

Merge 1.5 - Suspended Linear

1.0



GENERAL PRODUCT INFORMATION:



This product is suitable for dry locations.

Maximum run length per branch circuit power feed is 80ft.

Maximum run length for low-voltage busbar is 40ft; Multiple 40ft runs may be combined using multiple transformers.

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

This instruction shows a typical 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.

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

Identify the Fixtures and Configuration

1A

The diagram illustrates three wiring scenarios for a suspended linear fixture run:

- Top Section:** Shows line-voltage wiring. It starts with an 'INITIAL LINE-VOLTAGE POWER SOURCE FOR START' on the left. Wires run through the fixture to a 'LAST FIXTURE ON 80' LIMIT'. A 'MID-RUN SECONDARY LINE-VOLTAGE POWER SOURCE' is shown connecting to the fixture run between units.
- Middle Section:** Shows low-voltage wiring. It starts with an 'INITIAL LOW-VOLTAGE POWER SOURCE' on the left. 'LOW-VOLTAGE WIRES JOINED' are shown connecting between units. A 'MID-RUN SECONDARY LOW-VOLTAGE POWER SOURCE' is shown connecting to the fixture run. 'LOW-VOLTAGE LINES CAPPED OFF' are shown at the end of the run.
- Bottom Section:** Shows a mid-run power source configuration. A 'MID-RUN LOW-VOLTAGE POWER SOURCE' and a 'MID-RUN LINE-VOLTAGE POWER SOURCE (Y-CONNECTOR)' are shown connecting to the fixture run between units.

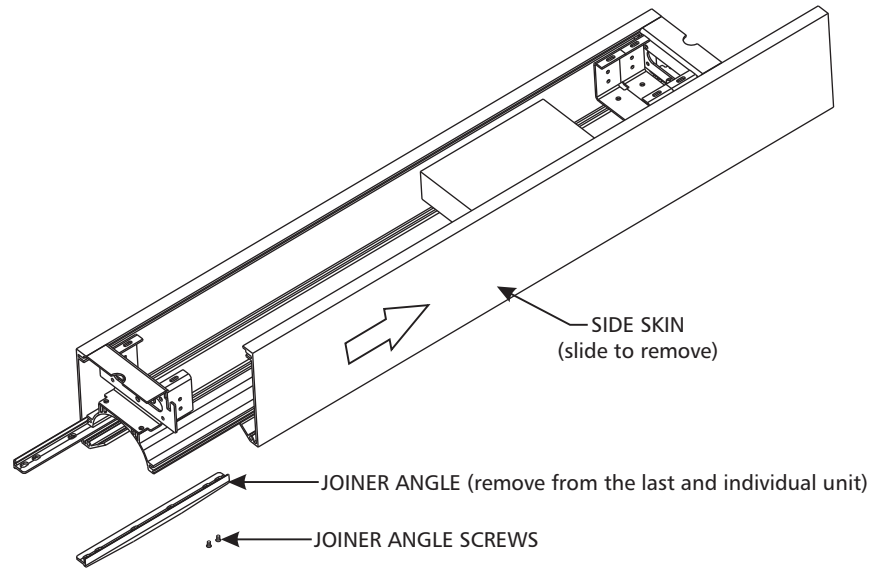
The line-voltage section of the fixture run will be likely powered at the start of the run, then interconnected to a maximum of 80'. For a longer run, sections may be isolated by simply not connecting the wire harnesses together. The secondary power source must be spliced to the wiring harness in the fixture using one of the provided notched locations.

The low-voltage section of the fixture run will also likely be powered at the start of the run, then interconnected to a maximum of 40'. Sections of the run may be isolated by simply not connecting the low-voltage lines and the run may be powered by multiple transformers at different units to power longer runs.

The line-voltage power can be delivered mid-run by using the Y-connector to connect the line-voltage and dimming controls. The low-voltage power can be delivered mid-run by connecting the low-voltage wires from the 2 adjacent units to the wire from the drop.

Prepare the Fixtures

2A

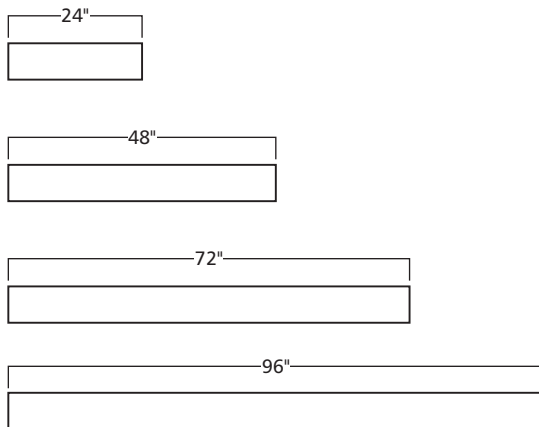


- 1 Remove the side skins from all the fixtures and set them aside in a safe place.
- 2 Designate which fixture will be the last in the run. This fixture will likely be the farthest from the power supply.
- 3 Remove the joiner angles from the last fixture by removing the screws on the bottom of the fixture.

NOTE: If installing an individual fixture, you should also remove the joiner angles.

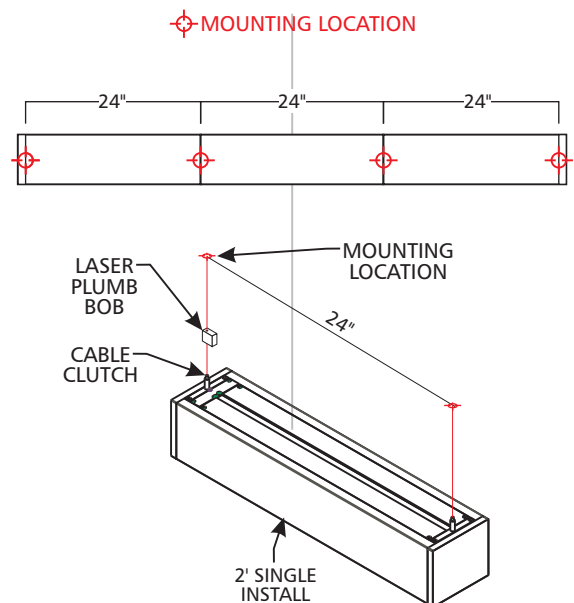
Prepare for Installation

3A



For corners, see instructions included with corner fixture

2' Example Configuration



- 1 The mounting cable/stem locations on the fixture are centered at the seam between adjoining fixtures. The mounting locations in a run fixtures are at the end of the main fixture bodies, not including the endcap. If installing a single fixture, mounting locations will be a 1/4" in from both ends. Using the provided diagram, mark the post/T-Bar location on the ceiling/grids for each model in the configuration. See example configuration.

