

# Merge Flush Mount

1.1

**ELEMENT**  
a brand of **TECH LIGHTING**

**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.

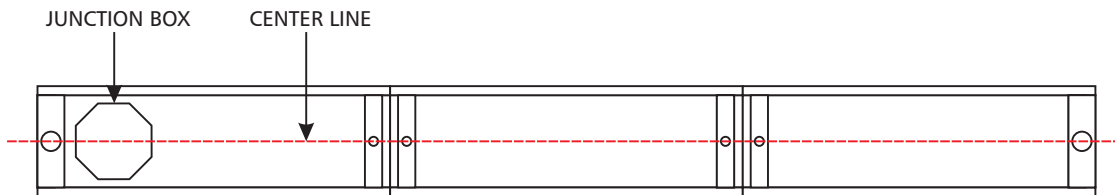


**CAUTION - RISK OF FIRE**  
This product must be installed in accordance with the applicable installation code by a person familiar with the construction and operation of the product and the hazards involved.  
**Use minimum 90°C supply conductors.**

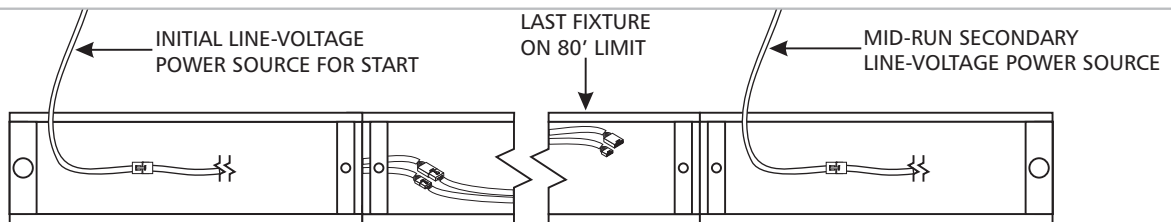
**NOTE:** Due to the complexity of this fixture, assistance is recommended for installation.

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

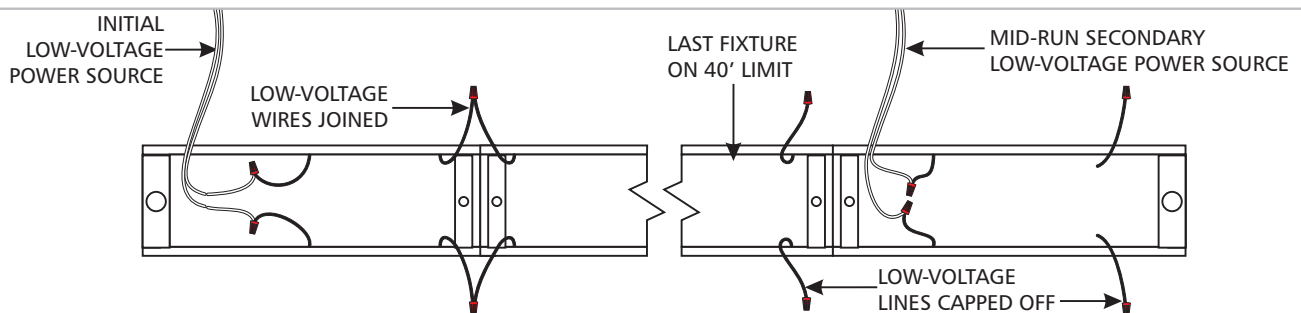
1A



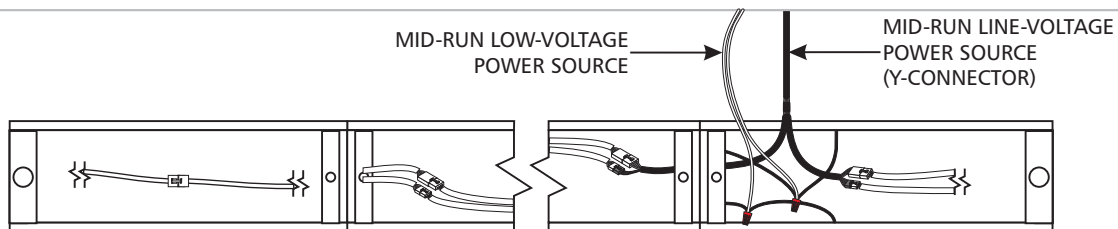
Locate the junction box or power feed exit point on the center line of the run as close to one end as possible.



