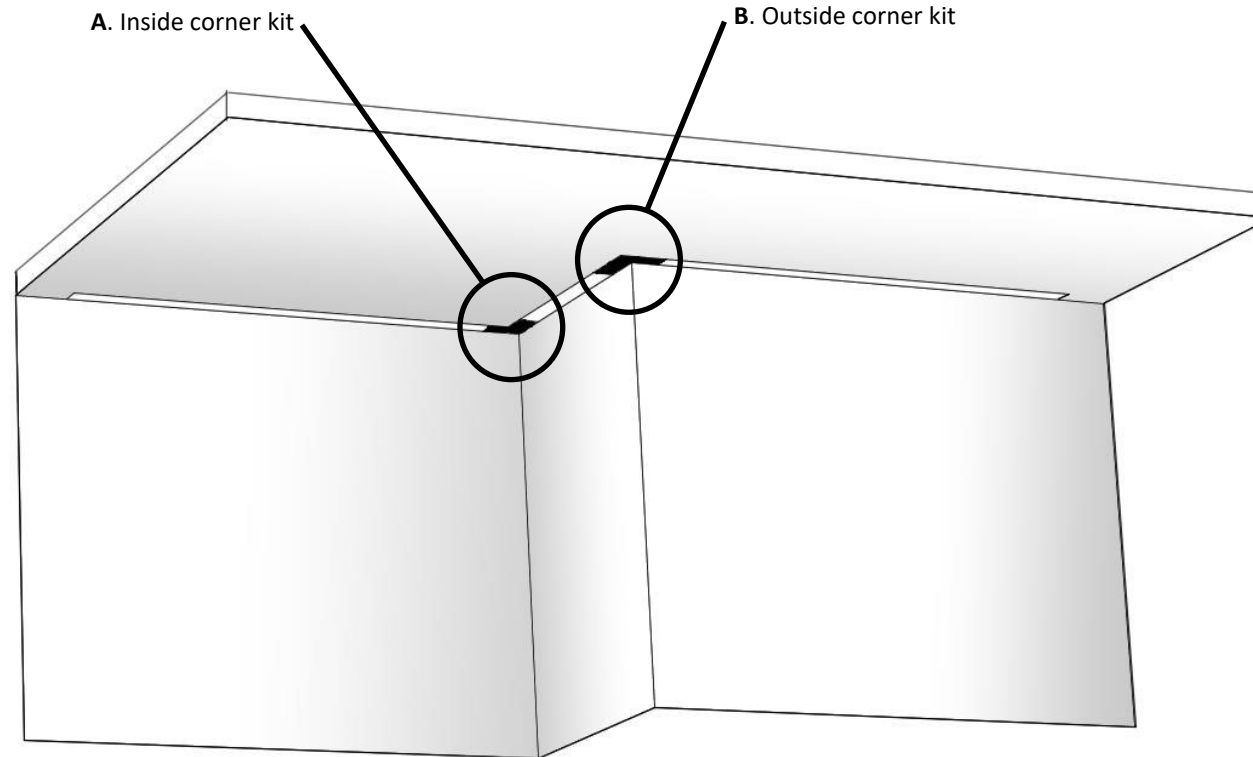


## System Overview

These instructions review how to install TruGroove Perimeter Ambient and Graze fixture corners. Please refer to layout drawings supplied by Philips Ledalite together with these installation instructions. These instructions must be used in conjunction with TruGroove Perimeter Grid or Drywall Installation Instructions. The graphics below show the corner types available and steps required to correctly install TruGroove Perimeter corners in grid and drywall ceilings.