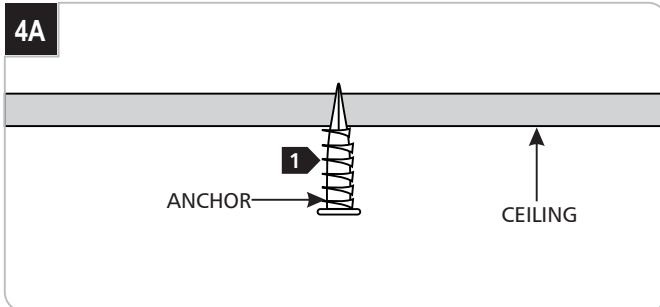
Note: If using a canopy with a cable post, the post located in the center of the canopy will be one of the reference points.

Alternate Marking: Lay the fixture configuration on the floor underneath the installation location, and use a laser plumb bob to project the location of the cable clutch or stem post onto the ceiling/grid. Mark the locations.

See the appropriate section for post mounting.
Cable/Stem Post for Ceiling: Section 4
Cable/Stem Post for Grid: Section 5

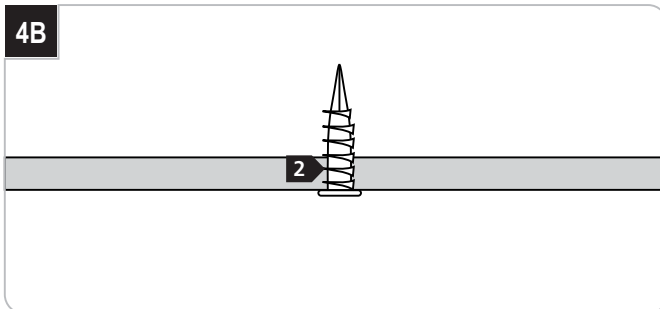
Install the Cable/Stem Posts (Ceiling)

4A



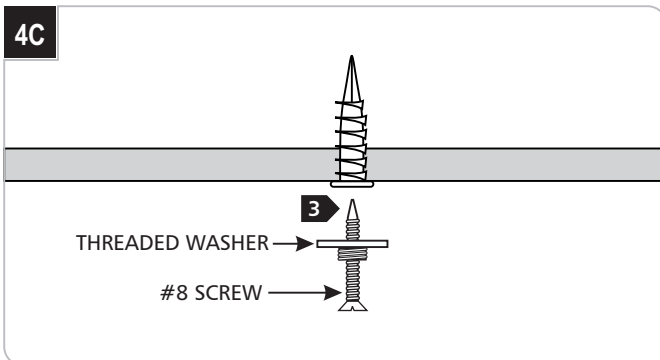
- 1 At the mark point, tap the anchor into the ceiling up to the threaded portion with a hammer.

4B



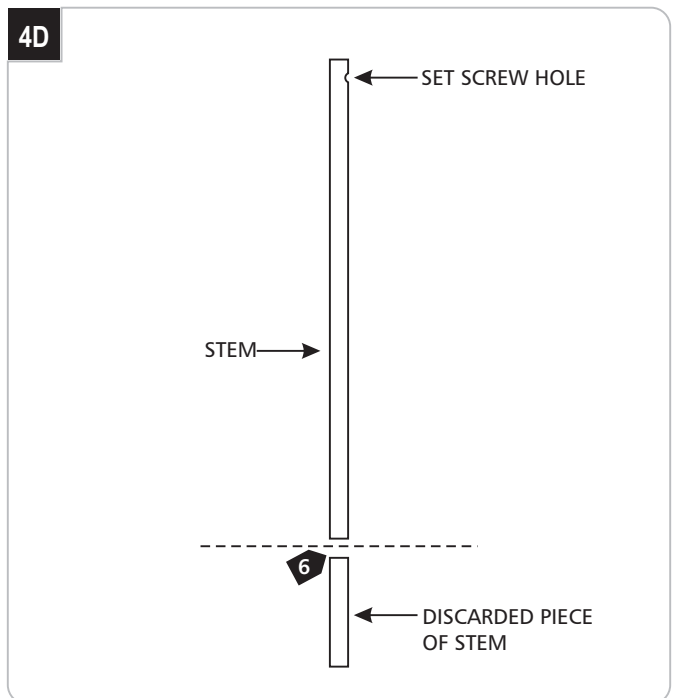
- 2 Screw the anchor in the rest of the way with a Phillips screwdriver.

4C



- 3 Mount the threaded washer to the anchor with the #8 screw.
- 4 Repeat the steps 1 through 3 for the remaining marked points.

4D

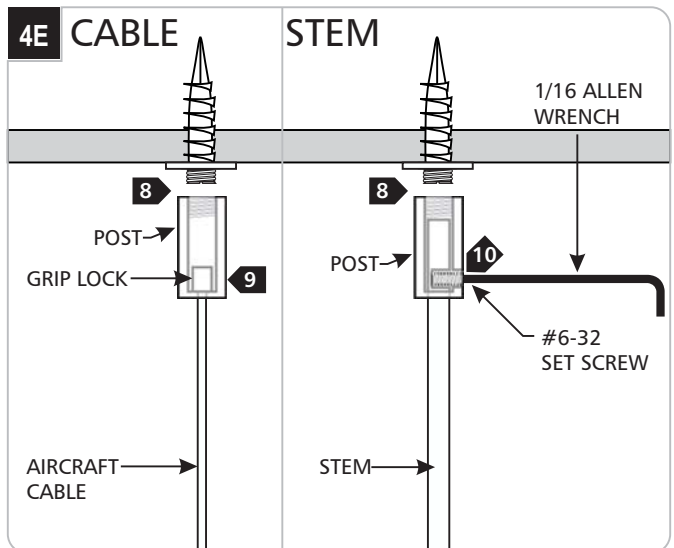


- 5 If shortening the stems: starting from the end with the set screw hole, measure then mark the desired length of the stem.

- 6 Cut the stem at the mark with a hacksaw.

- 7 Clean the burrs off the cut section.