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.



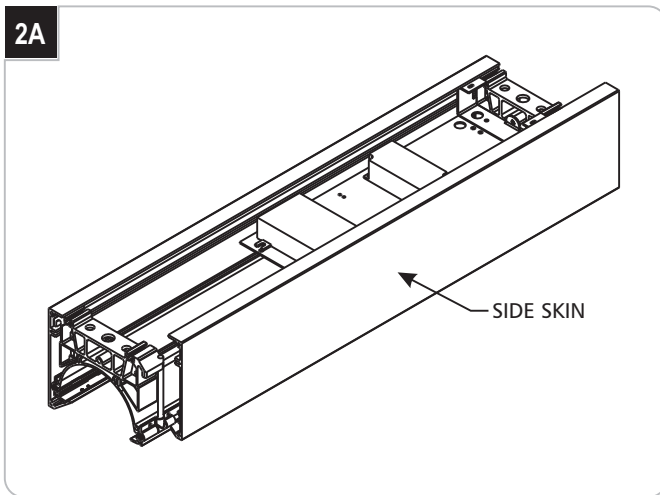
The low-voltage section of the fixture run will also likely be powered at the start of the run, then interconnected to a maximum of 40'. Sections of the run may be isolated by simply not connecting the low-voltage lines and the run may be powered by multiple transformers at different units to power longer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

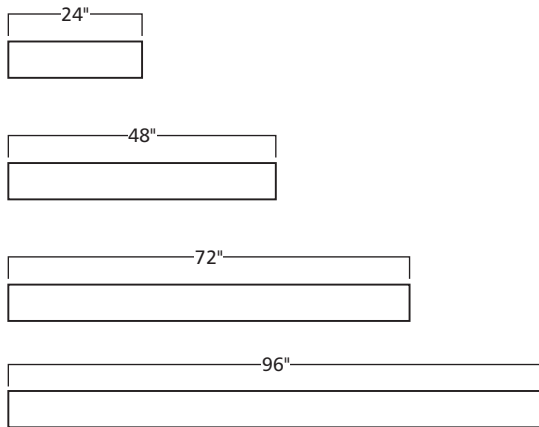
2A



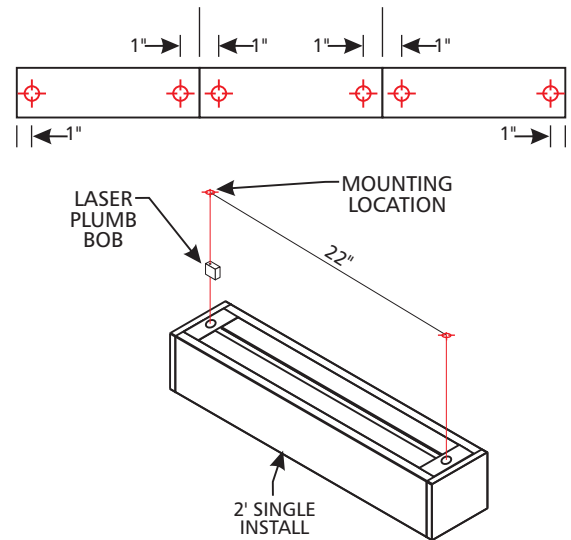
- 1 Remove the side skins from all of the fixtures by sliding them back to disengage the plates inside.
- 2 Set the side skins aside in safe place.

