LEDALITE

by signify

Linear

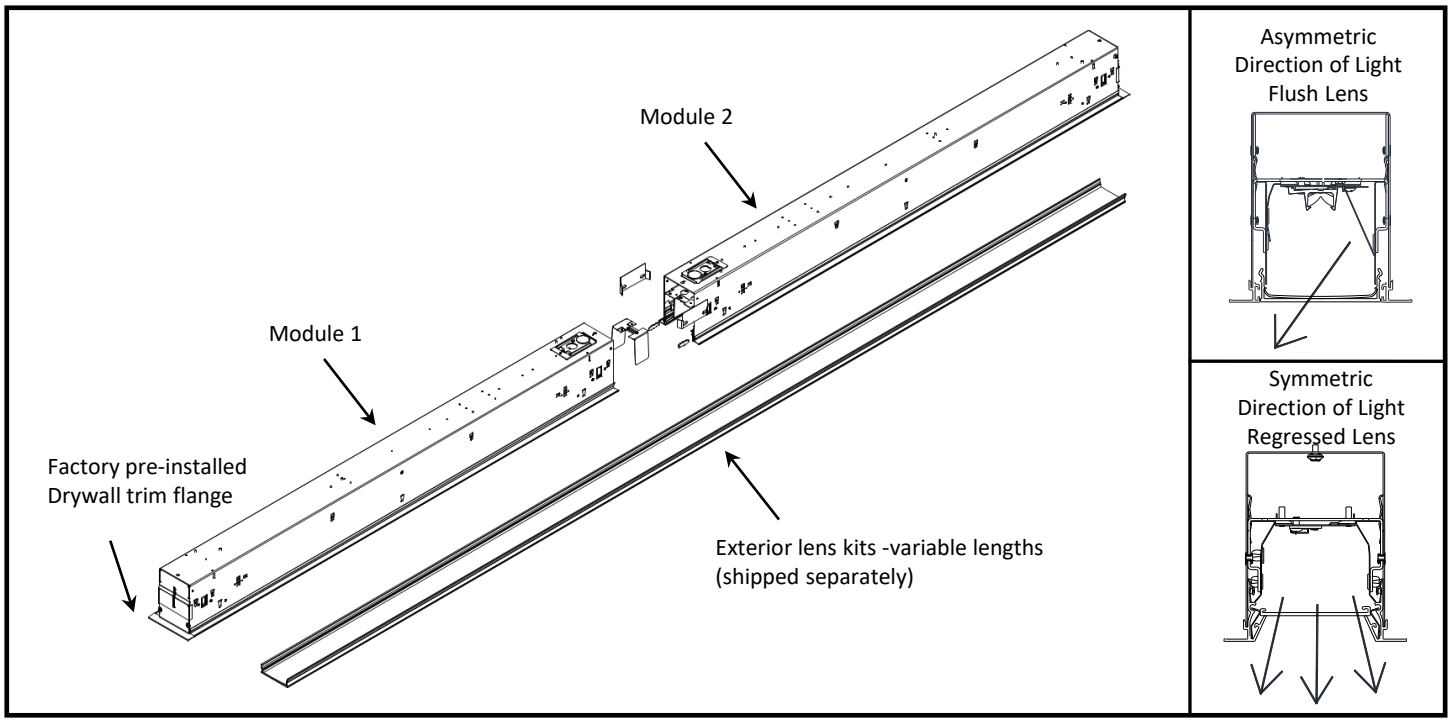
TruGroove Recessed

ID-39 Drywall Trim

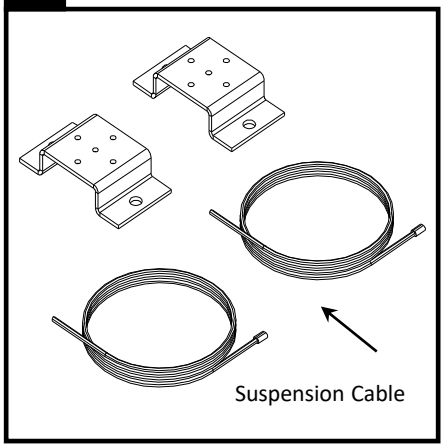
Installation Instructions
Standalone or Continuous Run in Drywall Ceiling

These instructions review how to install drywall trim versions of TruGroove recessed fixtures. Please refer to layout drawings supplied by Ledalite in conjunction with these installation instructions. The graphics below show the components required.

