<u>Preliminary Steps to install InterSpace in a drywall version - to be moved into install</u> template

NON-ACCESABLE CEILING PREPARATION (DRYWALL)

Before installation of the fixture(s) the ceiling preparation steps must be used with the InterSpace discrete, and continuous run, and patterns installation instructions.

Important: Read all instructions including wiring and mechanical details before the start of the installation.

Important: Install in accordance with the local and national building and electrical codes.

Note: InterSpace fixtures are designed for installation post ceiling preparation completion

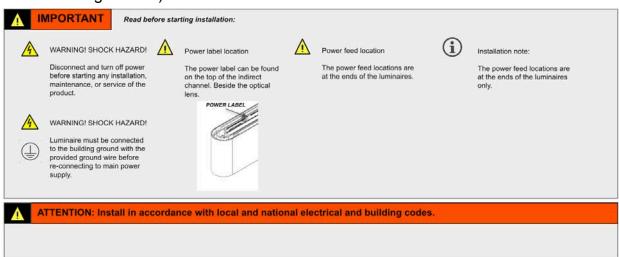
Important: Chicago plenum installations in non-accessable ceiling types, the driver box and jumper box are not to be adjusted. This will compromise the tape seams that are permanently sealed to comply with CCEA requirements.

WARNINGS:

• **Shock hazard!** Fixtures must be connected to building ground via provided ground wire before connecting to main supply power.

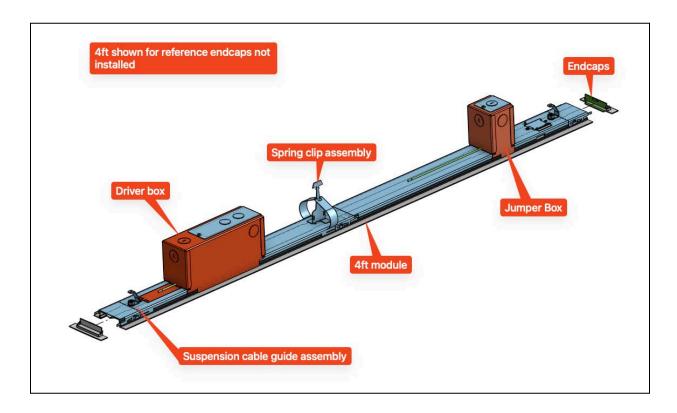


 Disconnect or turn off power supply before attempting any installation maintenance or servicing operations.(example of draft installation documentation warning section)

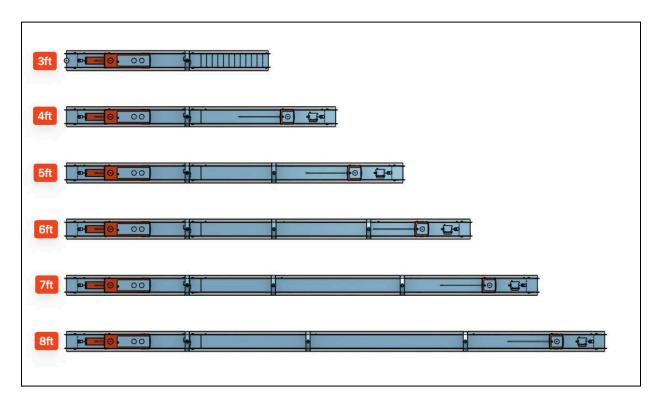


System Overview:

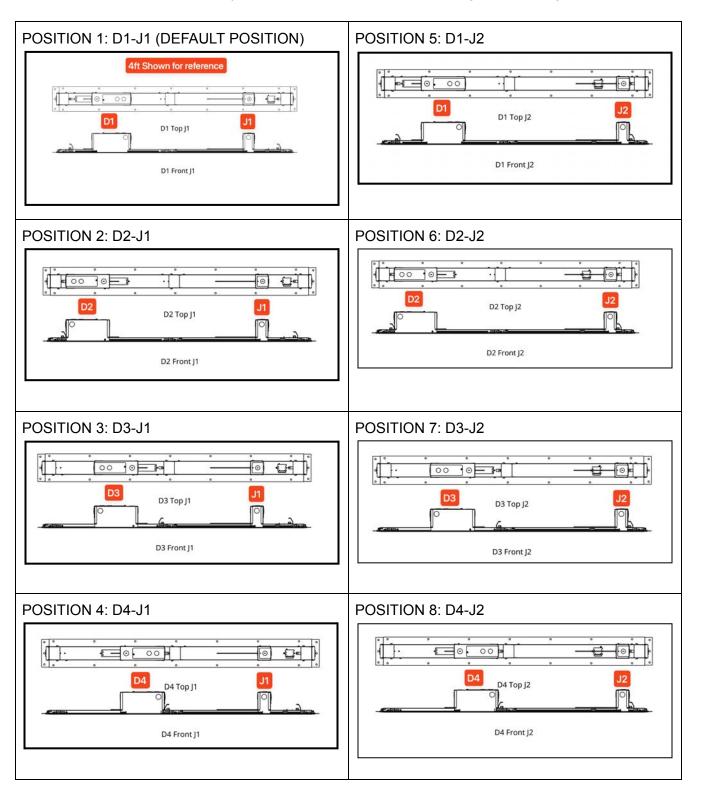
Each fixture is modular by design. There are no end or mid runs with exception to continuous run lengths outside of the nominal 4ft lengths e.g. 4ft-7in or 9ft-10in.



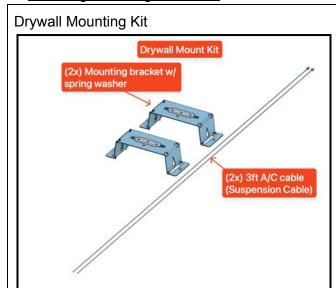
The fixture comes in the following nominal lengths: 3ft Variable, 4ft, 5ft, 6ft, 7ft, and 8ft Nominal without endcaps installed.

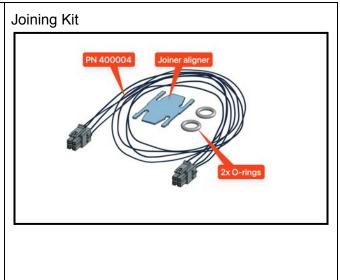


Driver box and jumper box positioning is adjustable. There are four adjustable positions for the driver and two adjustable positions for the jumper box. Allowing for 8 combinations for adjusting the positions of the driver and jumper to avoid a common 16" ceiling stud spacing.

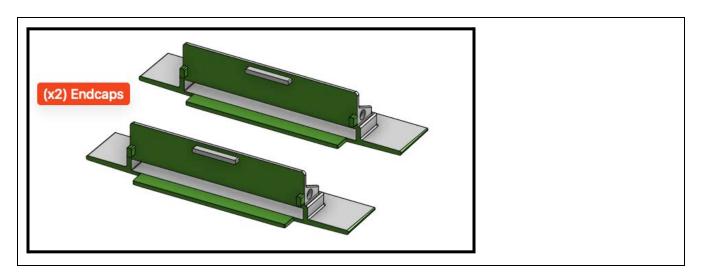


Mounting & Joining Hardware





Endcap Kit



Ceiling preparation for Standalone fixtures.

Identify fixture location(s) and match up the fixture tags as per layout drawings for appropriate length cut out.

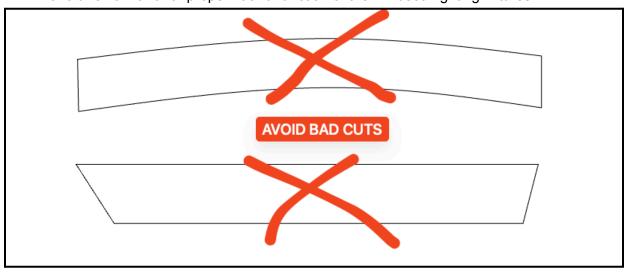
a. Stud spacing is to be noted during locating fixtures and adjust accordingly for stud avoidance. (*Refer to adjustment matrix for locating the driver and jumper boxes*)

Determine locations for power connection as per layout drawings.