## Prepare for Installation

3A



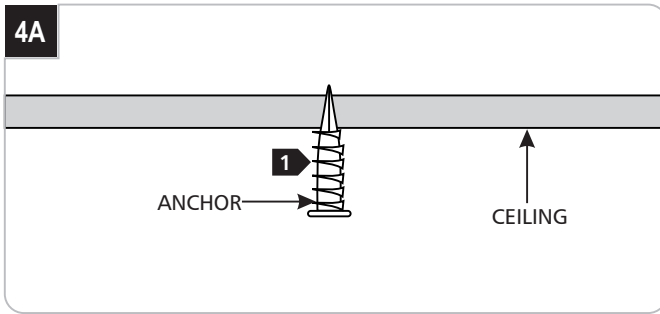
### 2' Example Configuration



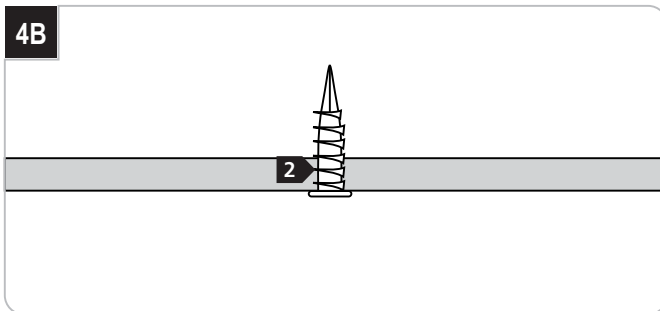
- 1 The mounting locations for the mounting brackets are 1" from the seam between adjoining fixtures and are 1" in from the end. If installing a single fixture, mounting locations will be a 1" in from both ends. Using the provided diagram, mark the anchor location on the ceiling/grids for each model in the configuration. See example configuration. Mark a line representing the entire length of the center line of the run of fixtures.

**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 anchor onto the ceiling/grid. Mark the locations.

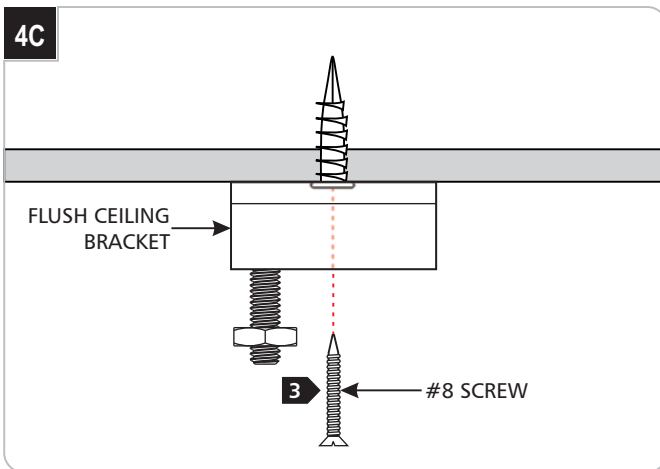
## Install the Flush Ceiling Brackets (Ceiling)



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

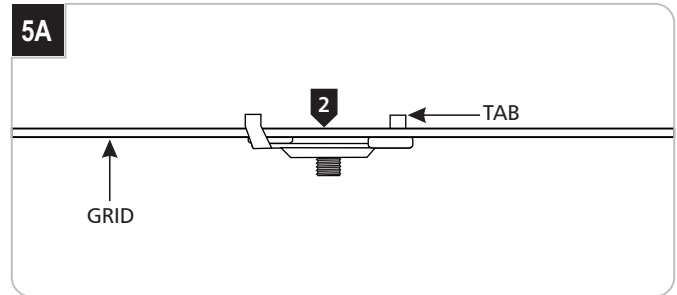


- 2 Screw the anchor in the rest of the way with a Phillips screwdriver.

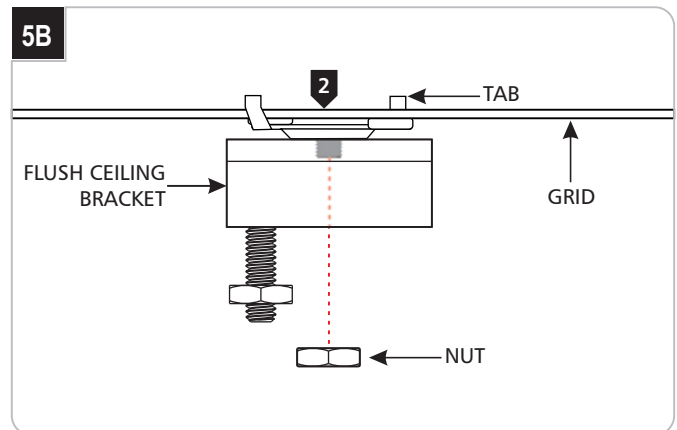


- 3 Mount the flush ceiling bracket to the anchor with the #8 screw.
- 4 Repeat the steps 1 through 3 for the remaining marked points.