4E



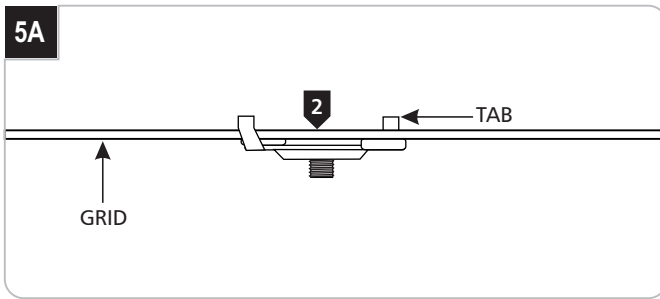
- 8 Screw the posts onto the threaded washers.

- 9 For cable: feed the aircraft cables through the post so that the grip lock is secured inside.

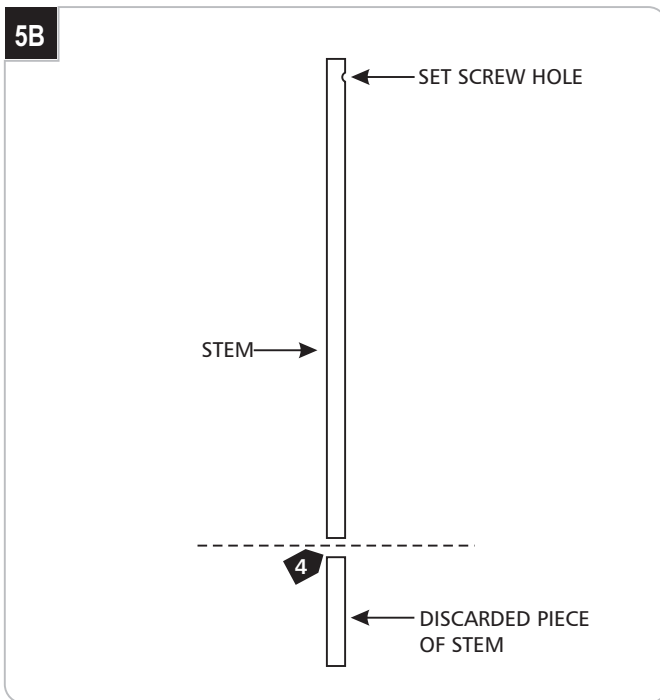
- 10 For stem: insert the stems into the posts, align the stem hole with the post hole, and install the #6-32 set screw with the 1/16 Allen wrench. Make sure that the set screw is installed completely and tightly into the stem.

- 11 For cable, skip to section 7. For stem, skip to section 8.

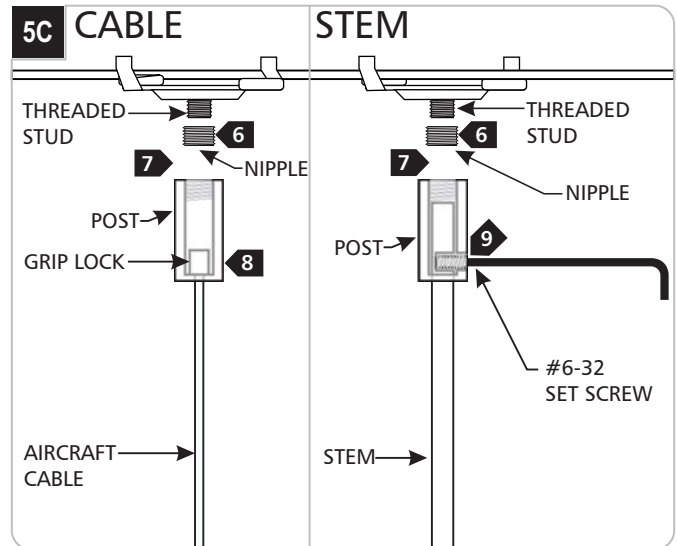
Install the Cable/Stem Posts (Grid)



- 1 Select the locations on the grids where the standoffs will be mounted.
- 2 Push the T-bar connector flat section against the grid. Rotate the T-bar connector until the tabs on the T-bar connector snap behind the grid.



- 3 If shortening the stems: starting from the end with the set screw hole, measure then mark the desired length of the stem.
- 4 Cut the stem at the mark with a hacksaw.
- 5 Clean the burrs off the cut section.

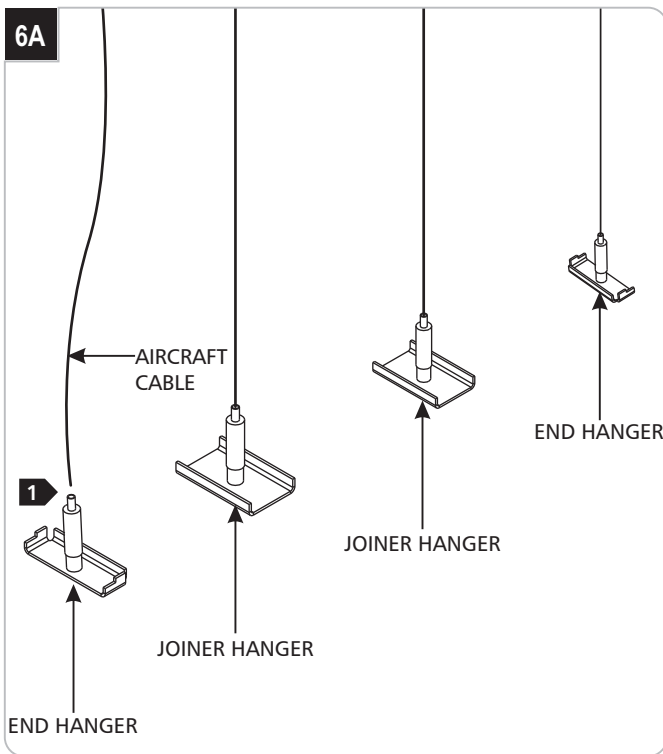


- 6 Screw the nipple to the threaded stud.
- 7 Screw the post completely to the nipple.
- 8 **For Cable:** Feed the aircraft cables through the post so that the grip lock is secured inside.
- 9 **For Stem:** Insert the stems into the posts, align the stem hole with the post hole, and install the #6-32 set screw with the 1/16 Allen wrench. Make sure that the set screw is installed completely and tightly into the stem.