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

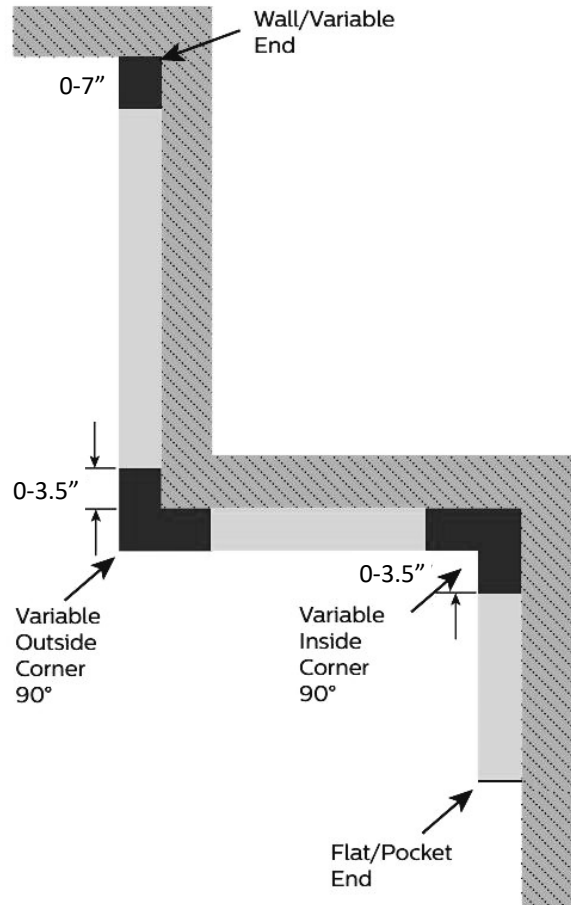


## Corner Type Detail

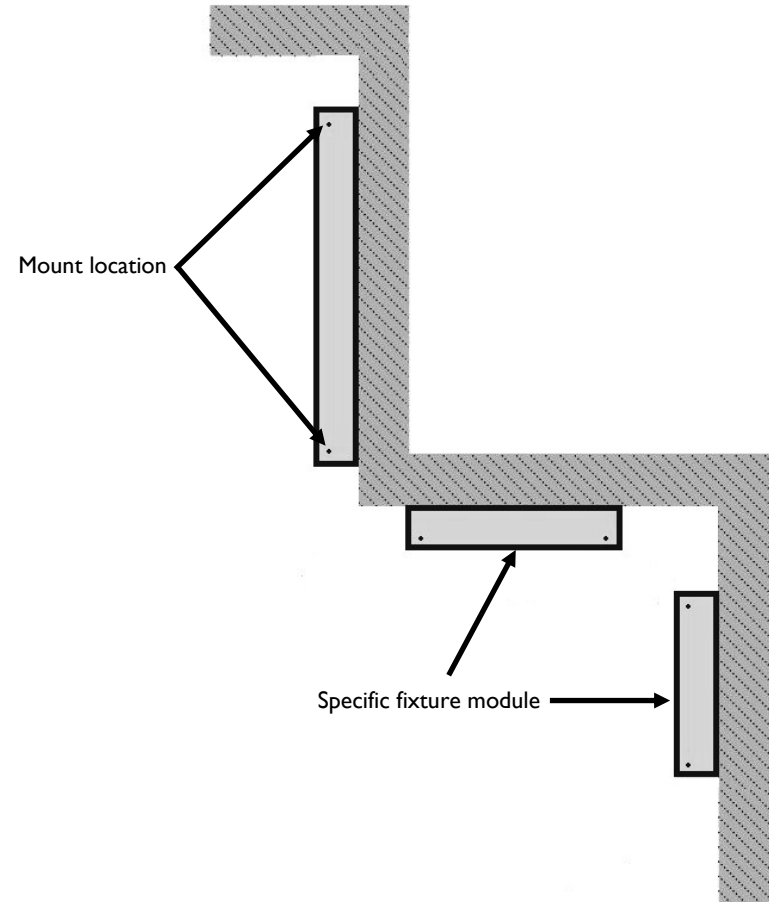
- A. **Inside corner:** for 2" and 4" regress, available in t-grid, trim and trimless.
- B. **Outside corner:** for 2" and 4" regress, available in t-grid, trim and trimless.

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

Page 1



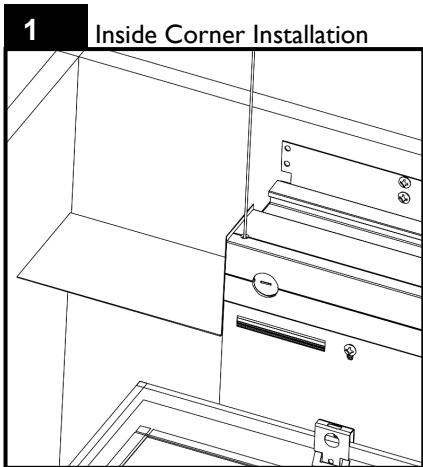
General Layout



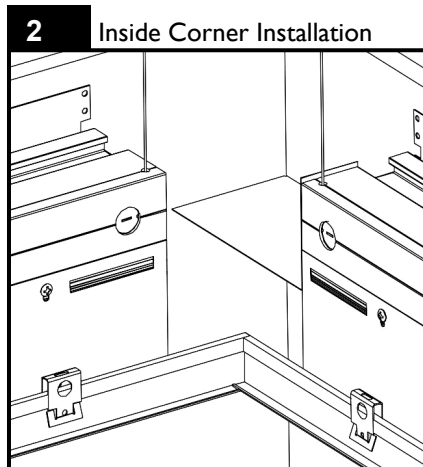
**IMPORTANT:** Refer to layout drawings for fixture module and mounting locations.

