
Install drywall ceiling and cut required opening as shown in **figure A** on page 2 or **figure B** on page 3.

6 Prepare Fixtures

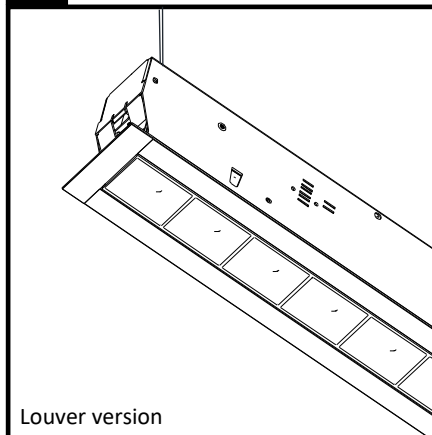
Arrange boxed fixtures on floor in specified mounting locations, based on supplied layout drawings. Match up each fixture based on the spec tag and ID number labelled on each fixture box for the specified run.



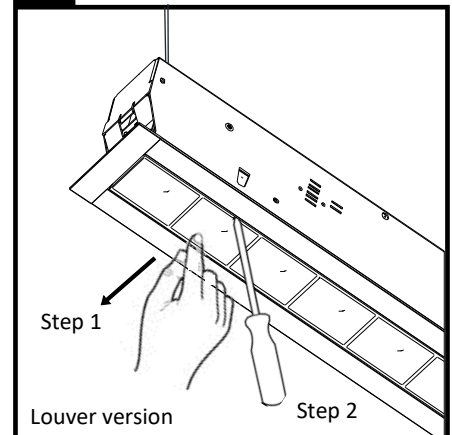
ATTENTION: Install in accordance with local and national building and electric codes.

7 Insert Aircraft Cable

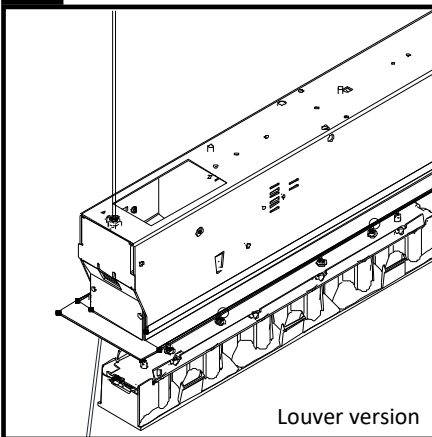
Suspend each module by inserting the aircraft cables through the grippers on top of the housing.

7a Insert Aircraft Cable

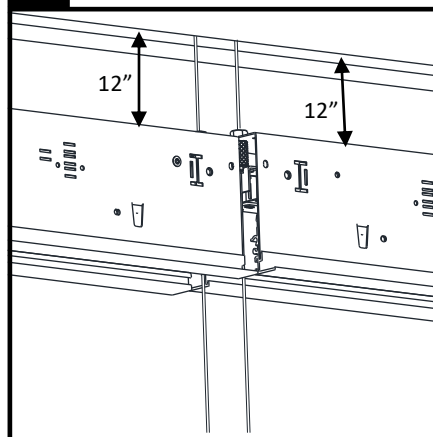
Louver version
Before continuing, louvers at fixture ends need to be temporarily removed for suspension cable and gripper access.

7b Remove Louver At End

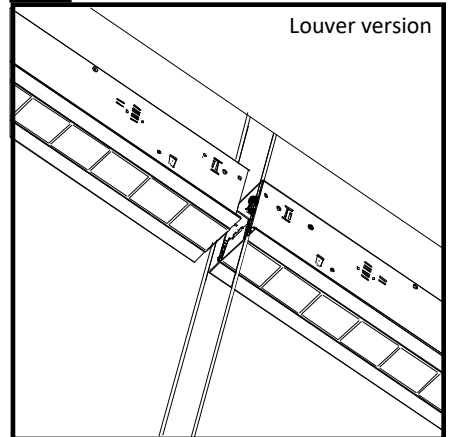
Louver version
To remove louver, first push louver edge away with one hand, then gently pry opposite side with a thin, flat screwdriver.