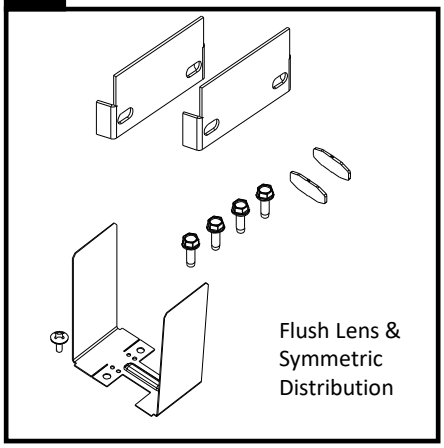
IMPORTANT: Read all instructions <u>including fixture/sensor wiring AND mechanical details before</u> beginning installation.



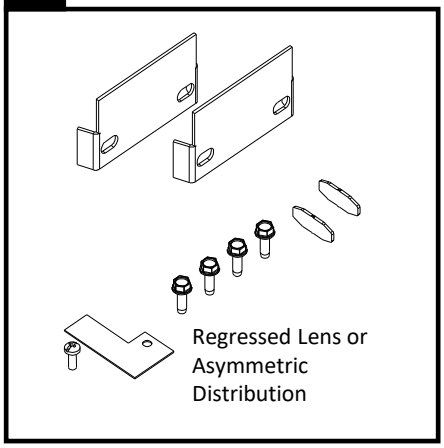
i Mounting Kit 390ZA01



ii Joint Kit 390JK01*



iii Joint Kit 390JK03*



*Note: One kit required for each joint. Joint kit determined by flush or regressed lens mounting and symmetric or asymmetric light distribution.
Tools: Phillips screwdriver, 5/16” Nut Driver

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

ID-39 TruGroove Drywall Trim Installation Instructions

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 interreference 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

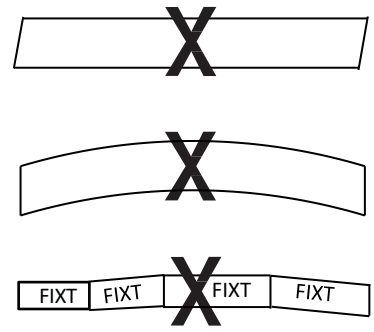
- 'C' Channels (or equivalent) must be properly braced to ensure accuracy of cut-out in drywall.
- Use appropriate tools to outline specified dimensions of ceiling cut-out to ensure straightness of cutting.
- Lens will not insert properly if fixture trim has mud or paint build-up.

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 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 3-7/8" to 4" width as shown in figure A.

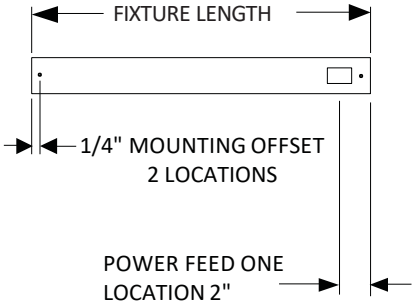
Important: The cut-out MUST fall within the specified tolerances.

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 3-7/8"**
MAX 4"



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.

ID-39 TruGroove Drywall Trim Installation Instructions

Prepare Ceiling: Continuous Runs

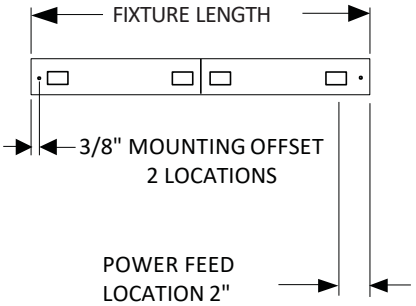
2 Determine Locations

- 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 3-7/8" to 4" width as shown in figure B. Refer to layout drawings for ceiling frame length.