**NOTE: ALWAYS START FIXTURE INSTALLATION IN A CORNER AND WORK OUTWARDS.**

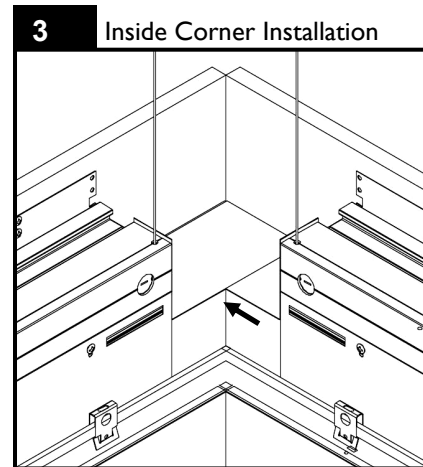
**! ATTENTION: Install in accordance with national and local building and electrical codes.**



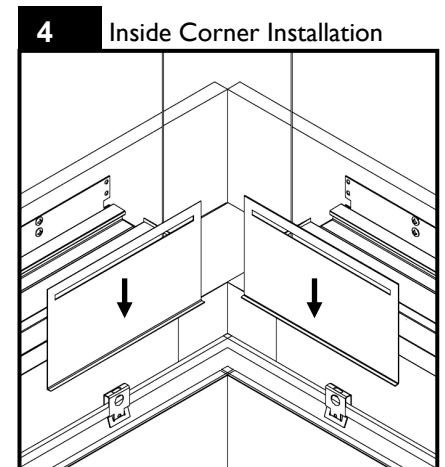
**1** Inside Corner Installation  
Follow TruGroove Perimeter Grid Ceiling Installation Instructions and supplied layout drawings and install first fixture module. Trim variable endplate to wall and install as shown.



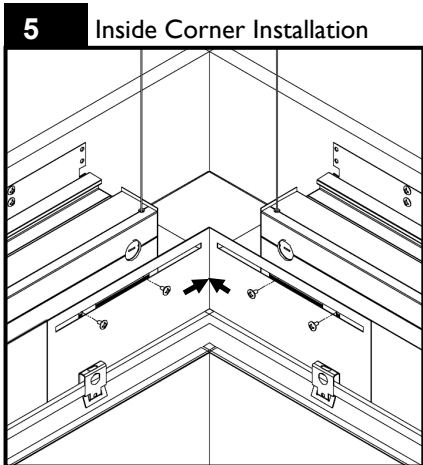
**2** Inside Corner Installation  
Install second fixture module as per TruGroove Perimeter Grid Ceiling Installation Instructions and supplied layout drawings.



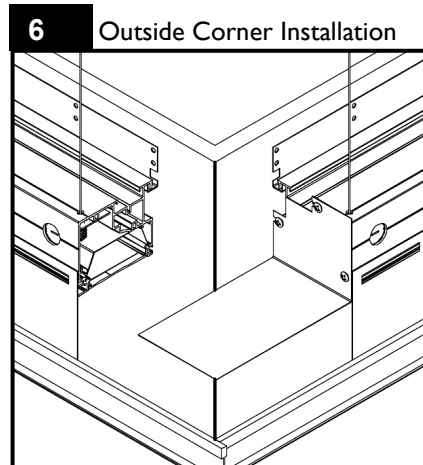
**3** Inside Corner Installation  
Install second variable endplate as per TruGroove Perimeter Grid Installation Instructions (steps 14b-19). Variable endplates will overlap, closing off the opening below.



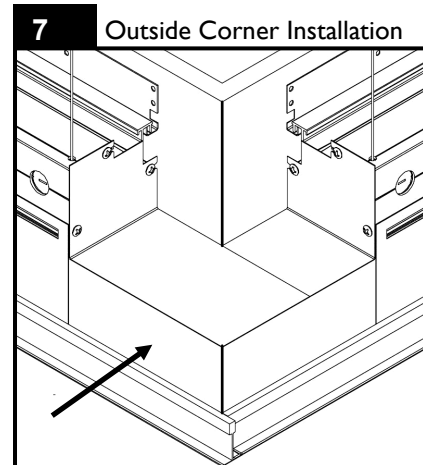
**4** Inside Corner Installation  
Insert variable panels inside installed grid panels.



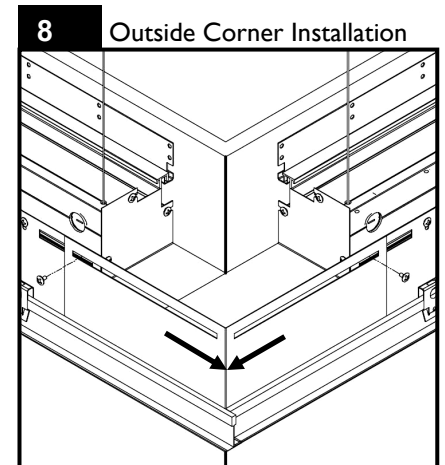
**5** Inside Corner Installation  
Slide panels together until gap is fully closed. Secure variable panels to housings with screws provided.