7c Remove Louver – At End

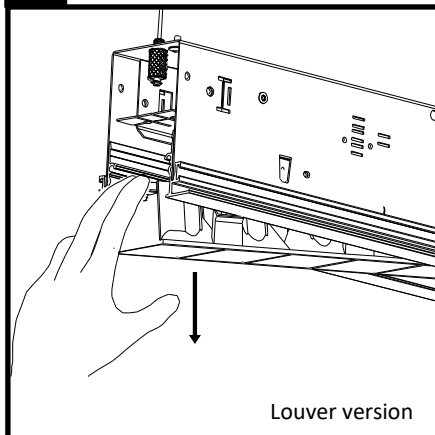
Louver version
Temporarily use tape to suspend louver just below fixture. **DO NOT ALLOW LOUVER TO HANG FROM ELECTRICAL WIRES.**

8 Raise Fixture

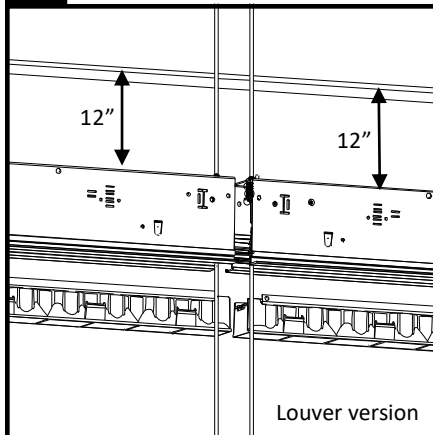
Gradually lift each module to approximately 12 inches below the ceiling.

8a Raise Fixture

Louver version
Gradually lift each module to approximately 12 inches below the ceiling.

8b Louver Removal At Joint

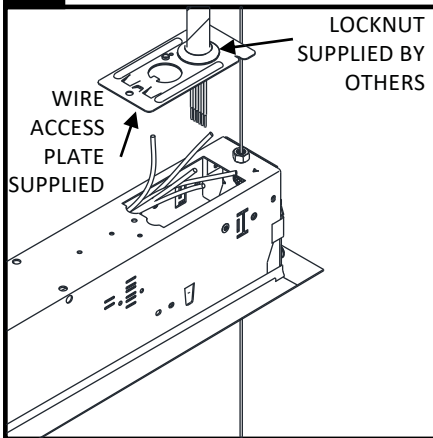
Louver version
To remove louver at a joint, gently pull louver down from open end.

8c Raise Fixture

Louver version
Temporarily use tape to suspend louver just below fixture. **DO NOT ALLOW LOUVER TO HANG FROM ELECTRICAL WIRES.**

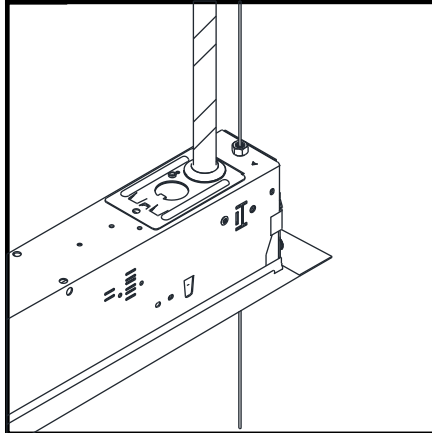
! **ATTENTION: Install in accordance with local and national building and electric codes.**

9 Remove Cover and Connect Power Wire



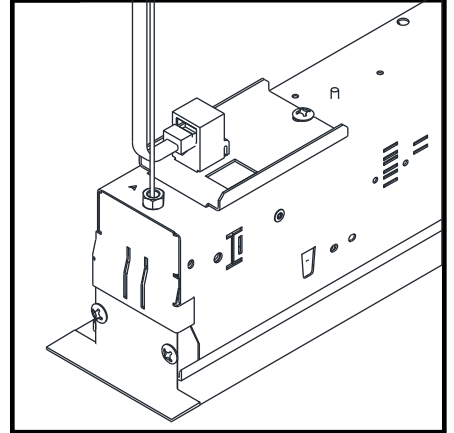
At power location(s), feed power wires through supplied wire access plate. Complete all wiring connections using wire nuts supplied by others.