B Ceiling Cut-out Details

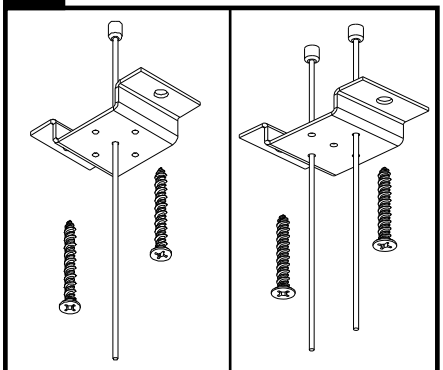
Cutout Width: **MIN 3-7/8”**
MAX 4”

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

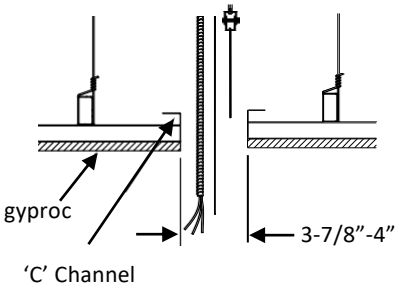


END MOUNT
390ZA01

JOINT MOUNT
390ZA02

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”).

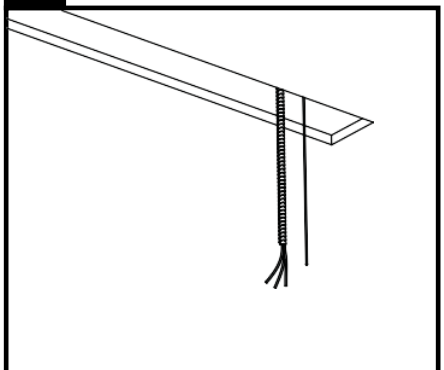
4 Install Mounts and Power Cables



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.

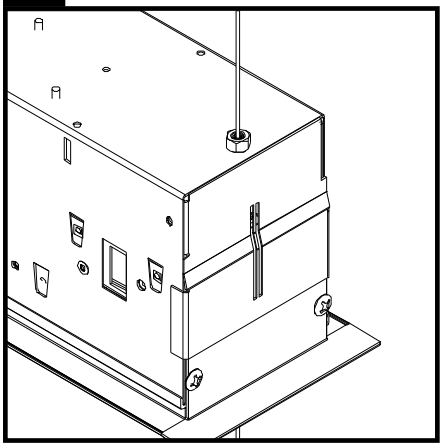
! ATTENTION: Install in accordance with local and national building and electric codes.

Install fixtures

6 Prepare Fixtures

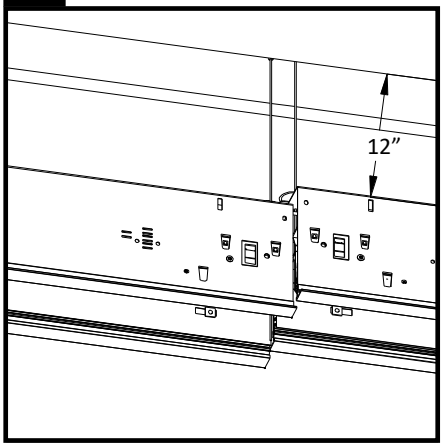
Arrange boxed fixtures on floor in specified mounting locations, based on supplied layout drawings. Match up each fixture based on the spec tag and ID number labelled on each fixture box for the specified run.

7 Insert Aircraft Cable



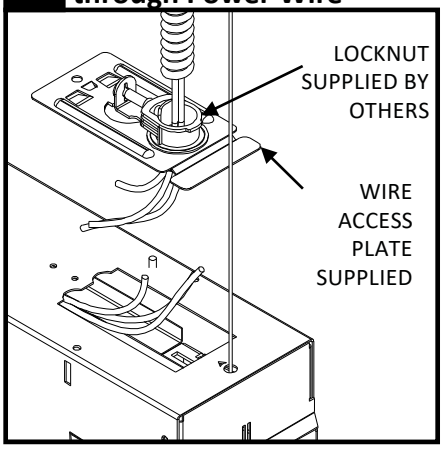
Suspend each module by inserting the aircraft cables through the grippers on top of the housing.