**6** Outside Corner Installation  
Follow Perimeter Grid Installation Instructions and supplied layout drawings and install first fixture module (steps 1-19). Trim variable endplate to required length and install as shown.



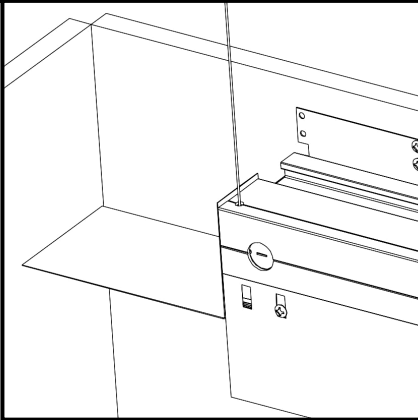
**7** Outside Corner Installation  
Install second fixture module and variable endplate as per TruGroove Perimeter Grid Installation Instructions. Variable endplates will overlap closing off the opening below.



**8** Outside Corner Installation  
Insert variable panels inside installed grid panels. Slide to required position until gap is fully closed. Secure variable panels with screws provided.

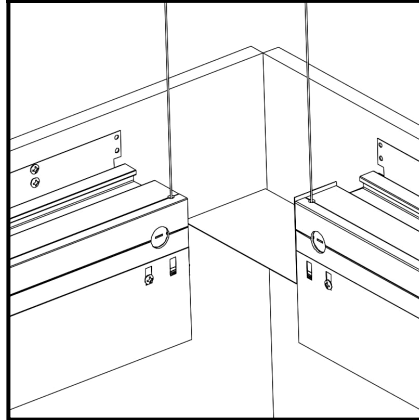
**!** ATTENTION: Install in accordance with national and local building and electrical codes.

**1** Inside Corner Installation



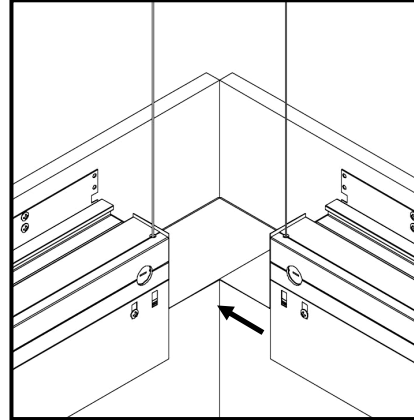
Follow TruGroove Perimeter Drywall Ceiling Installation Instructions and supplied layout drawings and install first fixture module. Trim variable endplate to wall and install as shown.

**2** Inside Corner Installation



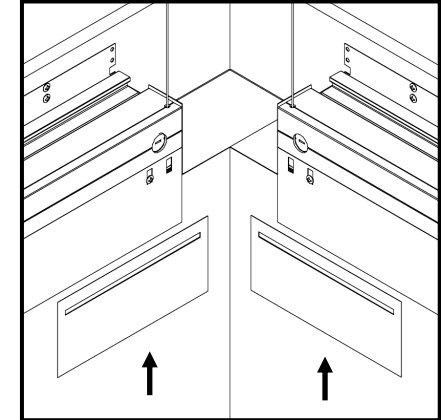
Install second fixture module as per TruGroove Perimeter Drywall Ceiling Installation Instructions and supplied layout drawings.

**3** Inside Corner Installation



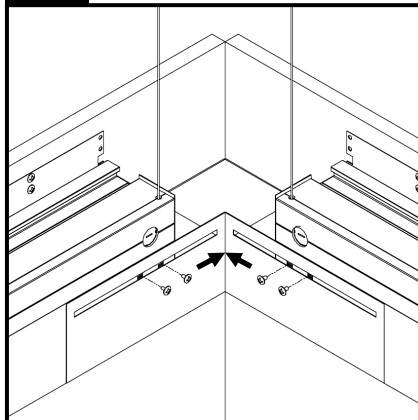
Install second variable endplate as per TruGroove Perimeter Drywall Ceiling Installation Instructions. Variable endplates will overlap, closing off the opening below.