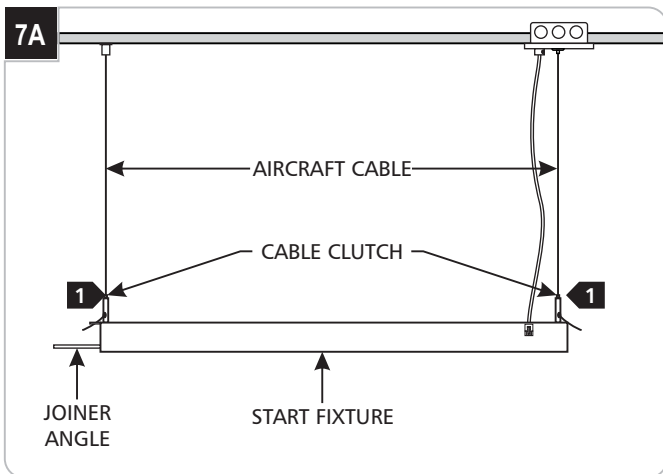
Continue installation using instructions provided with the canopy.

Prepare the Hanging System (Cable)

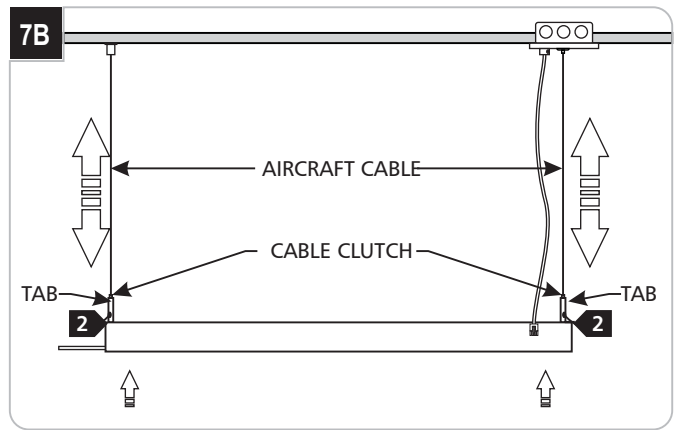


- 1** Feed the aircraft at the ends of the run through the cable clutches on the end hangers.
- 2** Hang joiner hangers on all the intermediate cables.

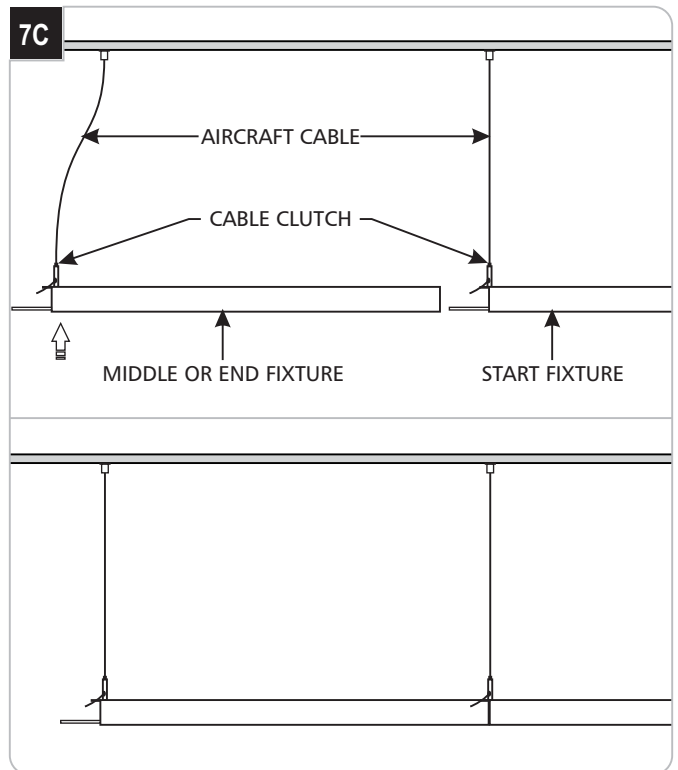
Install Fixtures (Cable)



- 1** Hang the first fixture from the first set of hangers. Make sure the joiner angles are facing the next fixture.

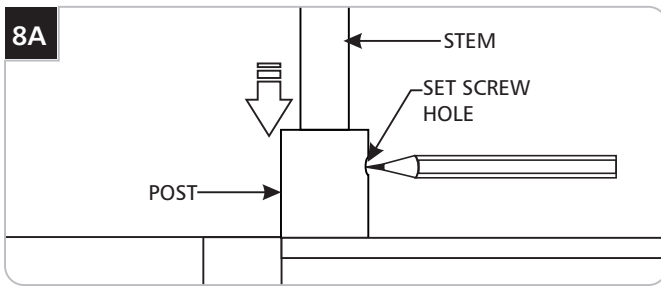


- 2** To level the fixture, push the tab on the cable clutch and feed more or less of the support cable into the cable clutch. Make fine adjustments to each cable until the fixture is level.
- 3** Do not cut off the excess aircraft cable until installation is complete.
- 4** If installing a single fixture, skip to step 10C.

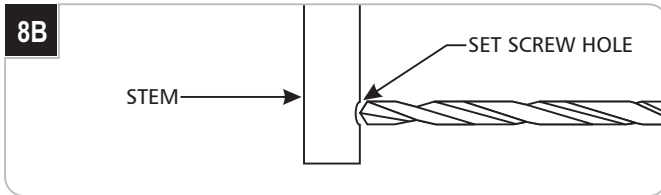


- 5** Hang the next fixture on the next 2 hangers while resting one end on the joiner angles of the previous fixture.
- 6** Push the fixtures together so that they are aligned and the reflectors are touching.
- 7** Continue hanging fixtures this way. The last fixture will be the one with no joiner angles.

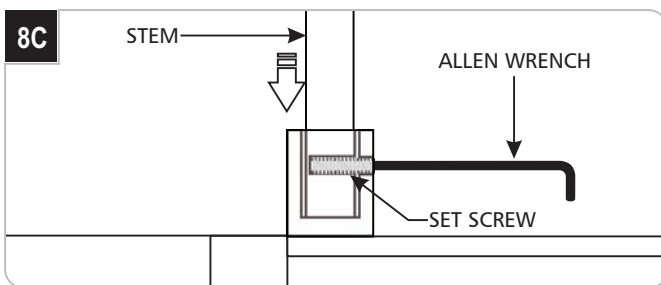
Prepare the Hanging System (Stem)



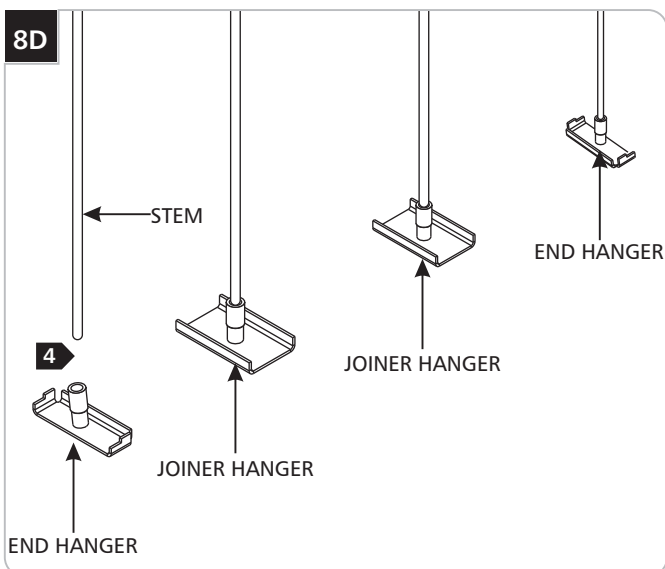
- 1 Push the stems completely into the post on the hanger assemblies and mark the location of the set screw hole.