8 Raise Fixture



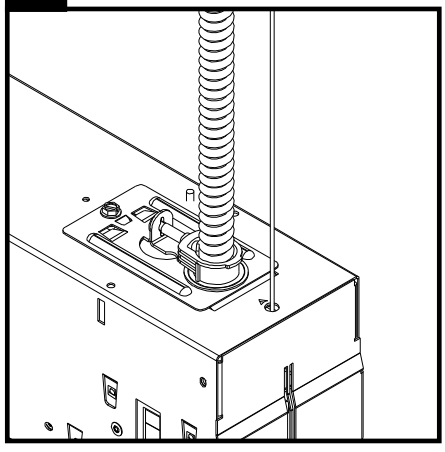
Gradually lift each module to approximately 12 inches below the ceiling.

9 Remove Cover and Feed through Power Wire



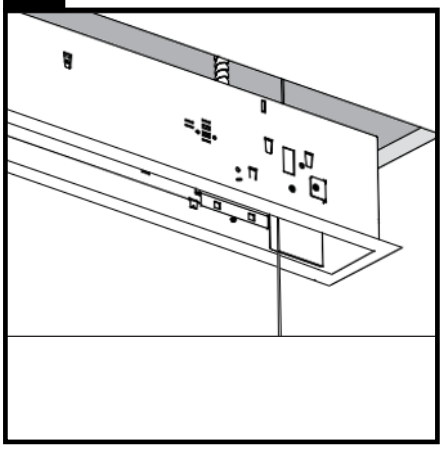
At the power location(s), remove factory installed wire cover. Feed power wires through. Complete all wiring connections.

10 Re-install Wire Cover



Re-install wire cover and slide to lock. Install screw.

11 Raise and Level Fixtures



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

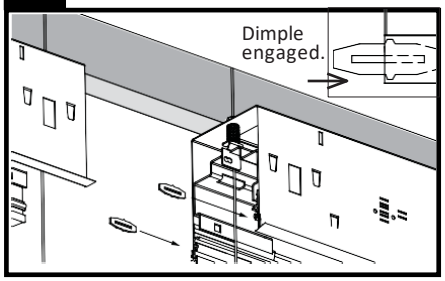
Important: Modules must be level relative to each other if joining of sections is required

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

ID-39 TruGroove Drywall Trim Installation Instructions

NOTE: For Standalone fixtures skip to step 16

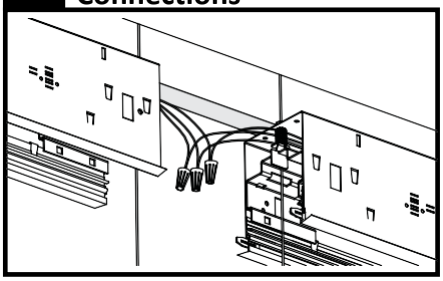
12 Install Joiner Aligners



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.

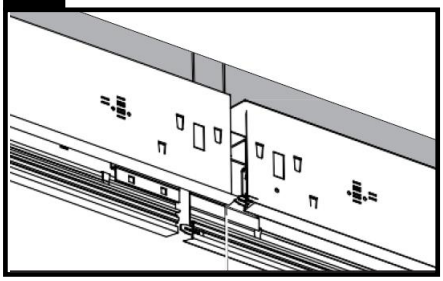
13 Complete Wiring Connections



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

Important: Pay attention that the fixture to fixture ground wire is connected.