**4** Inside Corner Installation



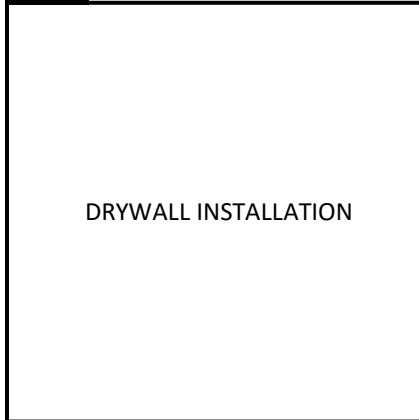
Raise variable and full size panels to housing level. Align full size panels with ends of housings and overlap variable panels on top. Support in position for attachment.

**5** Inside Corner Installation



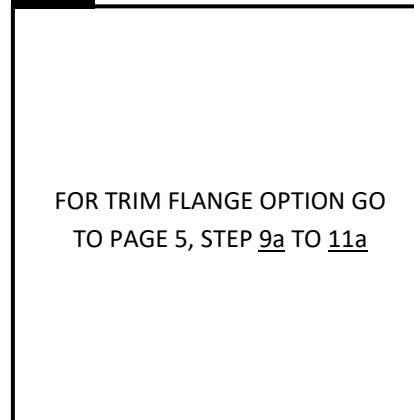
Slide panels together until gap is fully closed. Secure variable panels to housings with screws provided.

**6** Drywall Installation

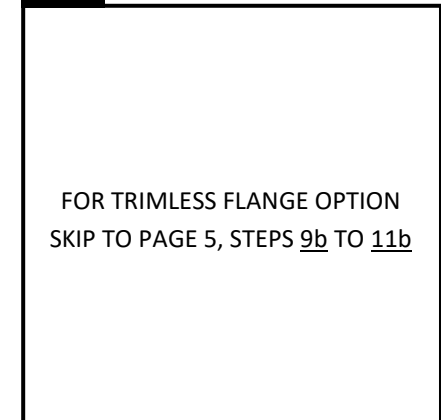


**NOTE:** These instructions cover drywall thickness of 1/2" - 5/8". Install drywall and trim flush to framing opening.

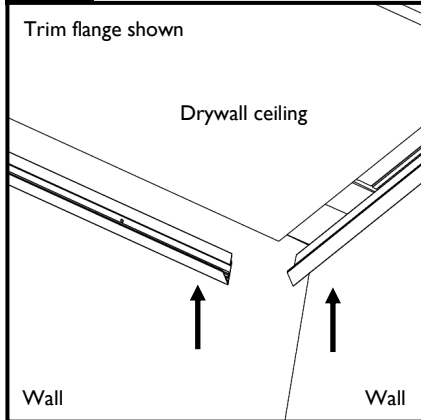
**7** Outside Corner Installation



**8** Outside Corner Installation

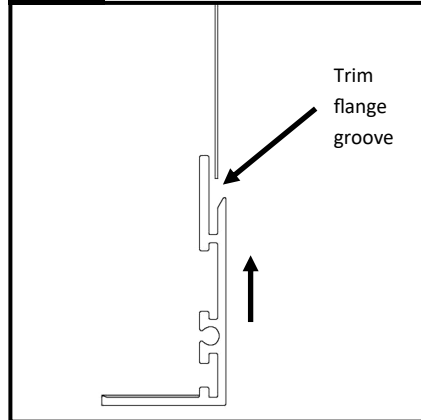


**9a** Inside Corner Installation



**NOTE:** Each trim flange must be cut at 45 degrees on site. Make sure to mark orientation and make one left and one right cut. Raise trim flanges to ceiling, push together for a tight seam and align cut edges with corner.

**10a** Inside Corner Installation



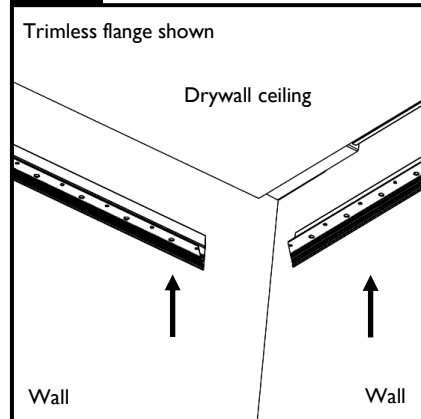
Make sure to engage panel edge into trim flange groove.

**11a** Inside Corner Installation



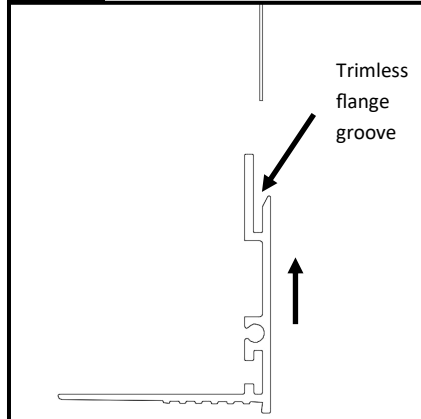
Secure trim flange to deep channel track with wafer head screws (by others). See steps 29-35 of TruGroove Perimeter Drywall Ceiling Installation Instructions for finishing.