- 2 Drill a hole using a #29 (0.136") drill bit at the marked location in each stem.

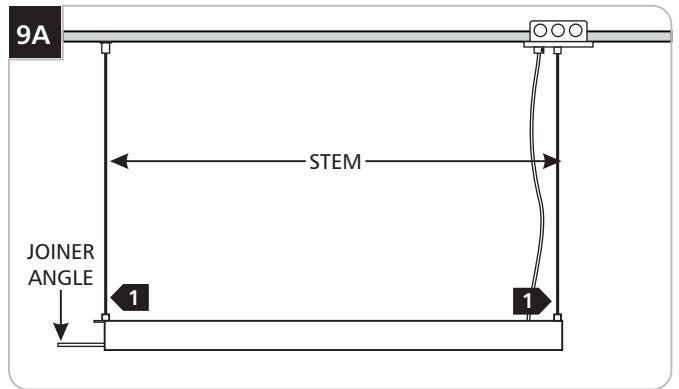


- 3 Reinsert the stems into the hanger posts and install the #6-32 set screw with the 1/16 Allen wrench. Make sure that the set screw is installed completely and tightly into the stem.

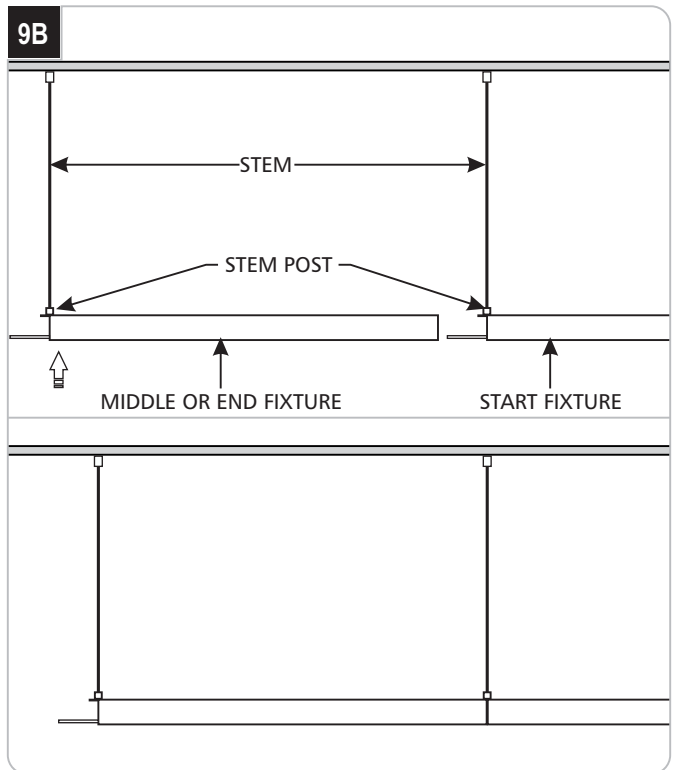


- 4 Make sure that end hangers are installed on the stems at the ends of the run and that joiner hangers are installed on the intermediate stems.

Install the Fixture (Stem)



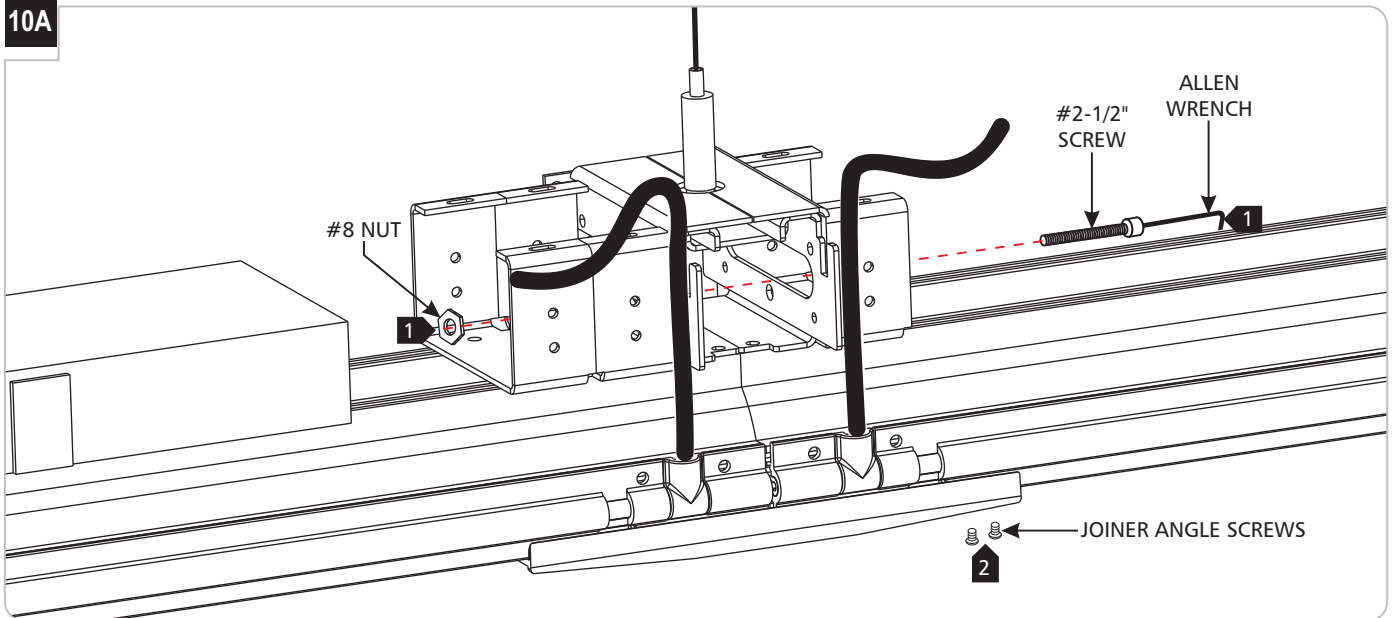
- 1 Hang the first fixture from the first set of hangers. Make sure the joiner angles are facing the next fixture.