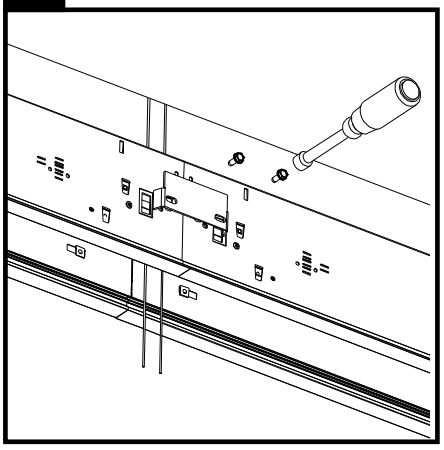
14 Join Individual Modules



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

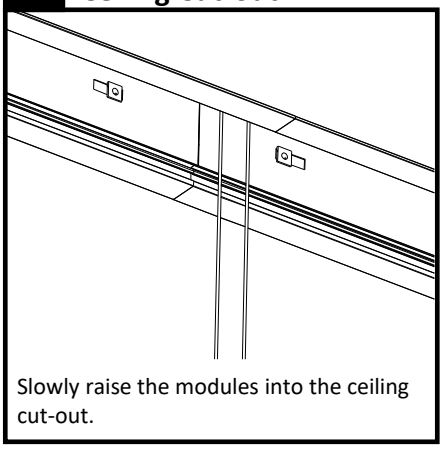
Important: Joiner aligners must be fully inserted to provide proper section alignment.

15 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.

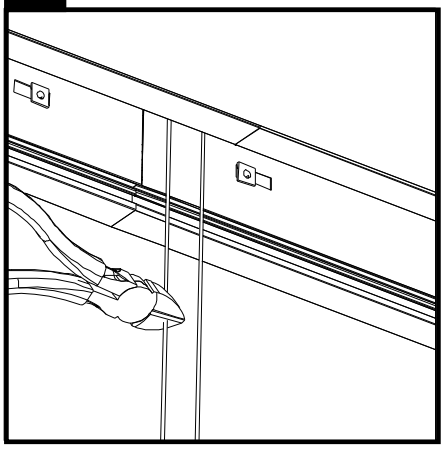
16 Raise Fixture(s) into Ceiling Cut-out



Slowly raise the modules into the 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.

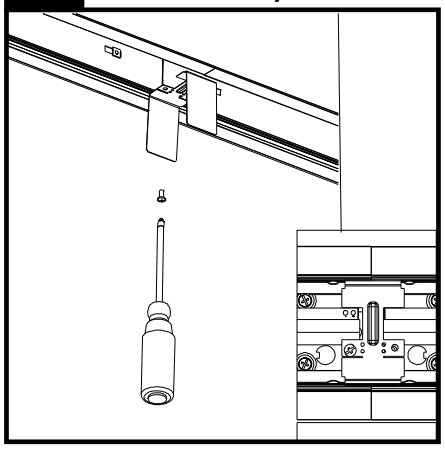
17 Trim Excess Cable



Trim suspension cable approximately 8 inches below the ceiling level. Tuck all excess cable inside the upper wiring cavity.

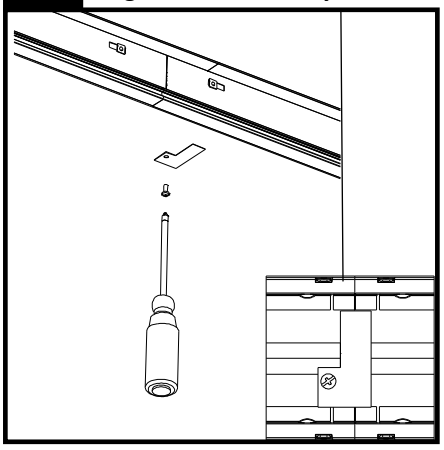
! ATTENTION: Install in accordance with local and national building and electric codes.

18a Secure Joint Cover
Flush lens and Symmetric



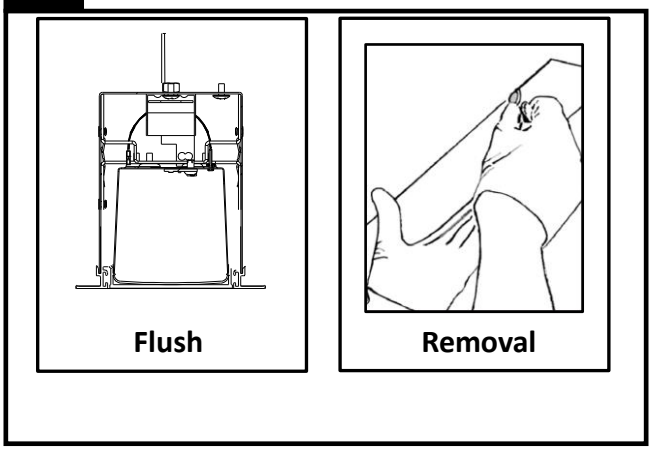
At joint location(s), secure joint covers using Philips screwdriver and supplied hardware. Ensure cover plates sit flush with bottom reflectors for proper LED board fit.