**9b** Inside Corner Installation



**NOTE:** Each trimless flange must be cut at 45 degrees on site. Make sure to mark orientation and make one left and one right cut. Raise trimless flanges to ceiling, push together for a tight seam and align cut edges with corner.

**10b** Inside Corner Installation



Make sure to engage panel edge into trimless flange groove.

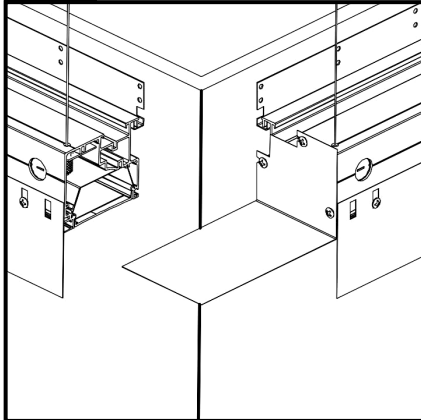
**11b** Inside Corner Installation



Push trimless flange tight against drywall and attach to structure using drywall screws (by others). See steps 45-50 of TruGroove Perimeter Drywall Ceiling Installation Instructions for finishing.

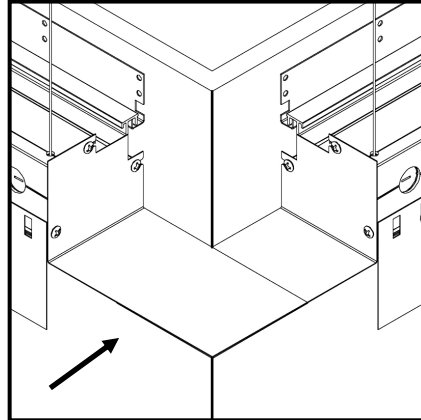
**! ATTENTION: Install in accordance with national and local building and electrical codes.**

**12** Outside Corner Installation



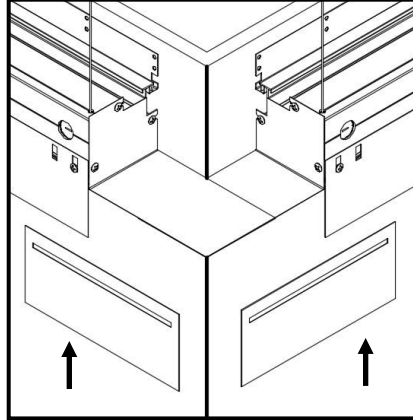
Follow TruGroove Perimeter Drywall Ceiling Installation Instructions and supplied layout drawings and install first fixture module. Trim variable endplate to wall and install as shown.

**13** Outside Corner Installation



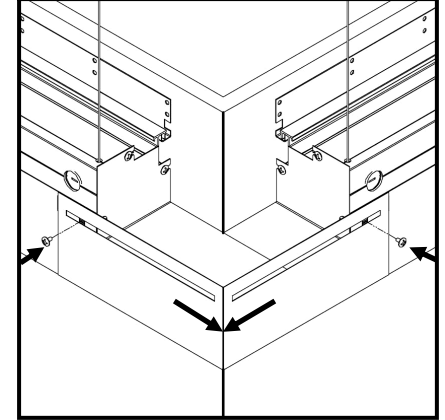
Install second module and variable endplate as per TruGroove Perimeter Drywall Ceiling Installation Instructions. Variable endplates will overlap closing off the opening below.

**14** Outside Corner Installation



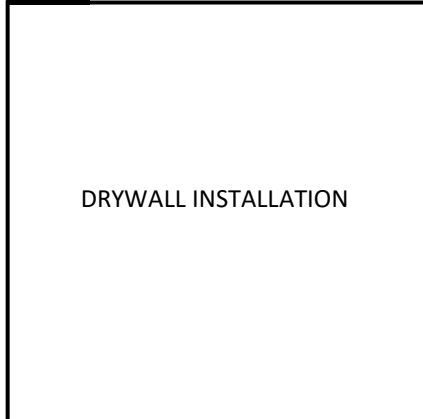
Raise variable and full size panels to housing level. Align full size panels with ends of housings and overlap variable panel on top. Support in position for attachment.

**15** Outside Corner Installation



Slide panels together until gap is fully closed. Secure variable panels to housings with screws provided.