- 2 Hang the next fixture on the next 2 hangers while resting one end on the joiner angles of the previous fixture.
- 3 Push the fixtures together so that they are aligned and the reflectors are touching.
- 4 Continue hanging fixtures this way. The last fixture will be the one with no joiner angles.

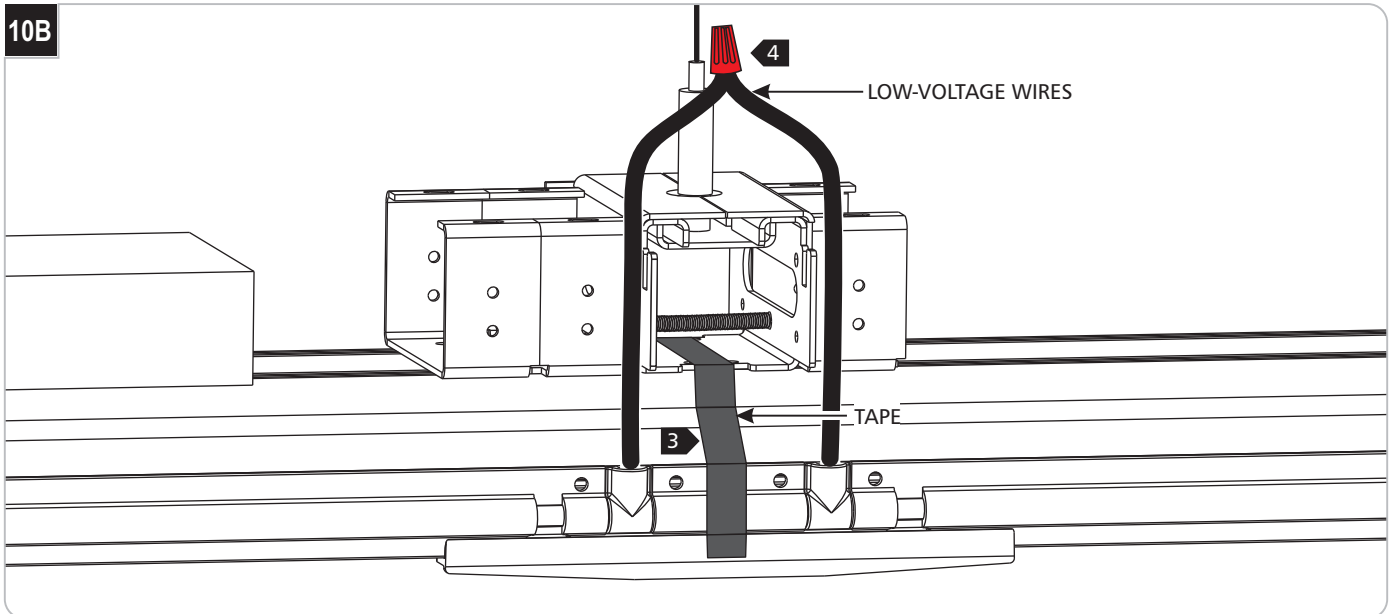
Connect the Fixtures

10A

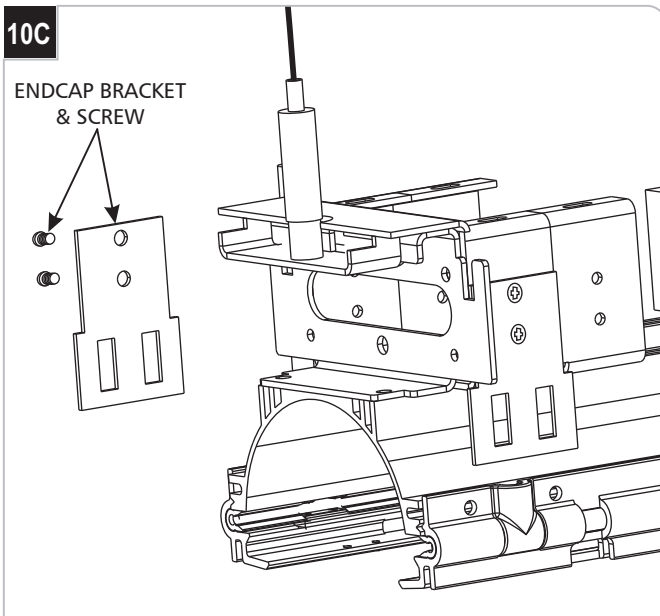


- 1 Install a 2-1/2" screw and a #8 nut at each fixture joint. Use the Allen wrench provided to tighten the screw and pull the fixtures together and minimize the seam between the reflectors when seen from below. Raise or lower the ends of the fixtures as needed to align them.
- 2 When all the fixtures have been hung, leveled, and aligned, lock them together by installing screws into the bottom of the fixtures through the joiner angles. The fixtures can be realigned by slightly loosening the joiner angle screws and re-tightening them after adjustment.

10B

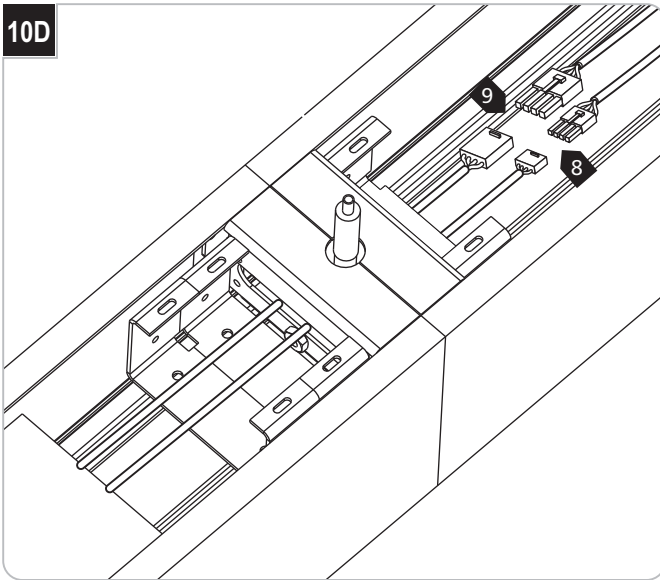


- 3 Install black electrical tape across the seam between the fixtures to block any light leak.
- 4 Connect the low-voltage wires using the wire nuts provided.

