

# Merge 1.5 - Recessed Track

1.0



MERGE



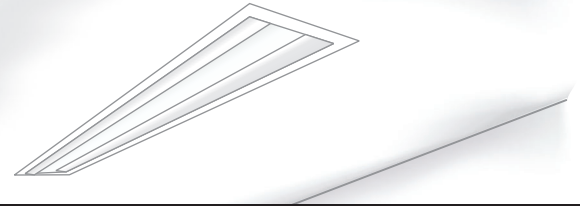
### GENERAL PRODUCT INFORMATION:

This product is suitable for dry locations.

Maximum run length for low-voltage busbar is 40ft; both ends may be energized for a total of 80ft.

Maximum loading of the low-voltage busbar is 240W (20 AMPS).

This instruction shows a typical installation.



### MINIMUM OF 2X4 CONSTRUCTION

**NOTE:** Due to the complexity of this fixture, assistance is recommended for installation.

### CAUTION - RISK OF FIRE

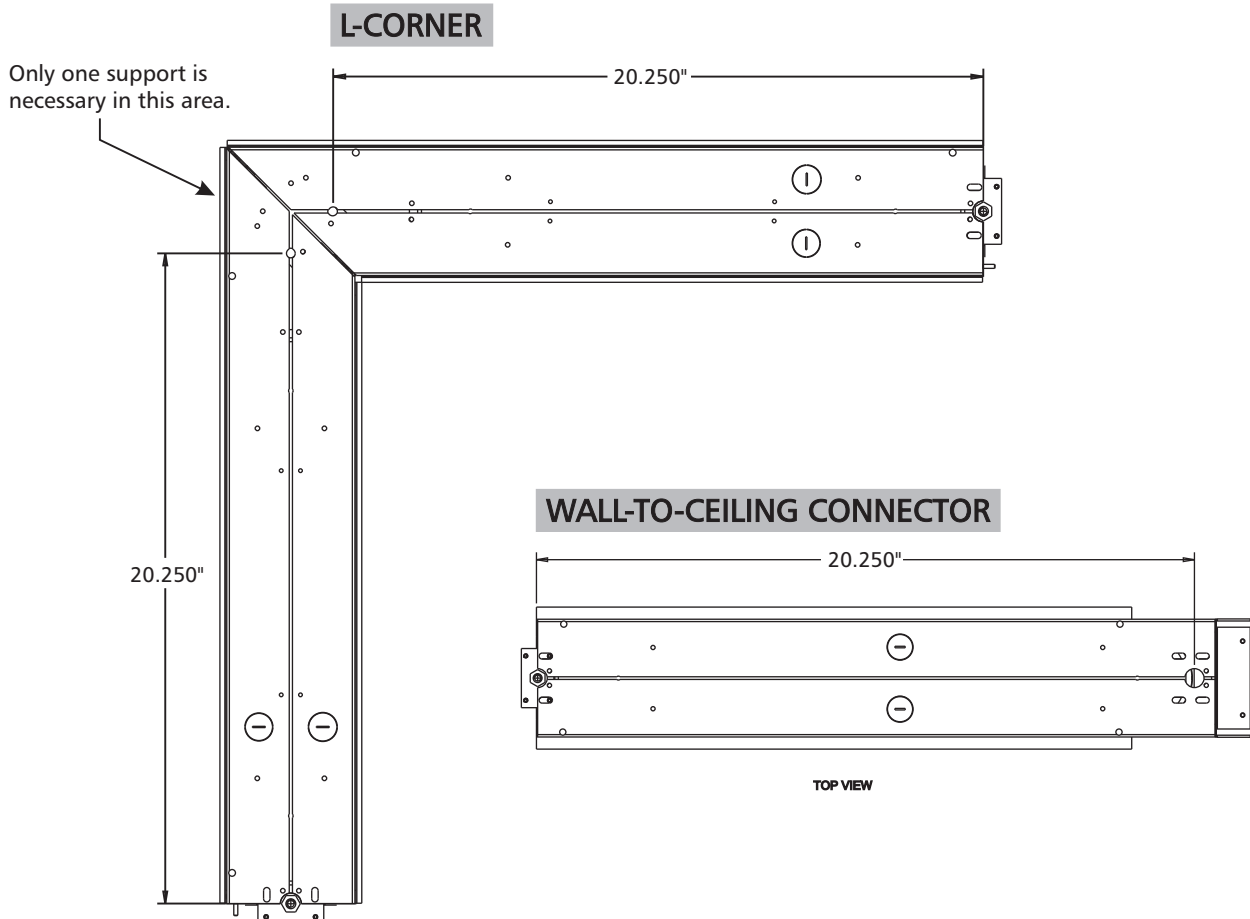
This product must be installed in accordance with the applicable installation code by a person familiar with the construction and operation of the product and the hazards involved.

**Use minimum 90°C supply conductors.**

**SAVE THESE INSTRUCTIONS!**

1A

### MOUNTING HOLE LOCATIONS

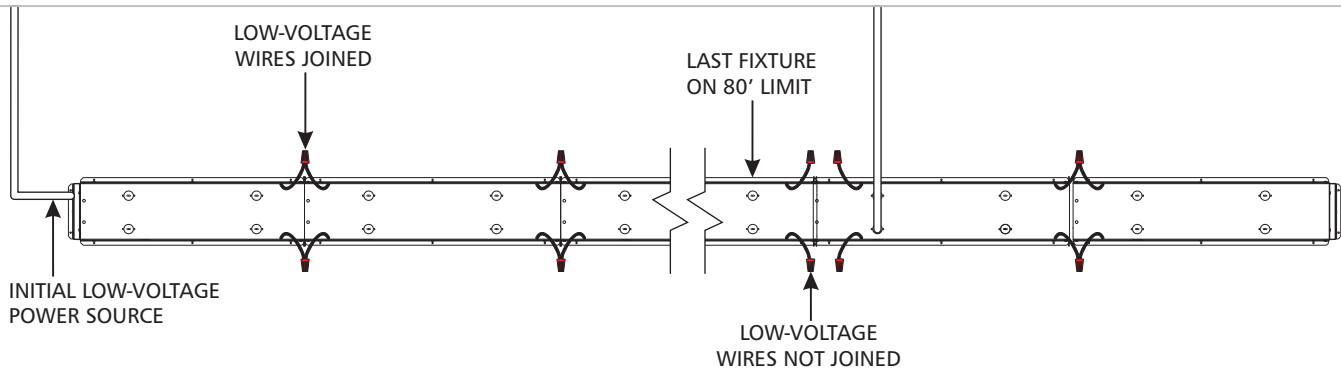
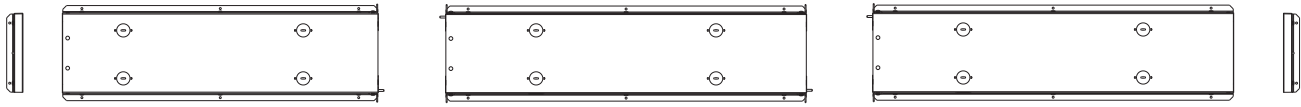


- 1 Install threaded rod or tie wire on the centerline of the fixture at the seam between fixtures, at the ends of the run, or using the provided diagrams where necessary. Do not let the threaded rods extend more than 1" into the fixture.

## Identify the Fixtures and Configuration (Continuous run installations only)

2A

You will receive only one kind of Merge 1.5 linear fixture. Though it can be purchased in various lengths, it can be used anywhere in a run of fixtures. Endcaps are mounted at the ends of a run to complete the installation.



The low-voltage section of the fixture run can be powered at any point along the run, then interconnected with jumper wires to a maximum of 40'. Sections of the run may be isolated by simply not connecting the low-voltage wires and the isolated sections can be powered by additional transformers.