## Install the Flush Ceiling Brackets (Grid)

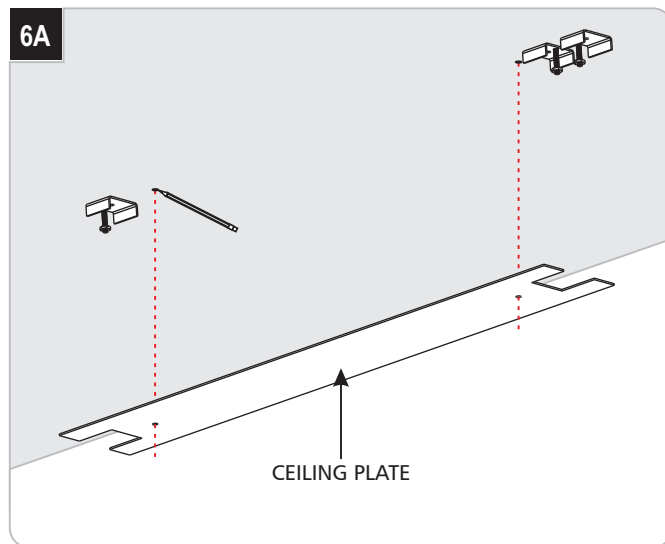


- 1 Select the locations on the grids where the standoffs will be mounted.
- 2 Push the T-bar connector flat section against the grid. Rotate the T-bar connector until the tabs on the T-bar connector snap behind the grid.

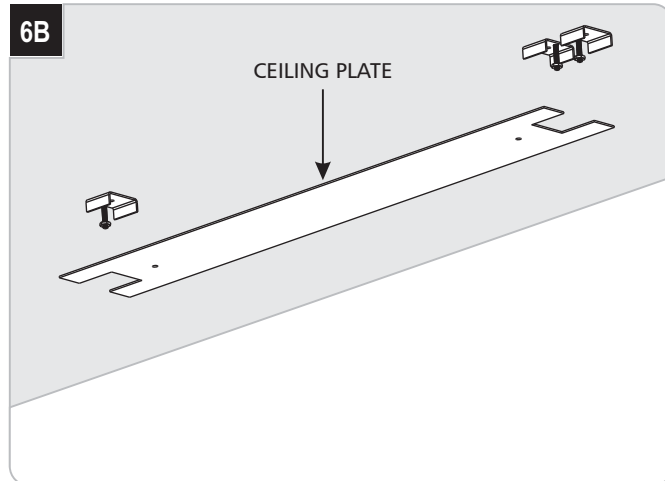


- 3 Mount the bracket to the T-bar connector with the nut.
- 4 Repeat steps 1 through 3 for the remaining marked points.