10CENDCAP BRACKET
& SCREW

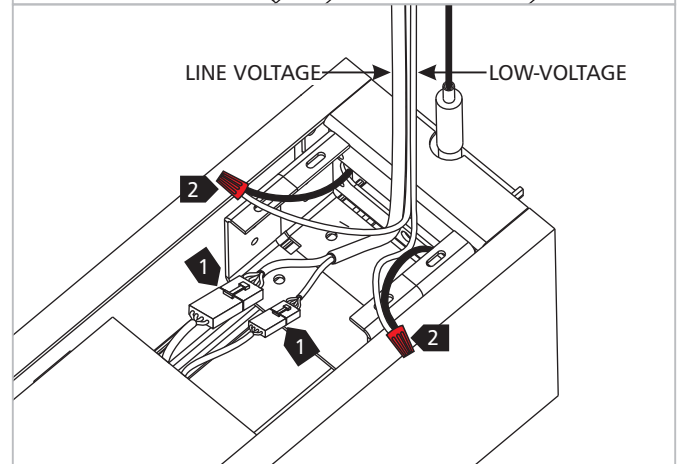
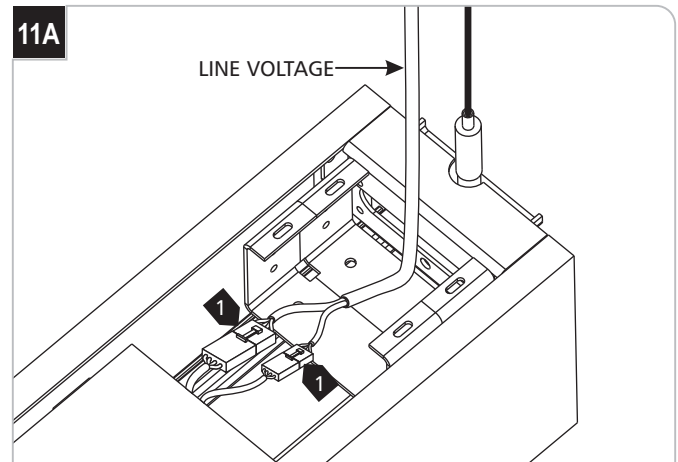
- 5 Mount 2 endcap brackets at each end of the run with the screws provided.

SIDE SKIN NOTE: Install the side skins by pivoting them into place an inch or two away from their final location and sliding into place.

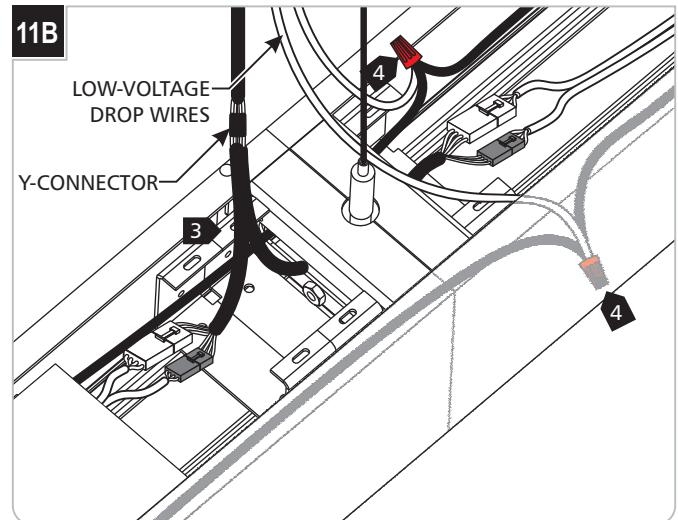
10D

- 6 Feed the female power and control connectors into the adjacent fixture and connect them to the male connectors.
- 7 Repeat steps for the rest of the connecting fixtures.

Connect the Power Feed

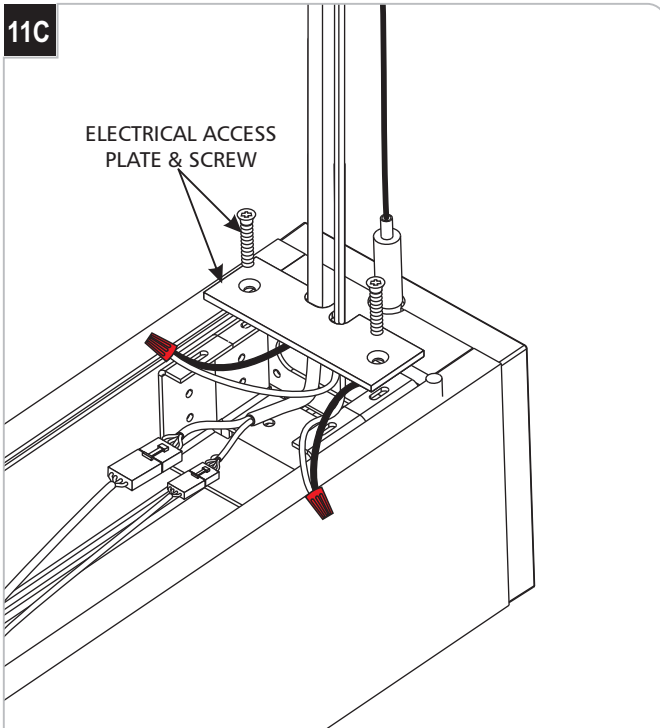
11A

- 1 Connect the power and control wire connectors from the power feed to the connectors on the fixture.
- 2 If utilizing the low-voltage bus bar, connect the low-voltage remote transformer wires to the low-voltage wires in the fixture with the provided wire nuts.