## INSTALLATION OPTIONS:

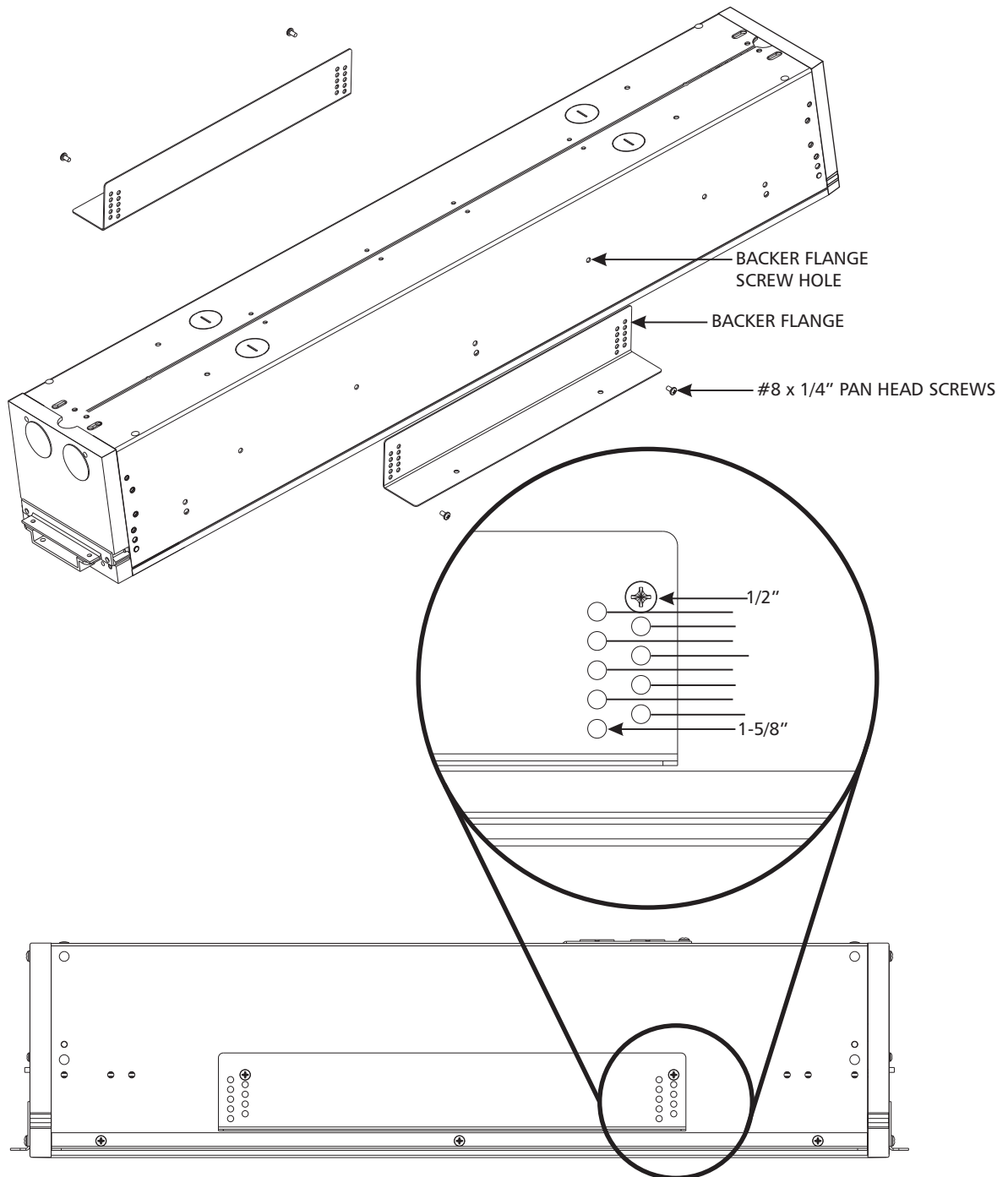
For Flangeless install - see section 4

For Flanged install - see section 5

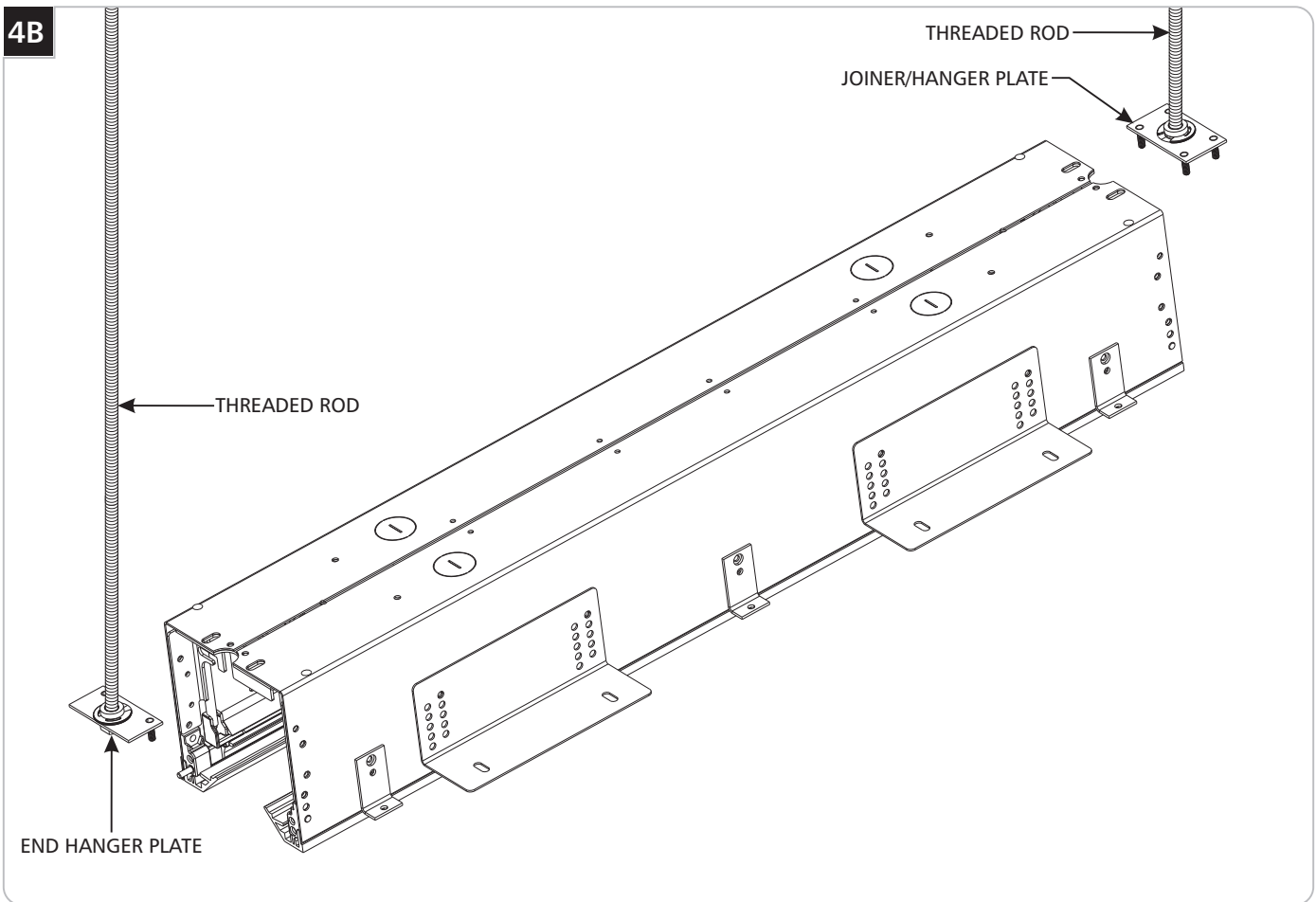
For Grid install - see section 6

### Install Each Fixture (Flangeless)

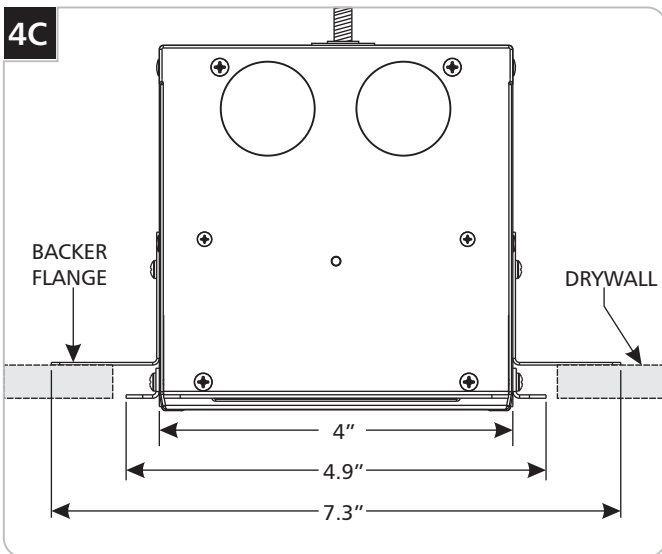
4A



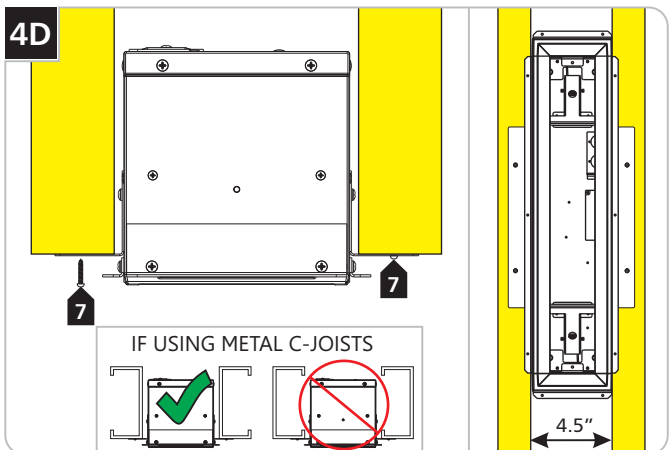
- 1 Set the height of the backer flange according to the finished ceiling thickness (maximum 1-5/8" ceiling thickness): install the flange at the appropriate height using the #8 x 1/4" pan head screws. The holes are spaced 1/8" apart.