## Install the Ceiling Panels

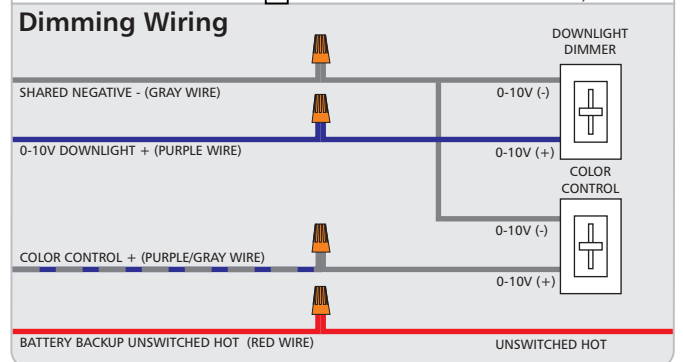
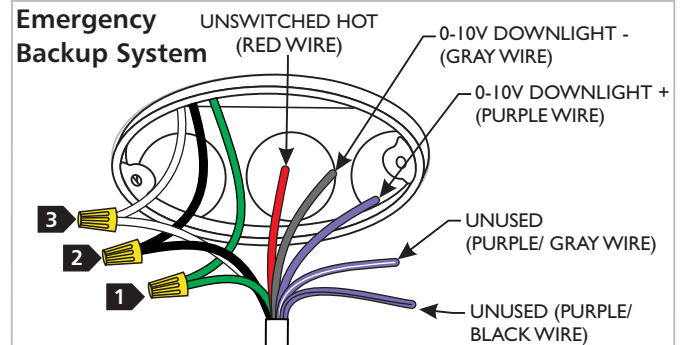
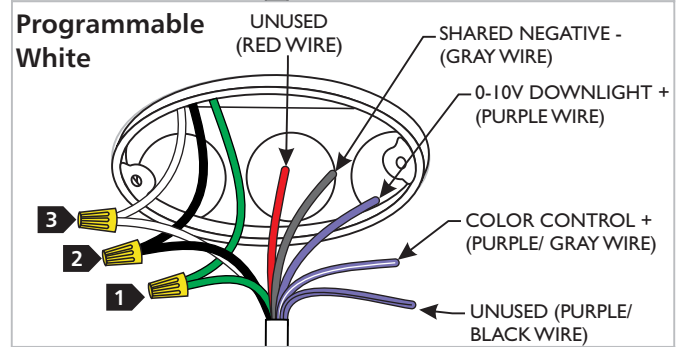
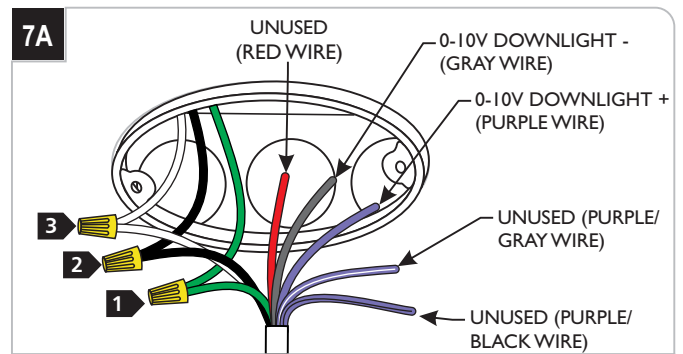


- 1 Use the ceiling panels provided to mark the locations for more anchors or T-bar connectors.



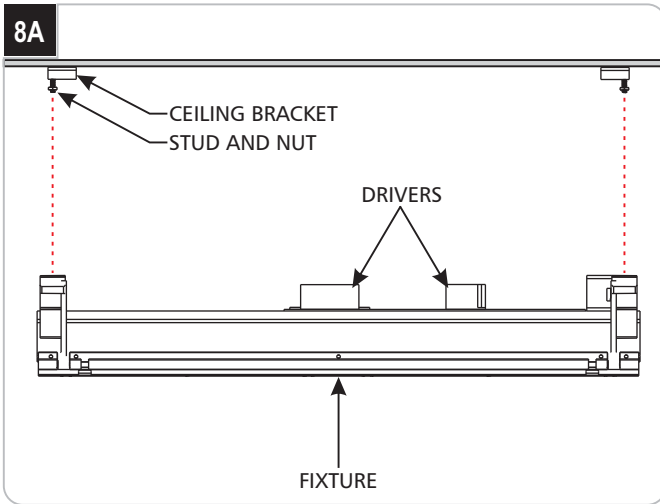
- 1 Install the anchors or T-bar connectors as described earlier.
- 2 Mount the ceiling panels with the appropriate screw or nuts.
- 3 Modify the ceiling panel which would cover the junction box or exit point of the power wires as necessary.