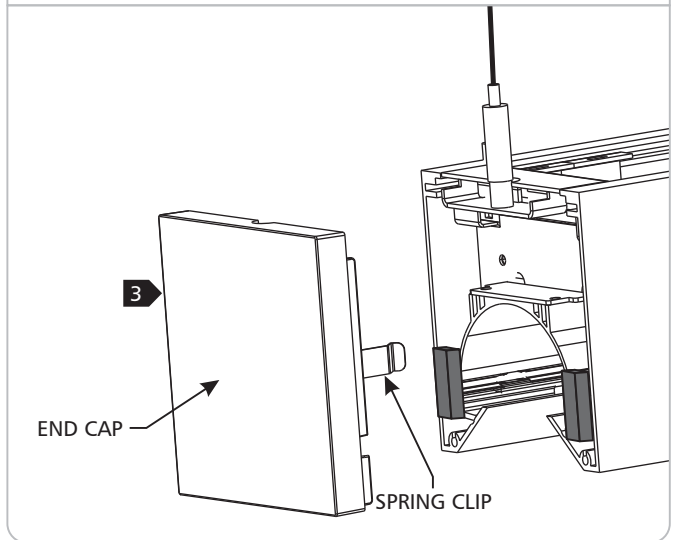
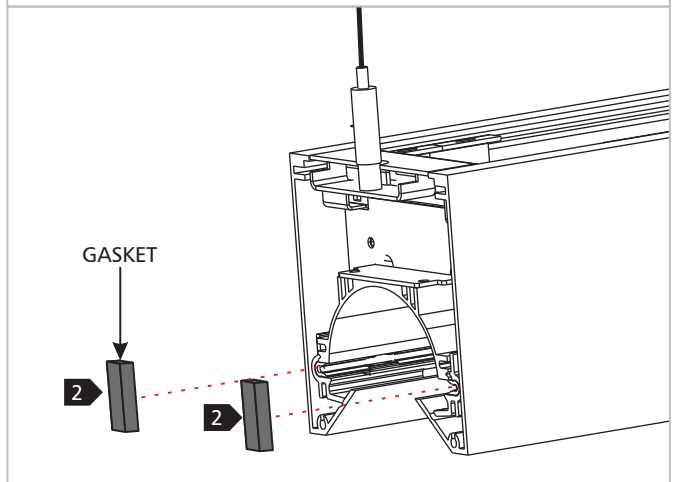
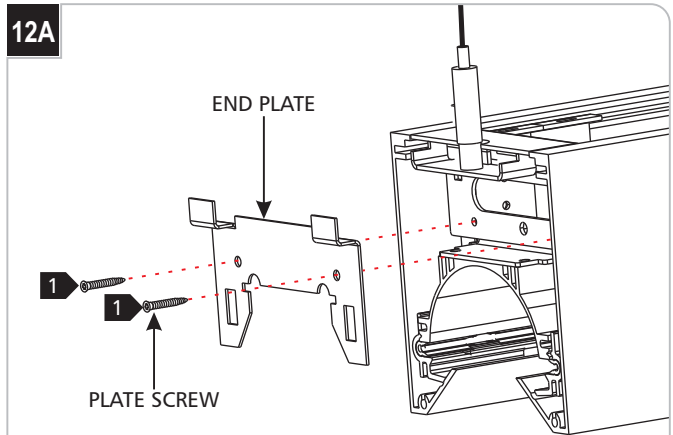
11B

- 3 If dropping power to a middle fixture, use the provided Y-connector to power the 2 adjacent fixtures.
- 4 Connect the corresponding low-voltage wires in the adjacent fixtures to the low-voltage drop wires.

Install the End Caps

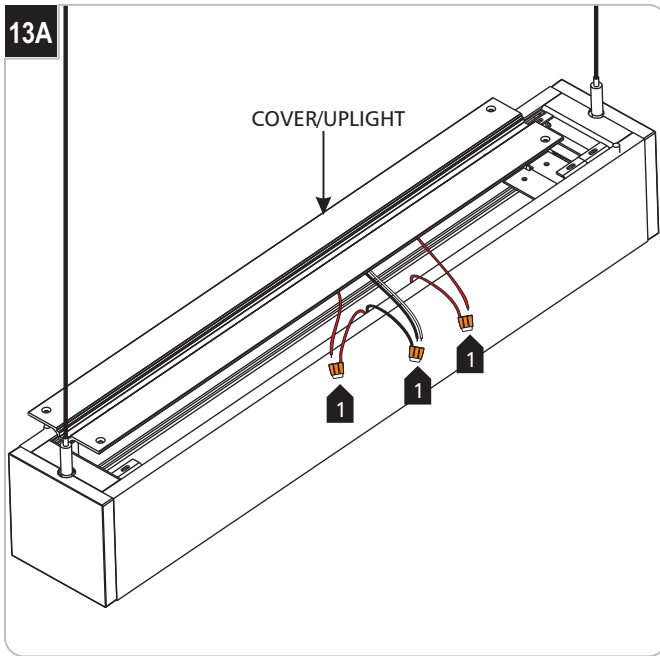


- 5 Mount the electrical access plate on all the fixtures using the screws provided.



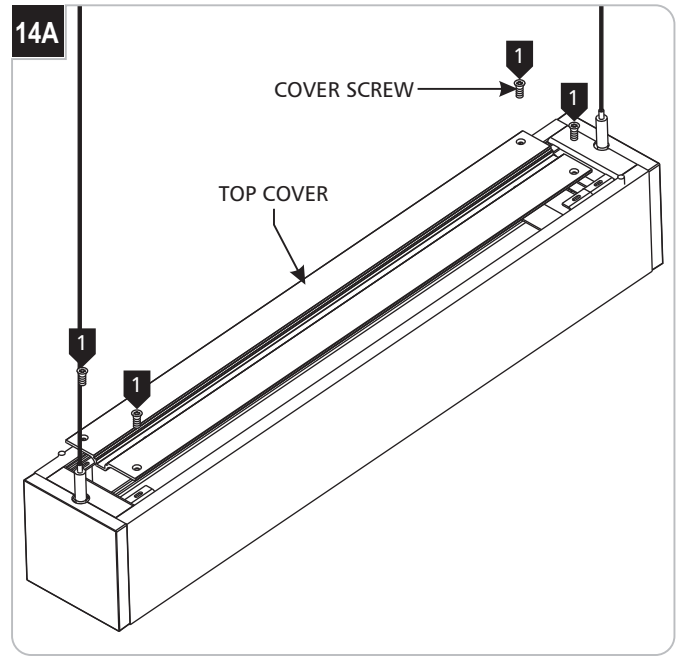
- 1 Install the end plates to both ends of the run with the screws provided. These plates keep the side skins safely in place and should not be ignored.
- 2 Install the light gaskets at the ends of the busbars.
- 3 Install the end caps by pushing them onto the ends of the run until they snap into place.

Wire the Uplight (Optional)



- 1 Connect the wires in the top cover to the corresponding wires inside the fixture using the push-in connectors provided.

Install the Cover (Uplight and Non Uplight Versions)



- 1 Neatly tuck in any wiring and secure the top cover to the top of the fixture using the provided cover screws.

Notes

SAVE THESE INSTRUCTIONS!



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