10 Install Wire Cover



Install wire cover and lock.

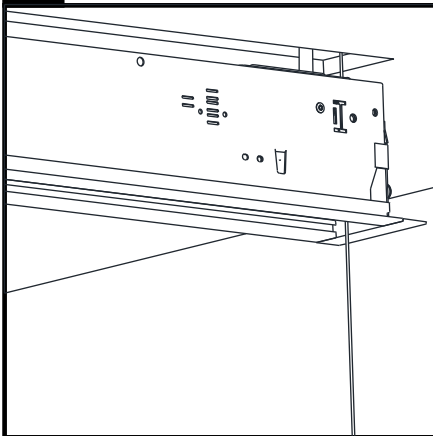
10a Install CAT6 Cable for POE Option



Insert CAT6 Cable at desired location.



11 Raise and Level Fixtures

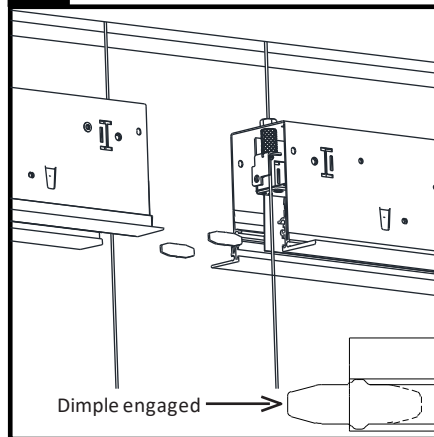


Once the power connections are complete, pull the aircraft cable to raise all modules to just below the ceiling.

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

NOTE: For Standalone fixtures skip to Step 17

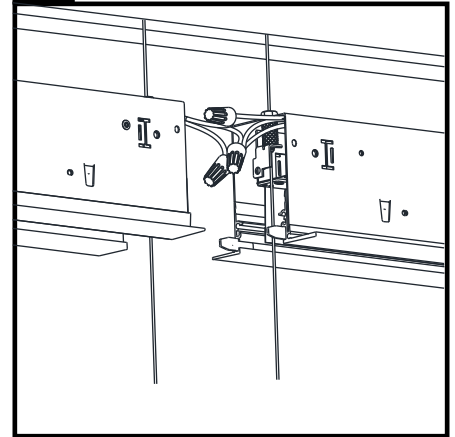
12 Install Joiner Aligners



At joint location(s), gently tap provided joiner aligners inside one module only. Two joiner aligners are required for each joint.

Important: To insert aligners, tap gently with a hammer until half is inserted into the joiner channel. Be sure to engage the dimple as shown.

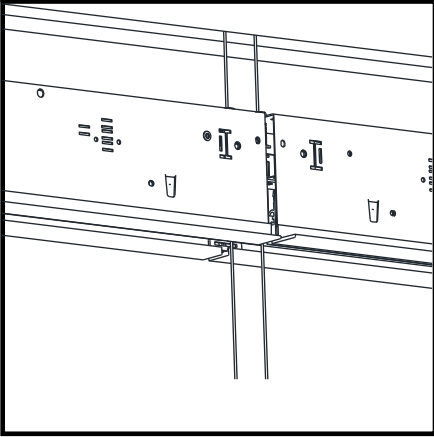
13 Complete Wiring Connections



Complete module to module wiring connections and carefully tuck all wires inside the upper wiring cavity.

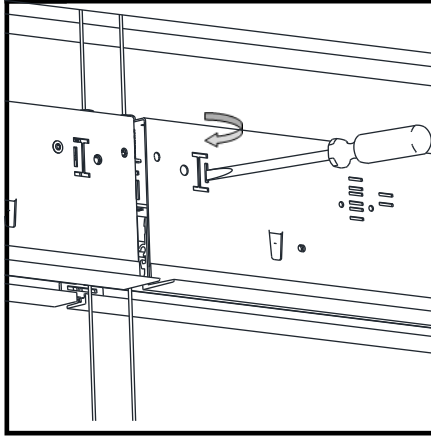
Important: Ensure that the fixture to fixture ground wire is connected.