## Install the Power Feed Wires

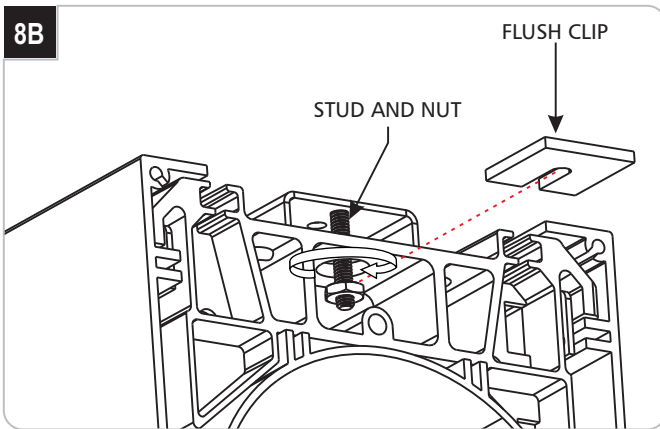


- 1 Connect the fixture to a suitable ground in accordance with local electrical codes.
  - 2 Connect the black fixture wire to the hot power line wire with a wire nut.
  - 3 Connect the white fixture wire to the neutral power line wire with a wire nut.
  - 4 Connect 0-10V dimming wires as shown.
  - 5 Connect the fixture's low-voltage wires to the remote transformer's low-voltage power lines.
- For Programmable White Option:**
- 6 Use the purple/ gray wire as the positive line on the color changing switch.
- For Emergency Battery Backup Option:**
- 7 Use the red wire as an unswitched hot line to charge the battery.

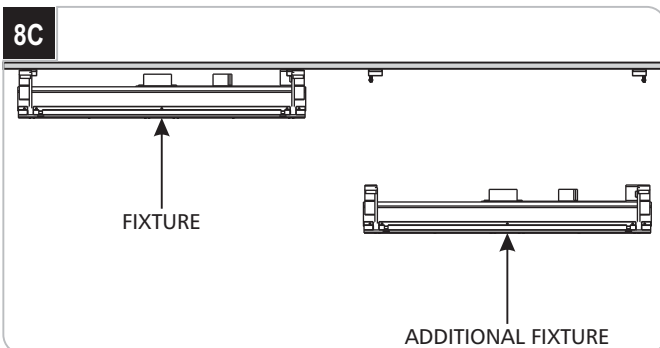
# Install the Fixture



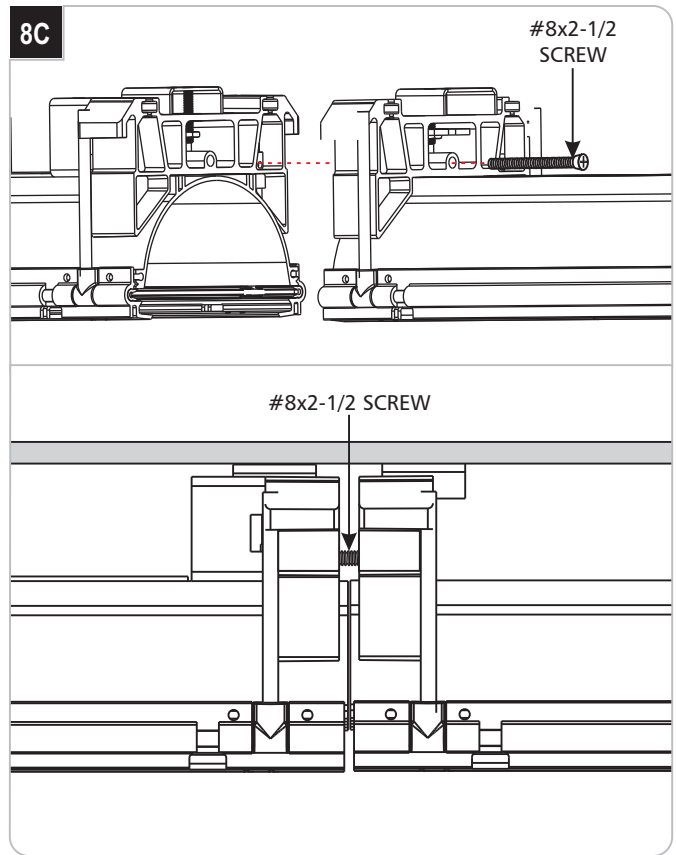
- 1 Raise the first fixture up to the ceiling brackets so that the nuts on the studs pass through the cross braces at either end.
- 2 Try to locate the end of the fixture with LED drivers close to the power feed.