**4B**

- 2** Mount a joiner/hanger plate on each length of threaded rod at the seams between the fixtures.
- 3** Mount an end hanger plate (shipped with the endcaps) on the threaded rods at each end of the run. **NOTE:** This plate will have 2 threaded studs rather than 4.
- 4** Hang the fixtures from #8 nuts on the studs. Do not tighten the nuts until after the fixtures have been aligned.

**4C**

- 5** Use the hanger plates to properly support the fixture using the threaded rods in accordance with local code. Install the fixture(s) so that the backer flanges are aligned with the top surface of the drywall.

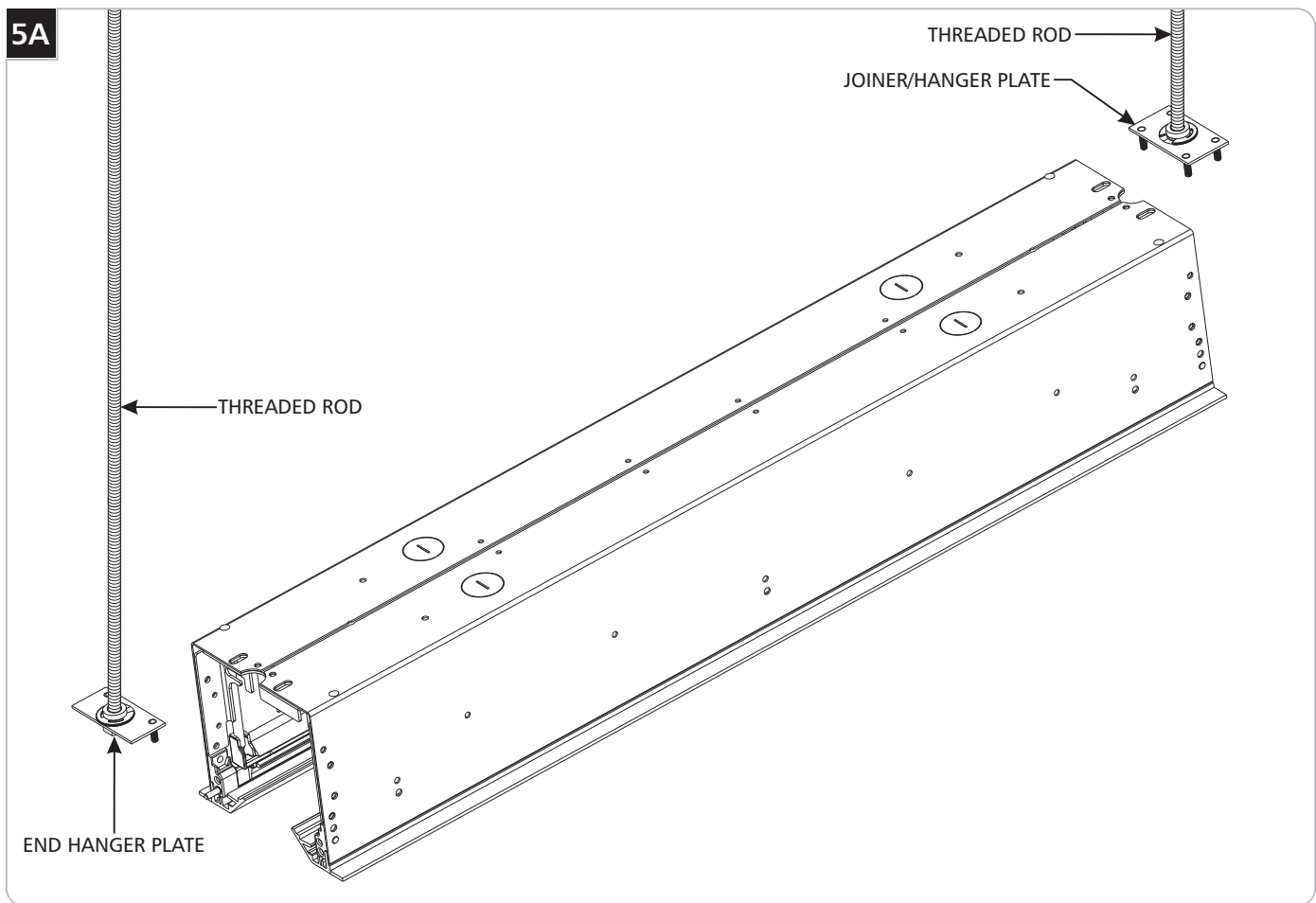
**4D**

This option uses framing rather than hanger plates to support the fixture. This option is recommended for wall installations and 2" X 4" construction.

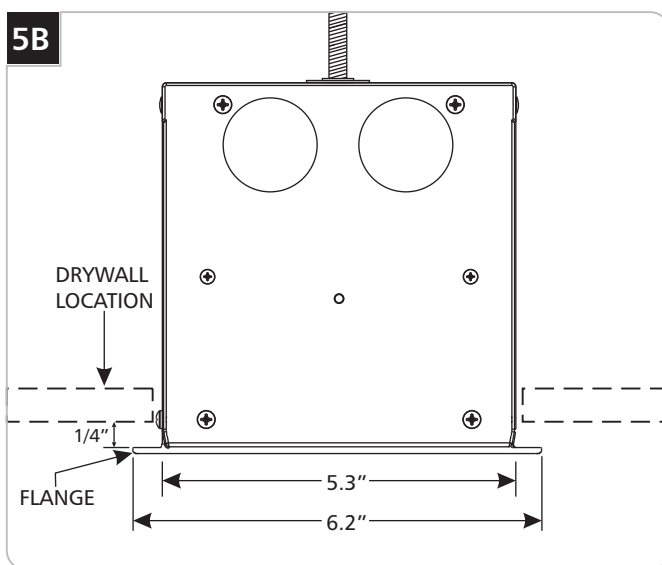
**NOTE:** There is little opportunity for adjustment once the fixtures are mounted, so use this option only when necessary.

- 6** Install the framing to create 4.5" of clearance needed for the fixture.
- 7** Using wood screws, secure the fixture into the joists by screwing through the backer flanges.

## Install Each Fixture (Flanged)

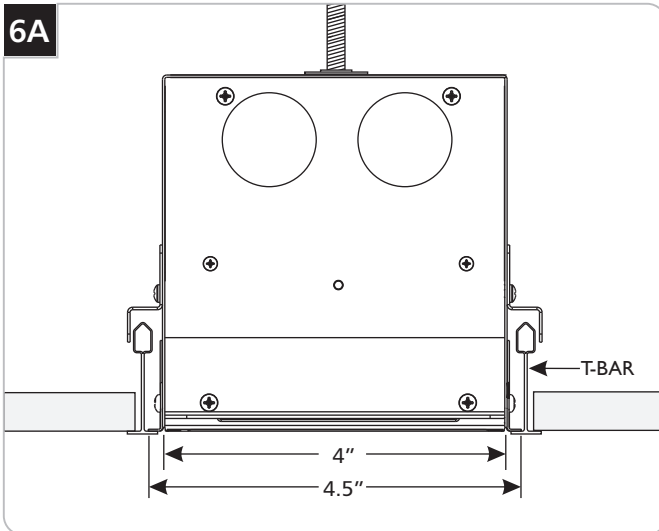


- 1 Mount a joiner/hanger plate on each length of threaded rod at the seams between the fixtures.
- 2 Mount an end hanger plate (shipped with the endcaps) on the threaded rods at each end of the run. **NOTE:** This plate will have 2 threaded studs rather than 4.
- 3 Hang the fixtures from #8 nuts on the studs. Do not tighten the nuts until after the fixtures have been aligned.