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

14 Join Individual Modules

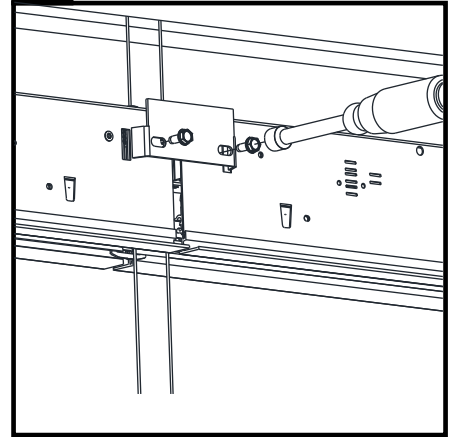
Gently slide housing modules together, ensuring joiner aligners are engaged inside the trim in the adjacent module.

Important: Joiner aligners must be fully inserted to provide proper section alignment.

15 Open Slots for Joiner Bracket

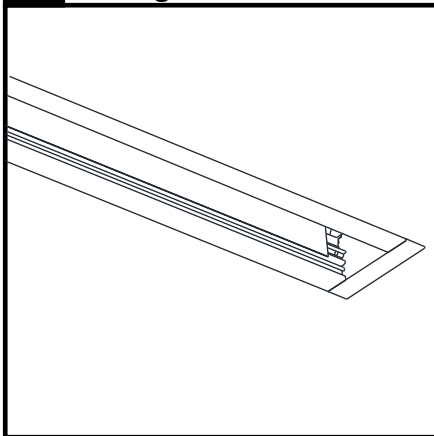
Snap off the safety cover on joiner bracket slots with a flat head screwdriver.

This only needs to be done on ends that require joining.

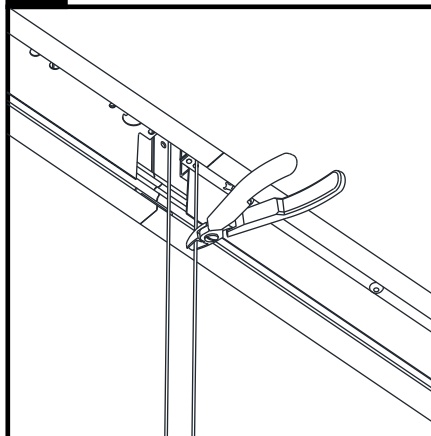
16 Install Joiner Brackets

Install joiner brackets on each side of the housing using supplied hardware.

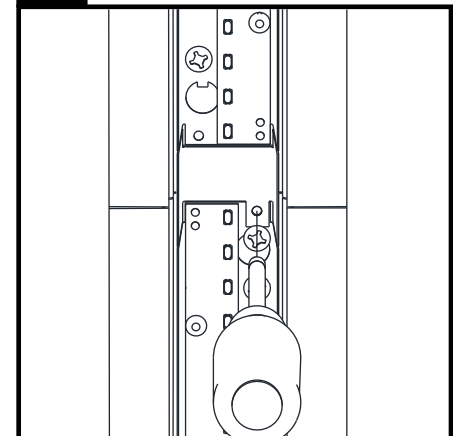
Important: Hand tighten bracket screws while supporting the housing on the opposite side. Gradually alternate sides while tightening. Do not over tighten.

17 Raise Fixture(s) into Ceiling Cut-out

Important: For continuous row modules, start at one end and gradually raise each module up one inch at a time. Repeat process until housing is fully recessed and housing trim touches drywall ceiling. Do not stress the joint connection by tilting the module, as damage can occur.

18 Trim Excess Cable

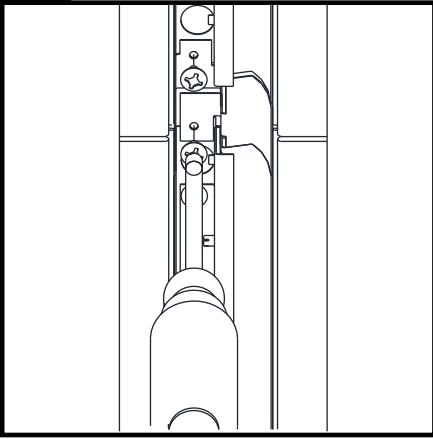
Trim suspension cable approximately 9 inches below the ceiling level. Tuck all excess cable inside the upper wiring cavity.