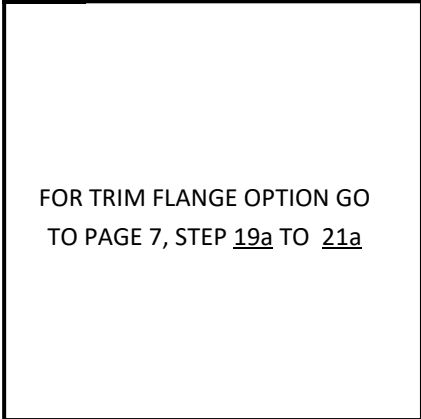
**16** Drywall Installation



DRYWALL INSTALLATION

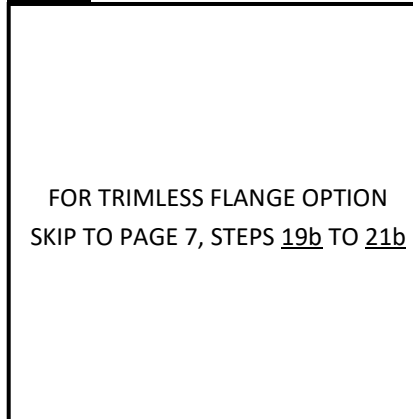
**NOTE:** These instructions cover drywall thickness of 1/2" - 5/8". Install drywall and trim flush to framing opening.

**17** Outside Corner Installation



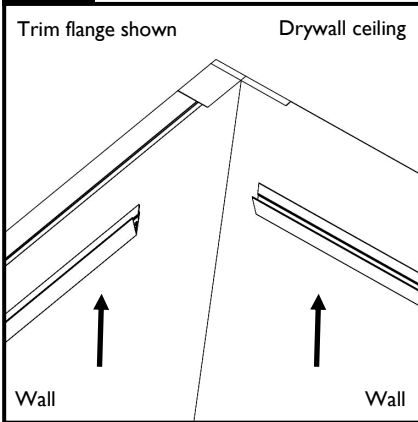
FOR TRIM FLANGE OPTION GO TO PAGE 7, STEP 19a TO 21a

**18** Outside Corner Installation



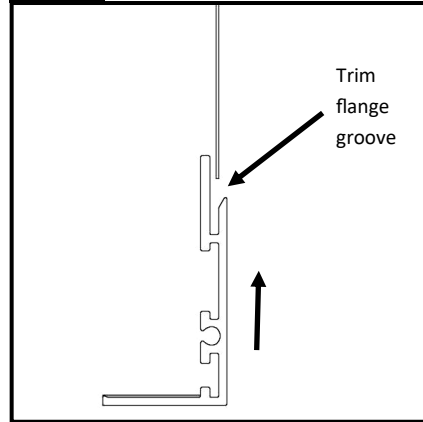
FOR TRIMLESS FLANGE OPTION SKIP TO PAGE 7, STEPS 19b TO 21b

**19a** Outside Corner Installation



**NOTE:** Each trim flange must be cut at 45 degrees on site. Make sure to mark orientation and make one left and one right cut. Raise trim flanges to ceiling, push together for a tight seam and align cut edges with corner.

**20a** Outside Corner Installation



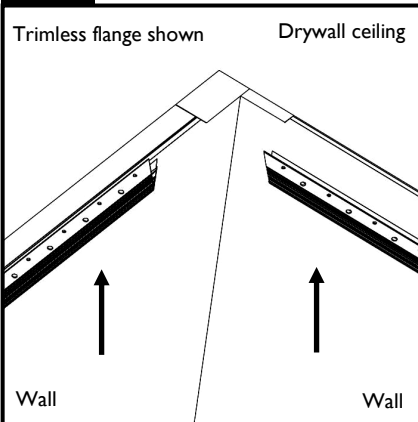
Make sure to engage panel edge into trim flange groove.

**21a** Outside Corner Installation



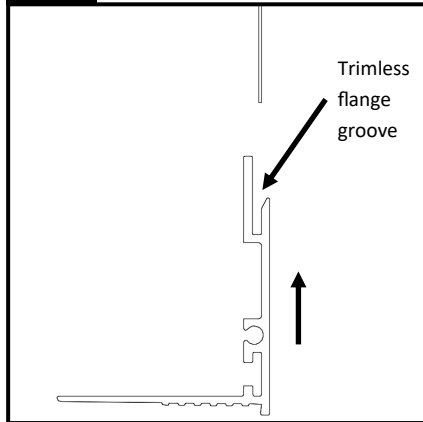
Secure trim flange to deep channel track with wafer head screws (by others). See steps 29-35 of TruGroove Perimeter Drywall Ceiling Installation Instructions for finishing.

**19b** Outside Corner Installation



**NOTE:** Each trimless flange must be cut at 45 degrees on site. Make sure to mark orientation and make one left and one right cut. Raise trimless flanges to ceiling, push together for a tight seam and align cut edges with corner.