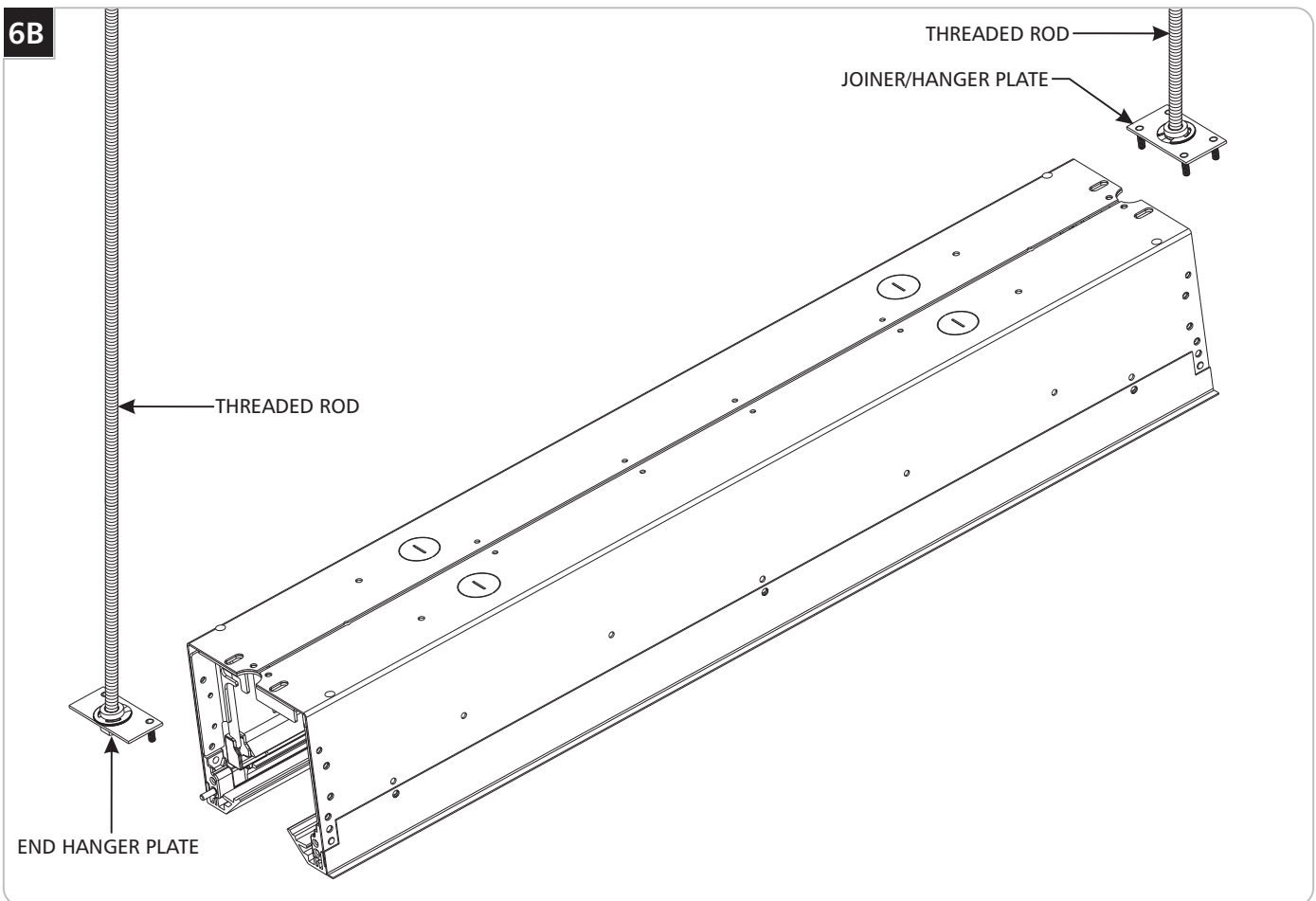


- 4 Use the hanger plates to properly support the fixture using threaded rod in accordance with local code. Install the fixture(s) 1/4" lower than the drywall ceiling plane.

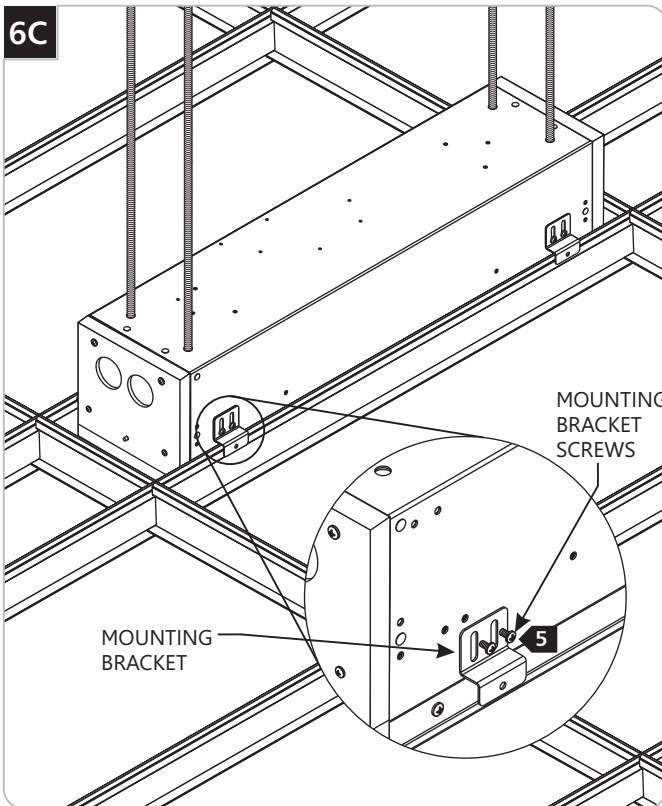
## Install Each Fixture (Grid)



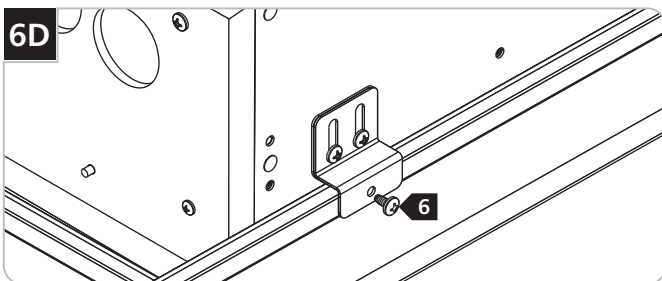
- 1 Build a 4.5" on-center grid to accommodate the fixture(s).



- 2 Mount a joiner/hanger plate on each length of threaded rod at the seams between the fixtures.
- 3 Mount an end hanger plate (shipped with the endcaps) on the threaded rods at each end of the run. **NOTE:** This plate will have 2 threaded studs rather than 4.
- 4 Hang the fixtures from #8 nuts on the studs. Do not tighten the nuts until after the fixtures have been aligned.



**5** Install two grid mounting brackets to each end of the fixture using the provided bracket screws (8' models require two brackets in the center of the fixture as well).



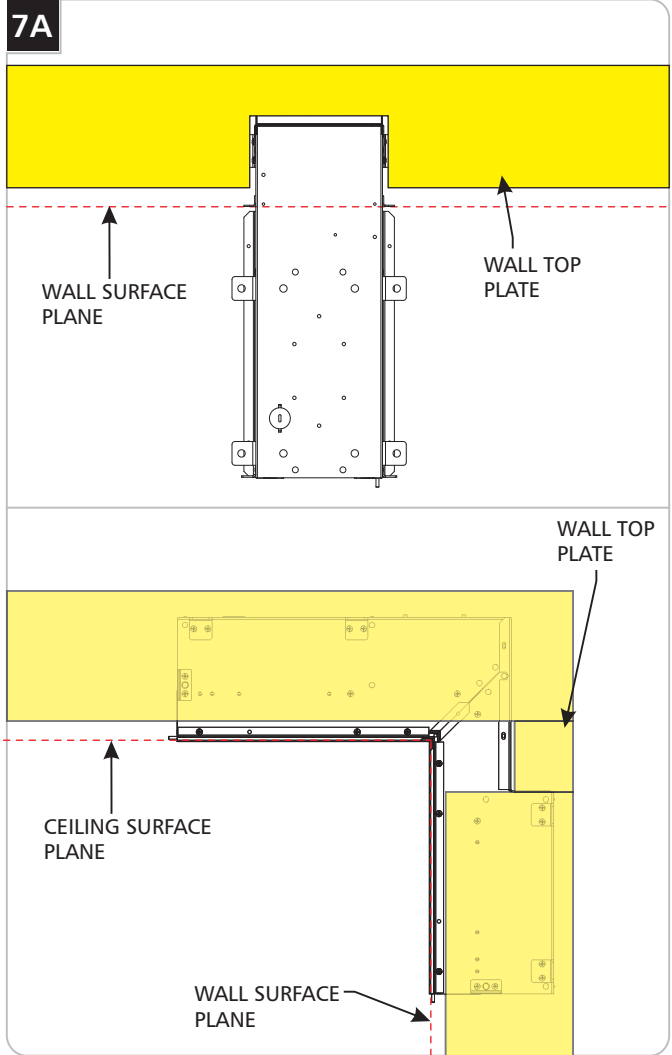
**6** To further secure the fixture or per local code, use the screws slots on the sides of the brackets to secure the fixture to the T-bar.

**NOTE:** One of the fixture in a lay-in run will be 44" long rather than the standard 48". The 44" fixture may be installed anywhere in the run.