19a Led Pan Joiner - Symmetric

Mount the LED pan connector with the supplied screw in the joiner kit.

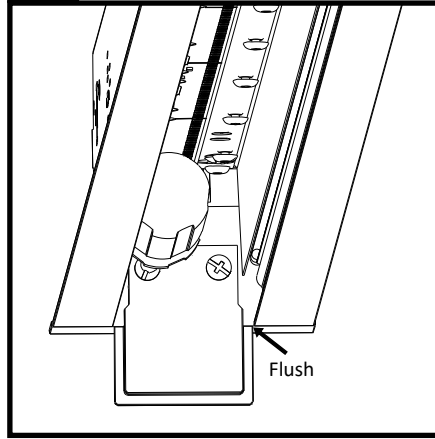
Note: this step is not required for louvers.

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

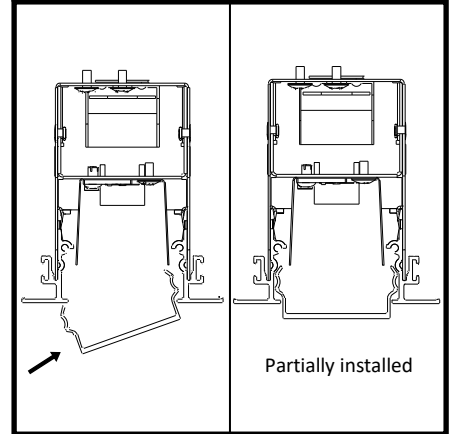
19b Led Pan Joiner - Asymmetric

Mount the LED pan connector with the supplied screw in the joiner kit. There are two pieces for the asymmetric fixture.

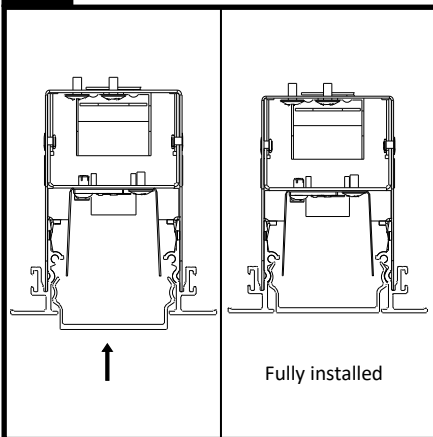
Note: This step is not required for louvers.

20 Fixture Lens Installation

Push up drop lens endcap flush to bottom of trim while **hand tightening** with supplied screws.(8-18 x 3/8 Pan)

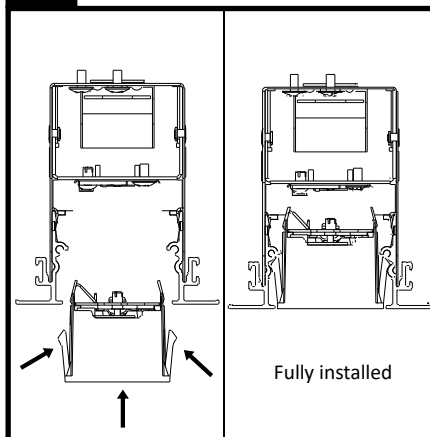
21a Fixture Lens Installation

Installation Tip: For easier installation, start at a housing end or a joint by placing lens at an angle and squeezing opposite end in slightly from the other side to insert inside housing.

21b Fixture Lens Installation

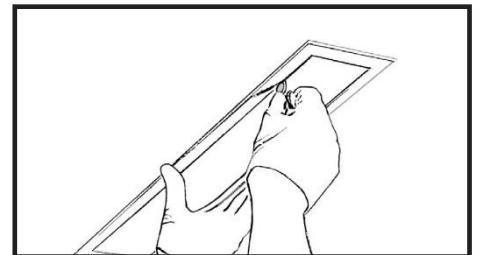
Once lens is positioned inside housing, starting on one end or joint, push upwards gently and work outward to complete the run.