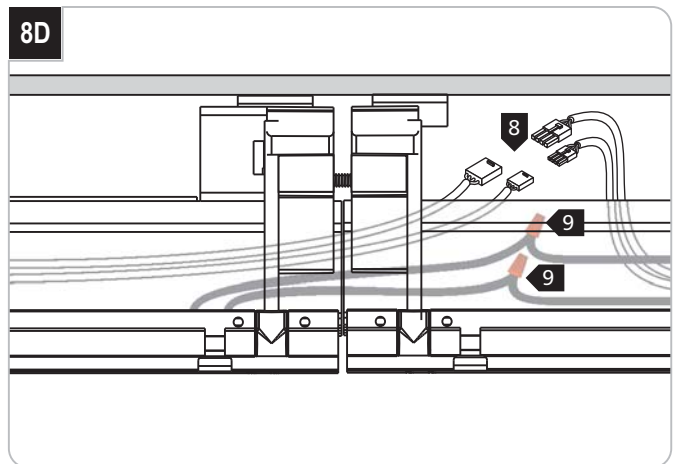
- 3 Insert the flush clips between the nut and the cross brace to support the fixture.
- 4 Tighten the nuts to bring the unit snug almost to the ceiling.
- 5 If installing a single fixture, skip to section 9.



- 6 Repeat steps 1-4 for the next fixture(s).

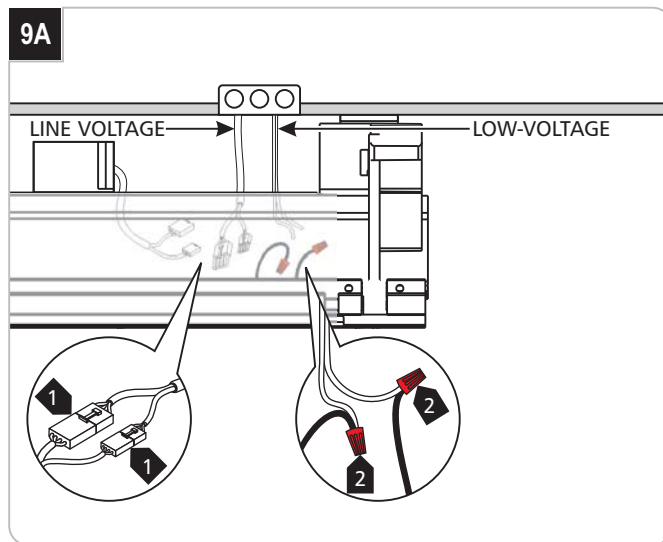


- 7 Install a 2-1/2" screw at each fixture joint. Use the hex wrench provided to tighten the screw and pull the fixtures together and minimize the seam between the reflectors when seen from below.



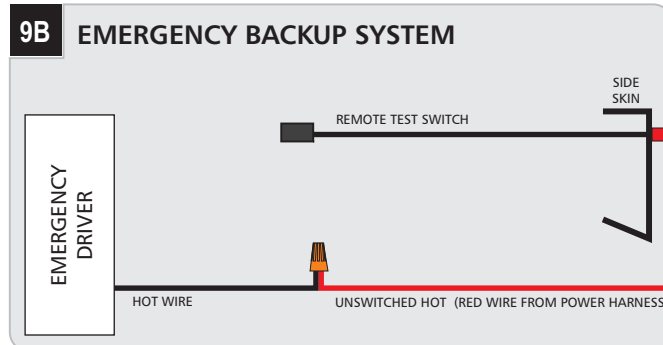
- 8 Feed the female power and control connectors into the adjacent fixture and connect them to the male connectors.
- 9 Feed the low-voltage wires also into the adjacent fixture and connect them using the provided wire nuts.
- 10 Repeat steps 8-9 for the rest of the connecting fixtures.

## Connect the Power Feed



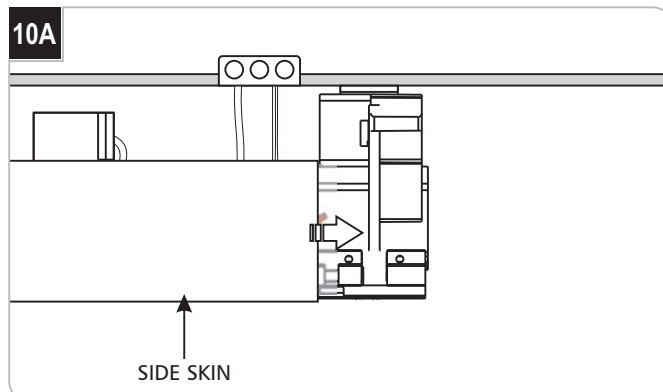
- 1 Connect the power and control wire connectors from the power feed to the connectors on the fixture.
- 2 If utilizing the low-voltage bus bar, connect the low-voltage remote transformer wires to the low-voltage wires in the fixture with the provided wire nuts.