## Install Wall-to-Ceiling Connector

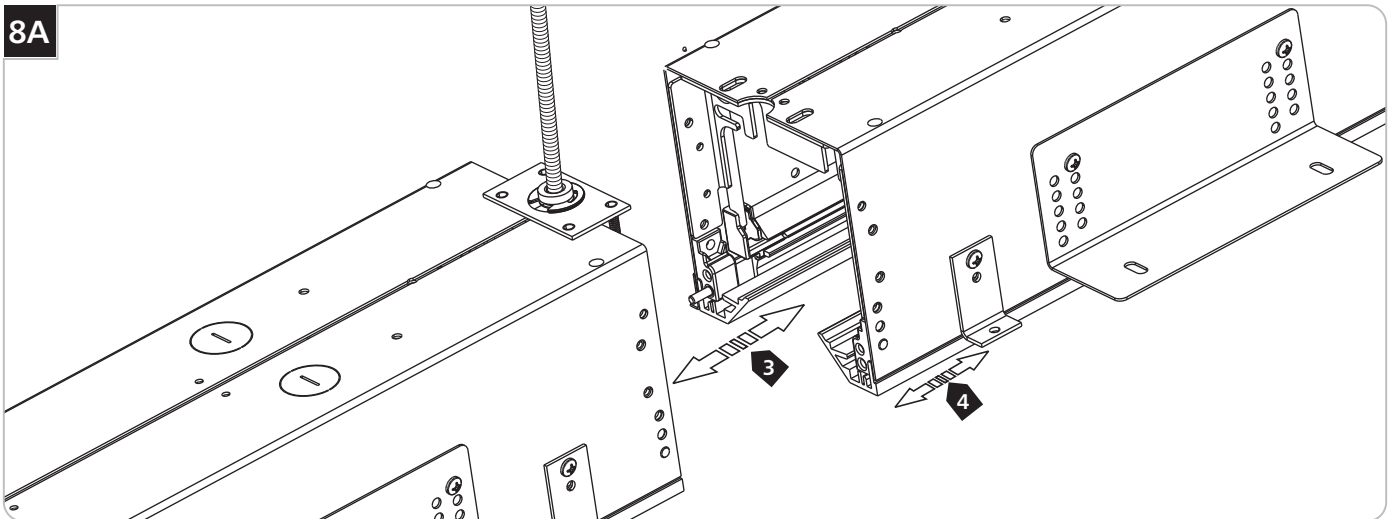
**NOTE:** If installing a continuous wall to ceiling connector, start the continuous fixture run installation with the connector.

If not installing a wall to ceiling connector, skip to the next step.

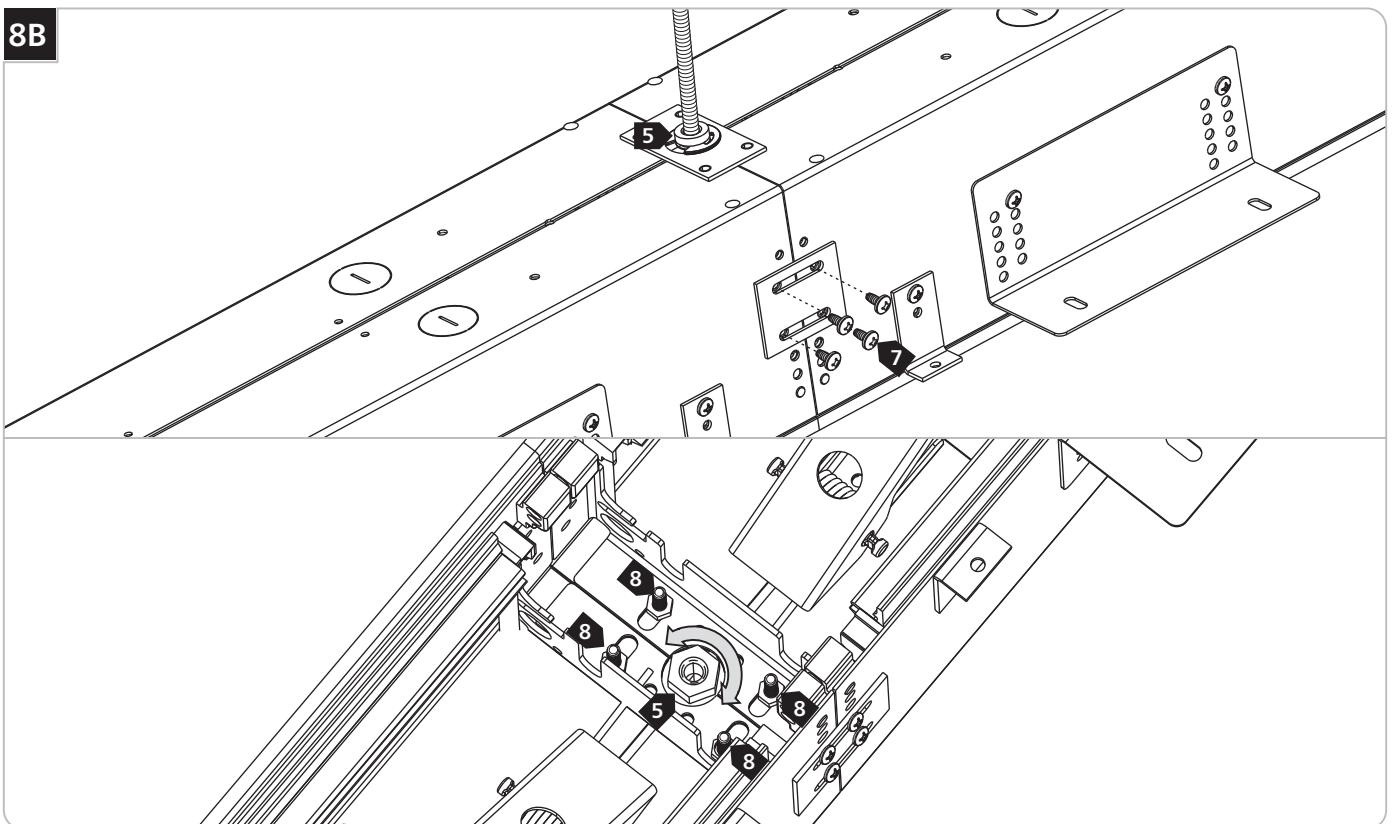


**1** To create clearance for the ceiling to wall connector, the wall top plate must be modified, following guidelines in accordance with local building code, to accommodate the fixture's depth.

## Connect the Fixtures



- 1 Install the first fixture using one of the methods described in the previous section.
- 2 Hang the next fixture from the hanger/joiner plate using the #8 nuts to support the fixture. Do not tighten the nuts until the fixtures are aligned.
- 3 Using the alignment pins as a guide, slide the fixtures together and touch the rails together to avoid creating visible seams.
- 4 The rails can be gently slid along the axis of the fixture if necessary to put the fixtures in alignment while avoiding visible gaps.

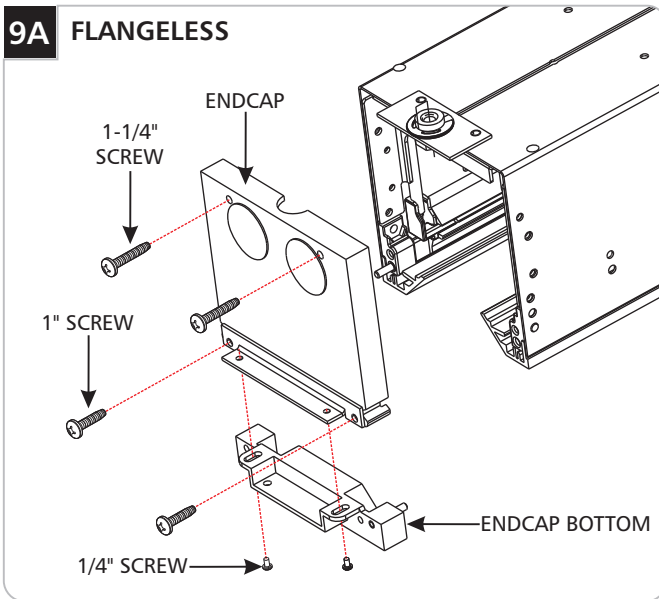


- 5 Turn the nut on the hanger plates to raise and lower the fixtures to align them vertically.
- 6 If available, use a laser line to align the fixtures in the plane of the ceiling.
- 7 When the units are aligned with no visible seams, use the provided screws to join the fixtures together with the joiner plates on each side.
- 8 Also tighten the #8 nuts on the hanger plates inside.
- 9 Repeat steps 3 and 4 for the remaining fixtures.