Note: Flush lens and drop lens are installed the same way. Flush lens is shown for reference.

22 Louver Installation

Install louvers previously removed for installation.

Installation Tip: For easier installation, squeeze 2 end tabs and angle louver assembly slightly towards housing. Insert into housings and gradually squeeze the next pair of tabs until louver is fully inserted.

**Lens/louver removal for maintenance:**

To remove snap-in lens for maintenance purposes, insert a flat, smooth edged object between lens and housing. Twist to release pressure and remove lens.

To remove louver sections for maintenance purposes, refer to step 7b of these instructions. Installation of louvers is covered in step 21 above.

! **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.

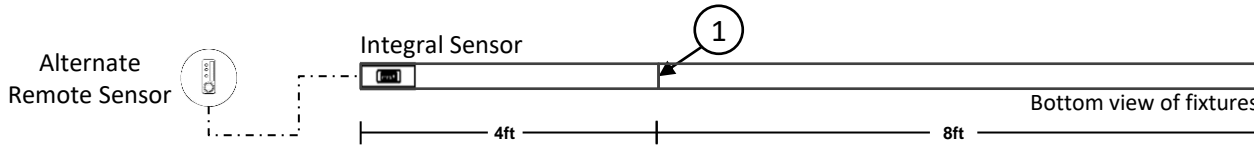
Sensors in Rows

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.

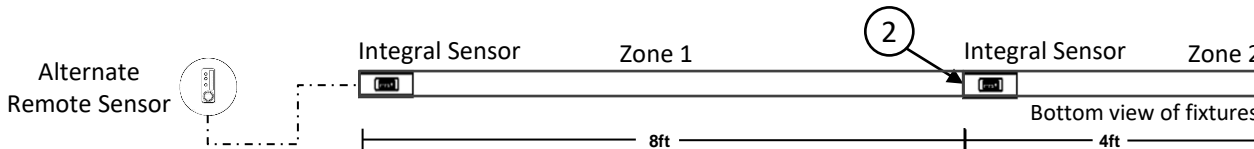


Multiple Sensors Controlling Separate Zones in a Row

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

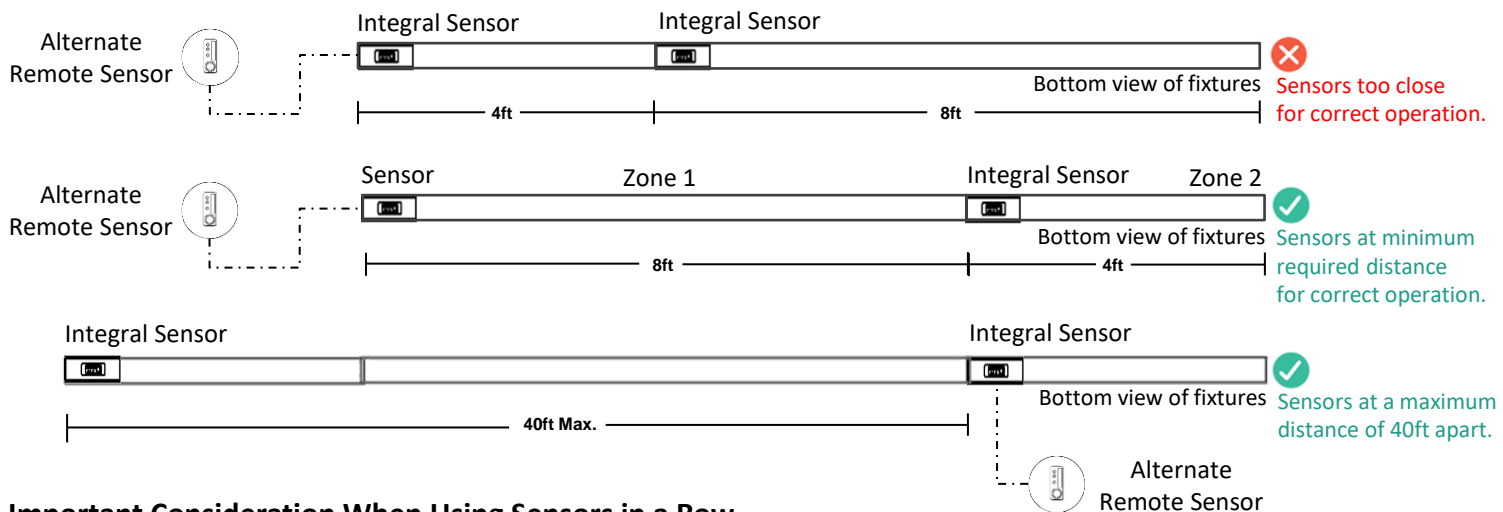
Notes:

- 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.



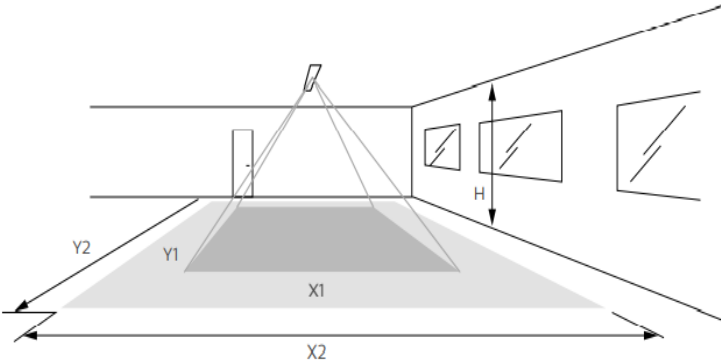
Important Consideration When Using Sensors in a Row

- 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.



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.

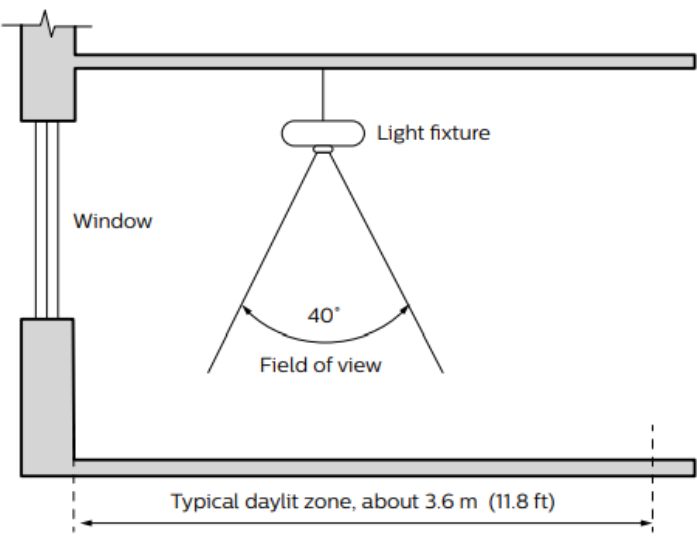


Height	Minor movement		Major movement	
h	X1	Y1	X2	Y2
2.4 m (7.9 ft)	1.9 m (6.2 ft)	2.9 m (9.5 ft)	2.9 m (9.5 ft)	4.3 m (14.1 ft)
3 m (9.8 ft)	2.4 m (7.9 ft)	3.6 m (11.8 ft)	3.6 m (11.8 ft)	5.4 m (17.7 ft)

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).

Photosensor spatial response



!

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



© 2021 Signify Holding. All rights reserved. The information provided herein is subject to change, without notice. Signify does not give any representation or warranty as to the accuracy or completeness of the information included herein and shall not be liable for any action in reliance thereon. The information presented in this document is not intended as any commercial offer and does not form part of any quotation or contract, unless otherwise agreed by Signify.

Signify North America Corporation
400 Crossing Blvd, Suite 600
Bridgewater, NJ 08807
Telephone: 855-486-2216

Signify Canada Ltd.
281 Hillmount Road,
Markham, ON, Canada L6C 2S3
Telephone: 800-668-9008

All trademarks are owned by Signify Holding or their respective owners.