18b Secure Joint Cover
Regressed lens or Asymmetric



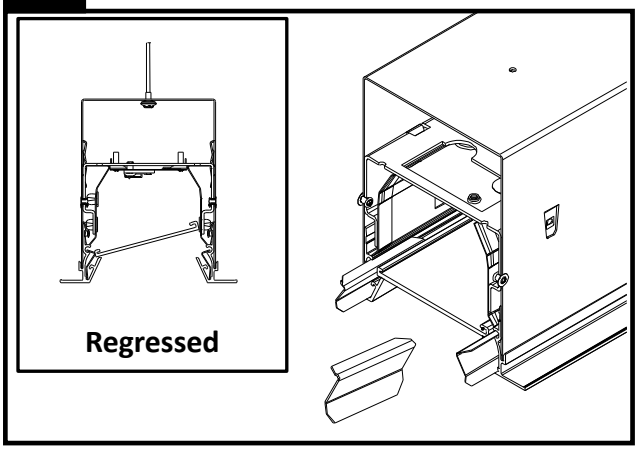
At joint location(s), secure joint covers using Philips screwdriver and supplied hardware. Ensure cover plates sit flush with bottom reflectors for proper LED board fit.

19a Flush Lens Installation and Removal



Flush Lens: Snap in lens into fixture.
Lens Removal: 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.

19b Regressed Lens Installation



Regressed Lens: Angle lens to insert into fixture. Lay lens on aluminum extrusion flange.
Ensure lens engages between lens retaining clips to prevent movement of lens.

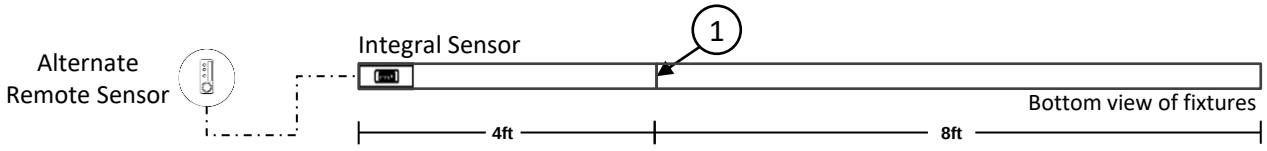
NOTE: Please refer to layout drawing and match up each lens based on the ID number.

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

Sensors in Rows

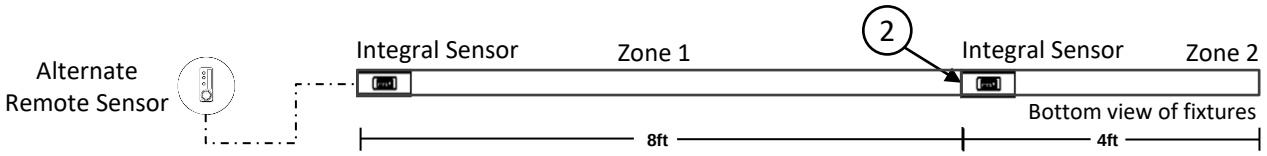
Single Sensor Controlling Whole Row

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.