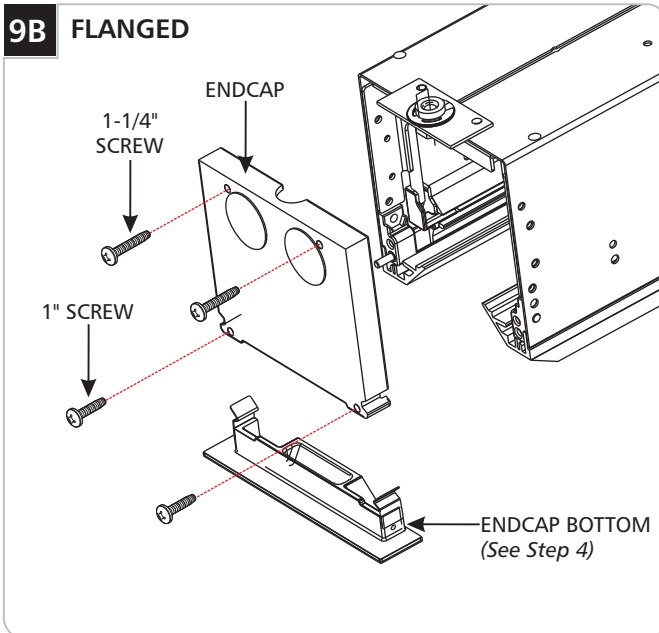
# Install the Endcaps

## 9A FLANGELESS



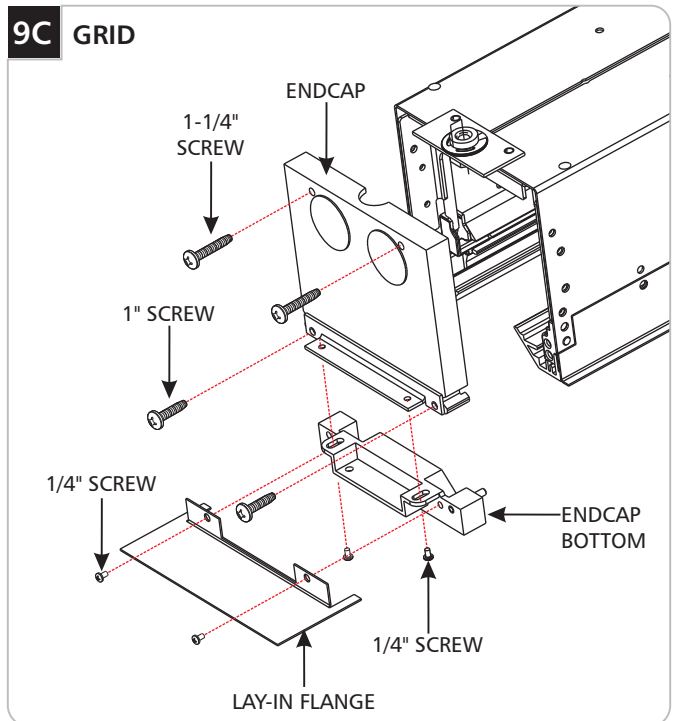
- 1 Mount the endcap and its bracket using two 1-1/4" screws and two 1" screws.
- 2 Attach the endcap bottom using two 1/4" screws. Mount the endcap bottom snug against the rails on the fixture to avoid creating visible seams

## 9B FLANGED



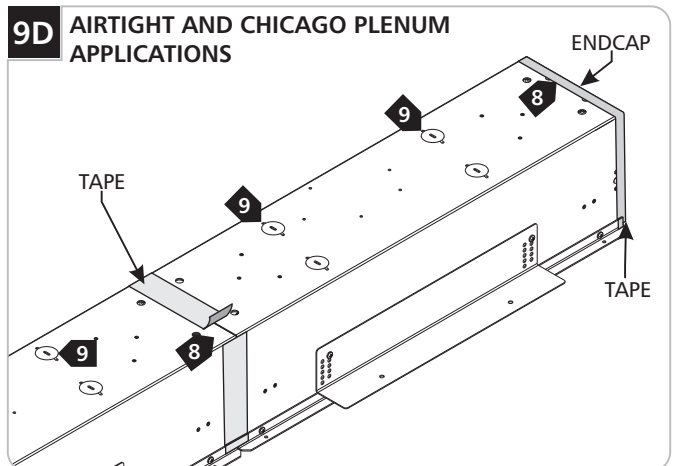
- 3 Mount the endcap and its bracket using two 1-1/4" screws and two 1" screws.
- 4 Keep the endcap bottom in a safe place and snap it in after the drywall is installed.

## 9C GRID



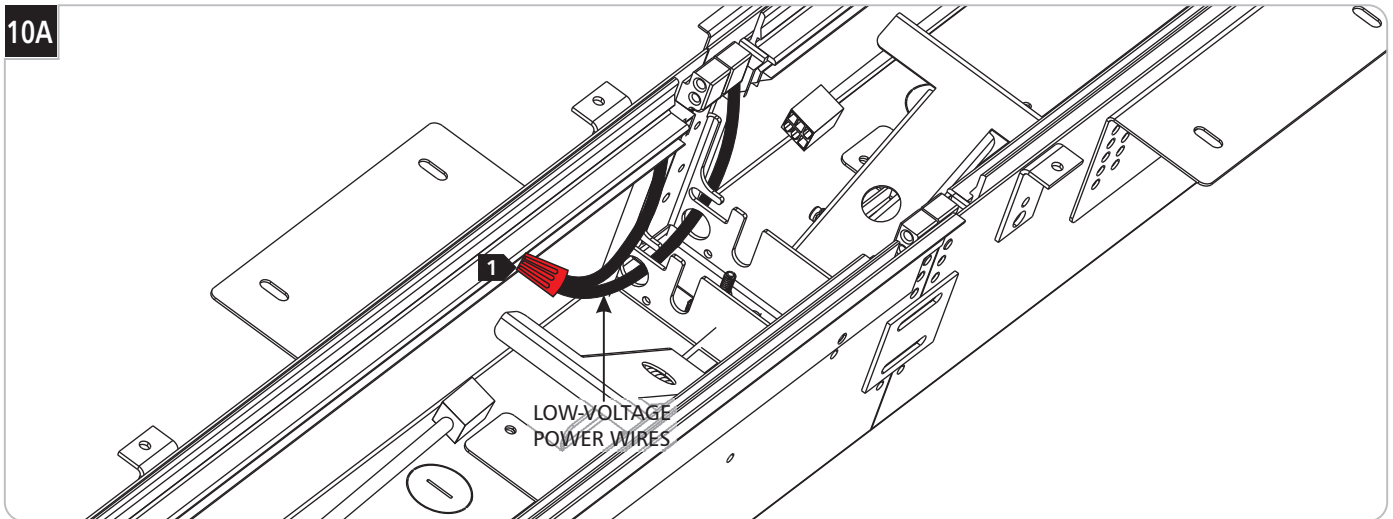
- 5 Mount the endcap and its bracket using two 1-1/4" screws and two 1" screws.
- 6 Attach the endcap bottom using two 1/4" screws. Mount the endcap bottom snug against the rails on the fixture to avoid creating visible seams
- 7 Attach the lay-in flange using two 1/4" screws.

## 9D AIRTIGHT AND CHICAGO PLENUM APPLICATIONS



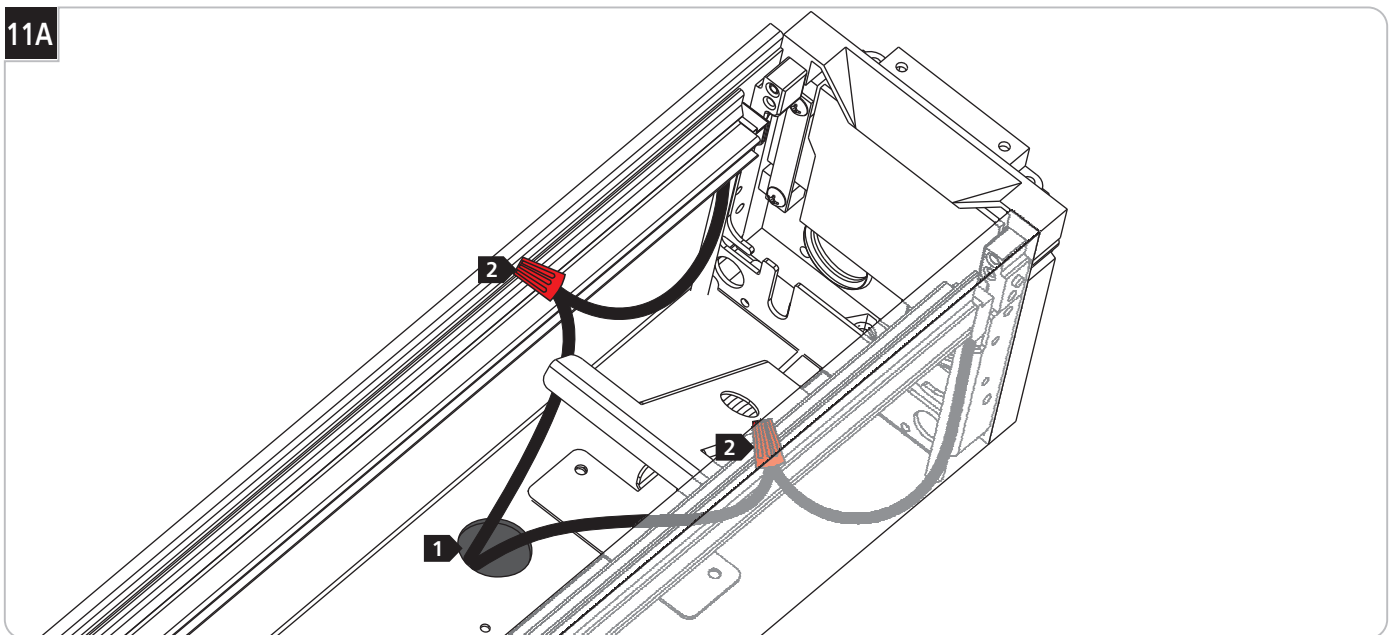
- 8 For airtight and Chicago Plenum applications, use the tape provided to seal the seams between the fixtures and at the endcaps.
- 9 Tape any unused knockouts and conduit fittings.
- 10 Tape the opening in the endcaps, if present.
- 11 Use the screws provided to fill in any unused holes.