**20b** Outside Corner Installation



Make sure to engage panel edge into trimless flange groove.

**21b** Outside Corner Installation



Push trimless flange tight against drywall and attach to structure using drywall screws (by others). See steps 45-50 of TruGroove Perimeter Drywall Ceiling Installation Instructions for finishing.

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.

**! ATTENTION: Install in accordance with national and local building and electrical codes.** **Page 7**

**Sensor 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 8 sensors; confirm fixture driver count with factory.



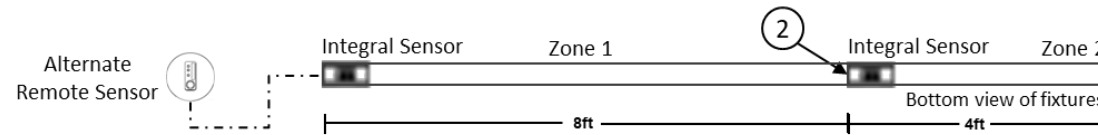
**Multiple Sensors Controlling Separates Zones in a Row**

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.

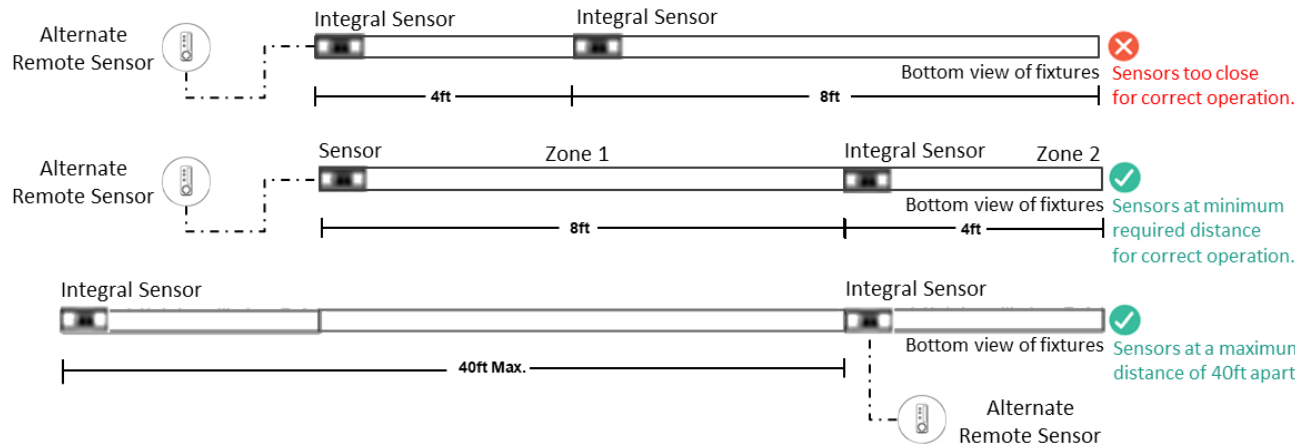
- Only one sensor is allowed on a wired zone. (Sensors can be paired together wirelessly via a mobile app).



**Sensor Spacing**

- For correct operation, sensor should be placed a minimum distance of 8ft apart.

- Wireless sensor should be placed no further than 40ft apart for good wireless signal connection.



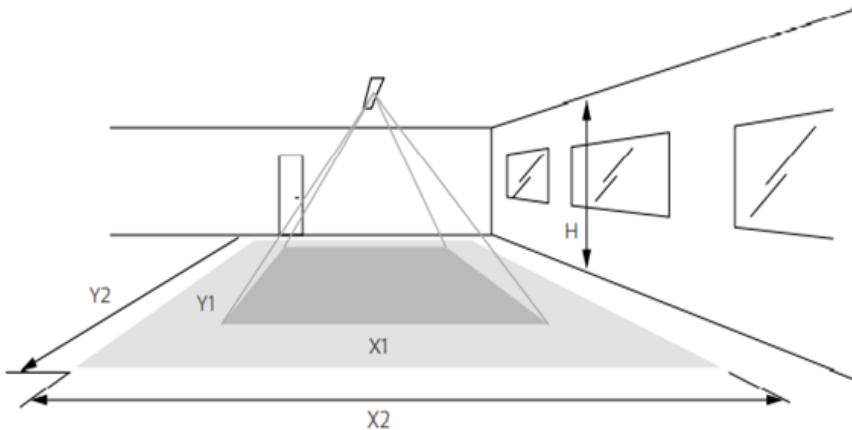
**Important Consideration When Using Sensor in a Row**

- For fixtures with wireless sensors (CS, SB or RA options): **DO NOT** connect fixture purple and 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 sensors may be used, note the same wiring rules will apply.



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

**Photosensor spatial response**