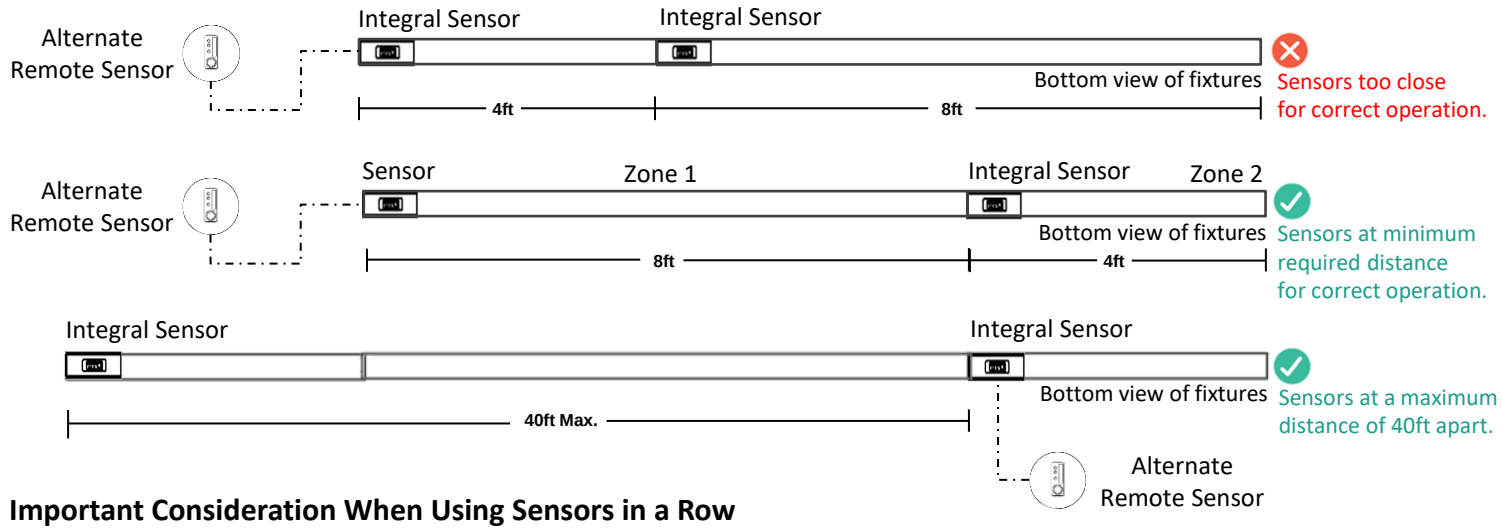
Multiple Sensors Controlling Separate Zones in a Row

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.



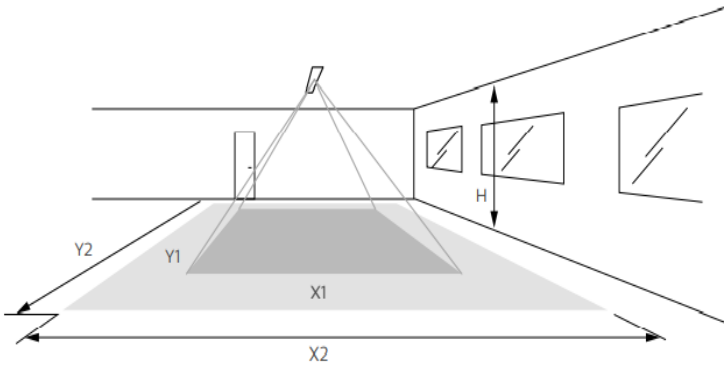
Important Consideration When Using Sensors in a Row

- 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 ≤3ft/s or 0.9m/s).
- Major movement (person moving ≥3ft/s or 0.9m/s).

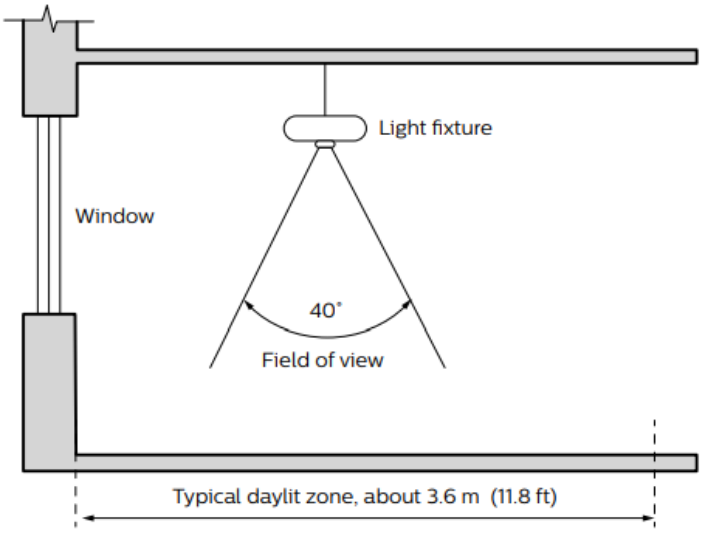
Daylight sensor

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 ≥2ft (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 x 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.

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