## Electrically Connect the Fixtures



- 1 Connect the low-voltage power wires together. Pass the wires through the holes in the frame so they won't interfere with the installation of the reflector later.

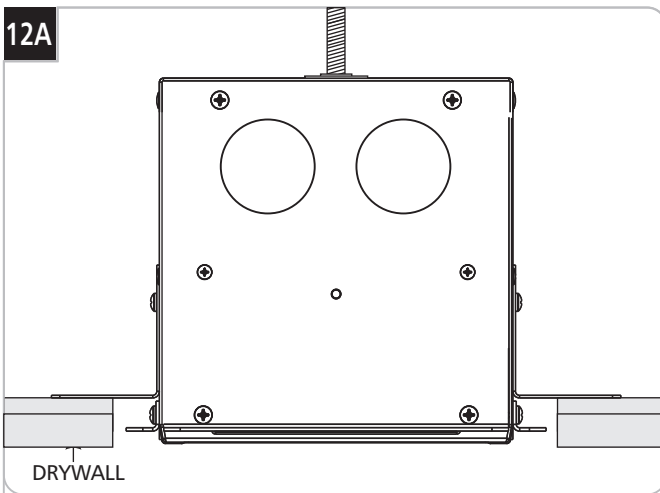
## Power the Fixture



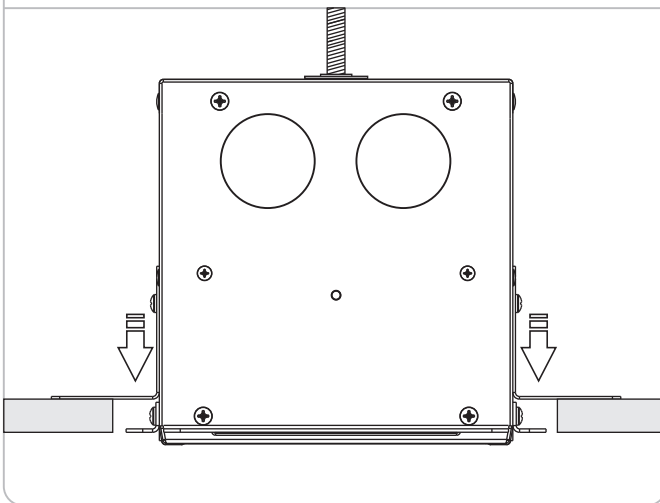
- 1 If using the low-voltage feature, follow the instructions on the remote transformer to install and power the transformer, then run the low-voltage power lines to the fixture.
- 2 Connect the fixture's low-voltage wires to the wires from the transformer.

## Install the Drywall (flangeless)

12A

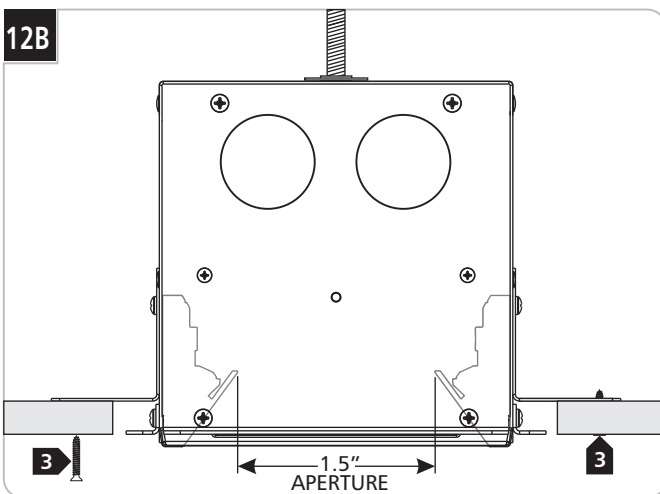


1 Install drywall up to the fixture housing(s).



2 If necessary, adjust the fixture height so that the backer flange makes contact to drywall surface.

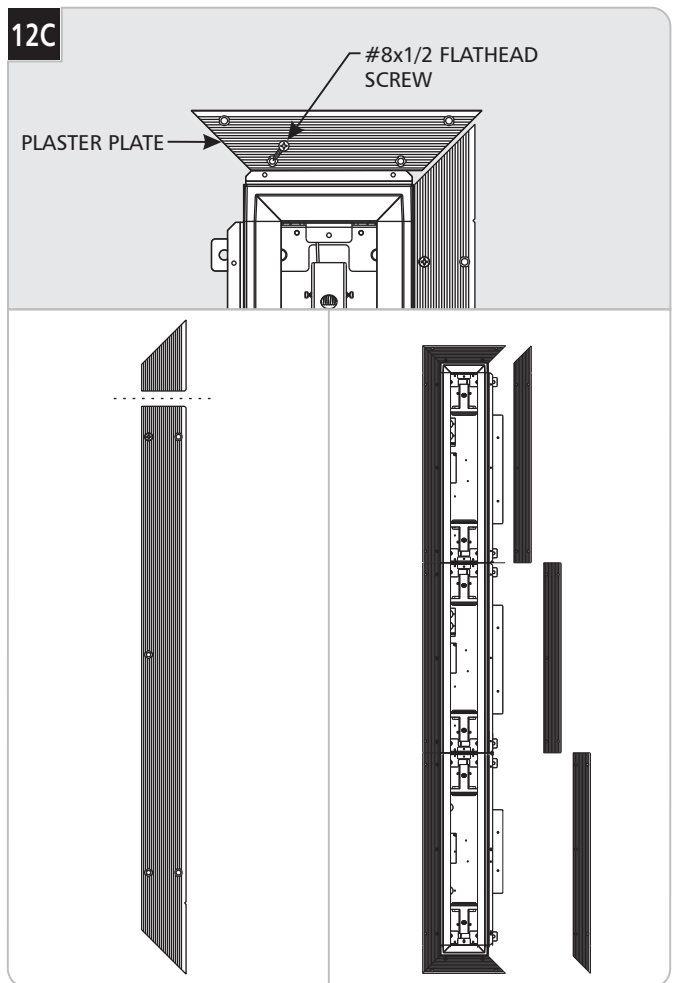
12B



3 Secure the drywall to the backer flange by either drilling a pilot hole and screwing in sheet metal screws or use self-drilling sheet metal screws.

**WARNING:** Fixture aperture width should not be less than 1.5". If the fixture is compressed during installation, the reflector will be difficult to install.

12C

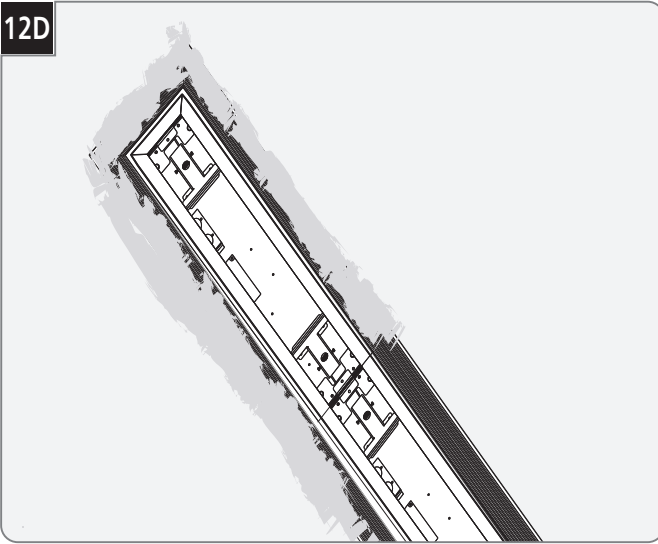


4 Secure the plaster plates to fixture(s) using the supplied #8x1/2 flat head screws:

Start with the ends to use the mitered pieces.