## Emergency Backup System Driver (Optional)



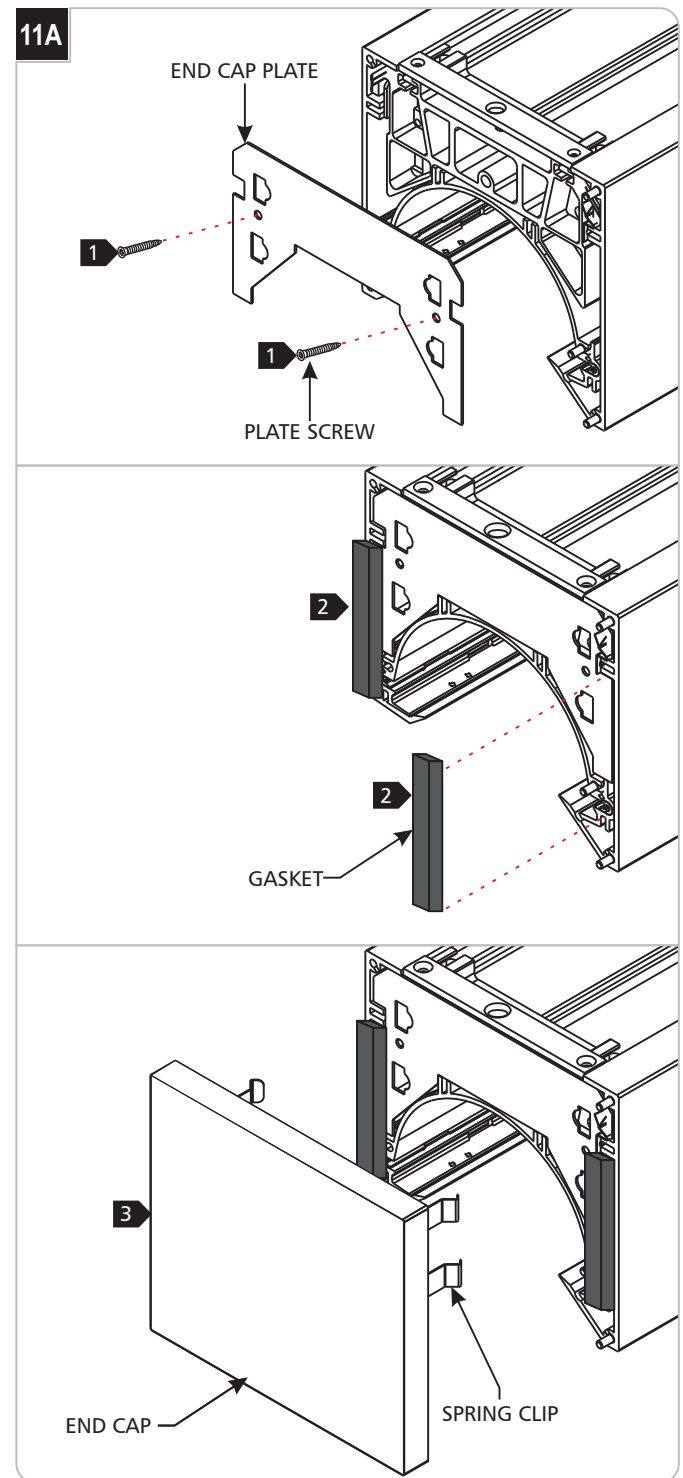
- 1 Connect the unswitched hot red wire from the power harness to the emergency driver.
- 2 Connect the test switch mounted to one of the side skins to the emergency driver.

## Install the Side Skins



- 1 Install the side skins by pivoting them into place an inch or two away from their final location and sliding them into place.

## Install the End Caps



- 1 Remove the black gaskets from the end where present. Secure the end cap plate to both fixture ends using the provided plate screws.
- 2 Install new light gaskets as shown on both ends.
- 3 Install the end caps by aligning the spring clips to the fixture and pushing them in until they snap in place.

**Notes**

**SAVE THESE INSTRUCTIONS!**



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