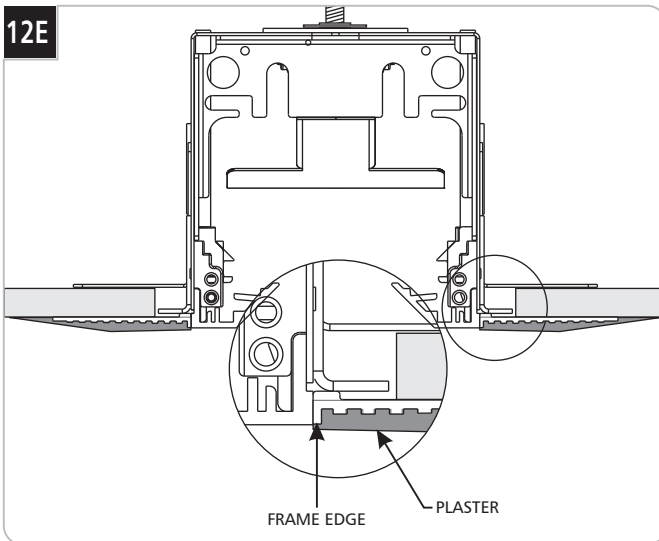
For intermediate sections, evenly trim the mitered ends off the long plaster plates so they are roughly in line with the fixture seams.

12D



5 Properly plaster onto the plaster flange and drywall.

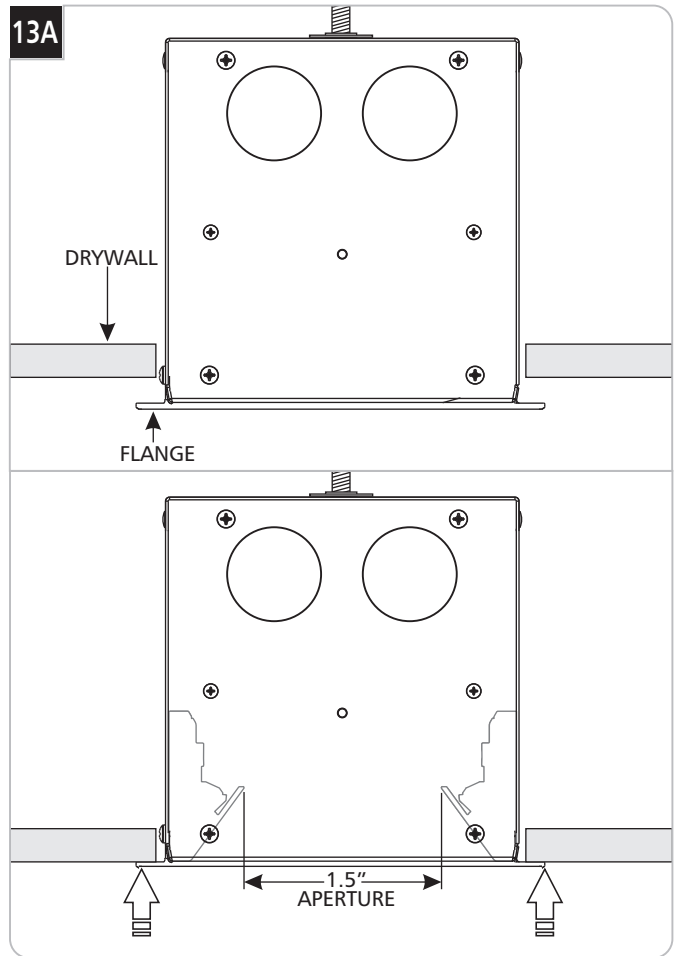
12E



6 Plaster up to the frame edge for a seamless appearance.

## Install the Drywall (flanged)

13A



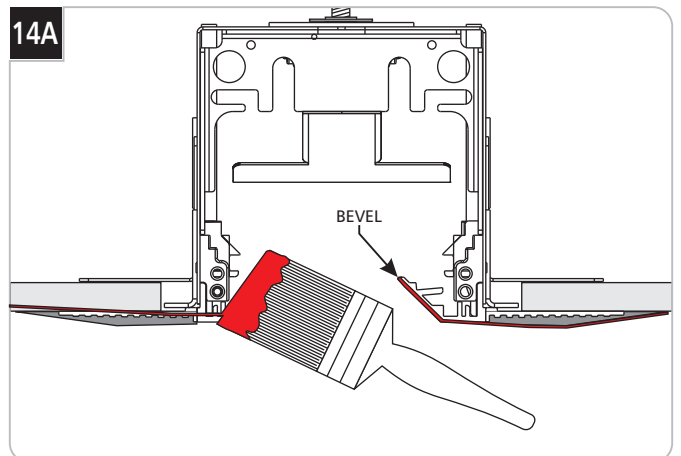
1 Install drywall up to the fixture housing(s).

2 Adjust the fixtures height so that the fixture flange is just snug to the drywall surface. **DO NOT OVER TIGHTEN.**

**WARNING:** Fixture aperture width should not be less than 1.5". If the fixture is compressed during installation, the reflector will be difficult to install.

## Painting the Bevel (optional)

14A

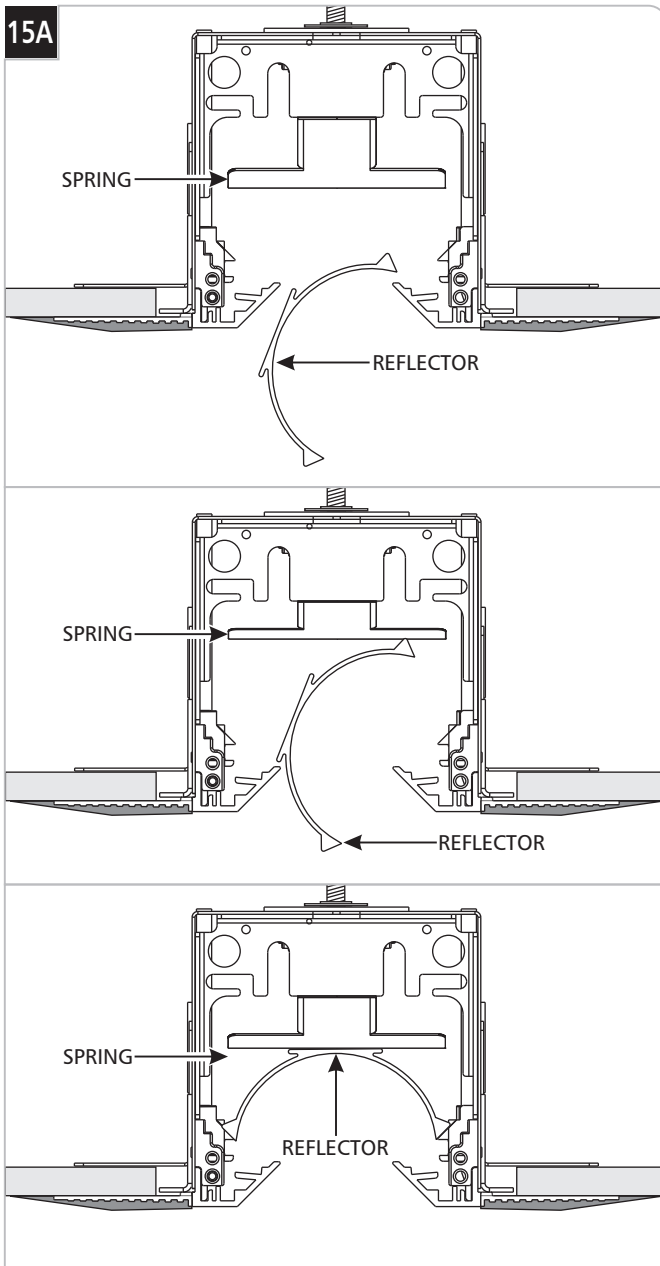


1 The fixture bevel may be painted to match the ceiling color. **Take caution not to over paint!** This will result in damaging the LEDs.

## Install the Reflector

**NOTE:** If your fixture consists of corner connectors, the corner reflectors should be installed prior to the linear fixtures.

15A



- 1 Install the reflector by tilting it and inserting it into the fixture.
- 2 Continue pushing the reflector in. Some resistance will be felt by the spring loader which will also level it with the ceiling.
- 3 Let the spring push the reflector down to rest evenly in the fixture. If necessary, use the provided pull hook to reposition the reflector inside the fixture.
- 4 Make sure the reflector is centered in the fixture. An improperly inserted reflector can damage the LEDs.
- 5 Repeat for the remaining reflectors.

Notes

Notes



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