Install power feed connections and rest below ceiling for access during power connection steps to fixture(s).

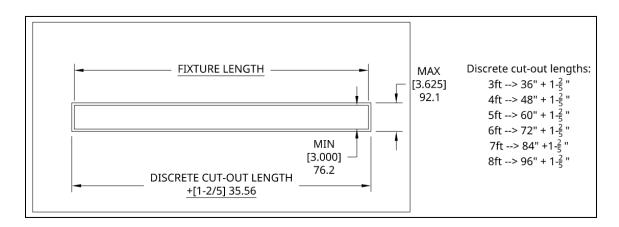
Cut out information and details:

- Recommend using appropriate tools to outline specific ceiling cut out dimensions and locations to ensure straightness of the cuts)
- Avoid cutting un-even cuts and curves over the length.
- Proper care to ensure straightness of cuts with accuracy is important in the drywall to avoid rework and for proper fit and function of the Mindset Lighting fixtures.



Cut Lengths for Standalone:

• 3 in MIN to a 3-1/8 in MAX width cut out for Trim. (for trim version)



Ceiling preparation for Continuous Runs

Identify fixture location(s) and match up the fixture tags as per layout drawings for appropriate length cut out.

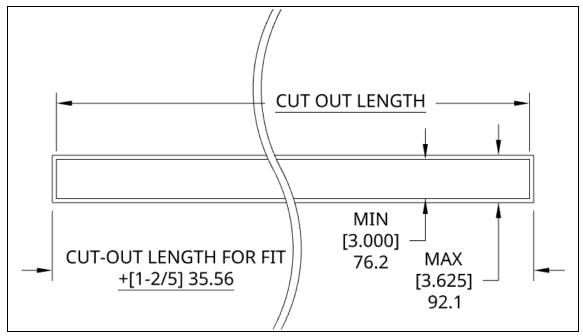
b. Stud spacing is a key step during locating fixtures to adjust drive box and jumper box accordingly for stud avoidance.

Determine locations for power connection as per layout drawings.

Install power feed connections and rest below ceiling for access during power connection steps.

Cut Lengths for Continuous Run:

• 3 in MIN to 3-1/8 in MAX width cut out for Trimless



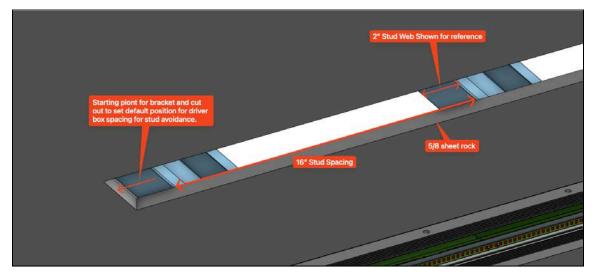
Perpendicular Stud Orientation Installation:

Starting locations are determined by using the cut out start position as the datum relative to the stud in the opening at the start. E.g. image below (Use 3D printed start tool to position the default start if desired or cardboard screen print or a measuring tape?)

Mindset Lighting InterSpace cut out starting positions are designed around =< 2 [inch] wide studs*.

*In a situation where the steel studs are <2.5 inch wide or an obstruction due to a double stud application, plumbing interference, ducting, or other artifacts that obstruct the installation. The fixture can be turned around and/or adjust driver box or jumper box locations accordingly to fit the specific location in the ceiling.

Important: Read before installing the mounting brackets and fixture(s).



Orient the cut out to start relative to the back of the stud to determine the locations of driver box and jumper box placement as per layout drawing.

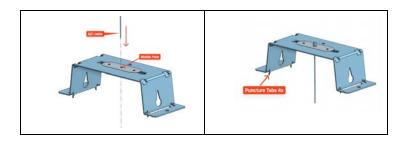
Important: Datum position to stud for spacing see below image for 0-position reference. Use the InterSpace Positioning Matrix table to determine recommended positioning or driver box and jumper box relative to cut out start location. The positioning matrix can be found by clicking **this link** or scanning **the QR code**.



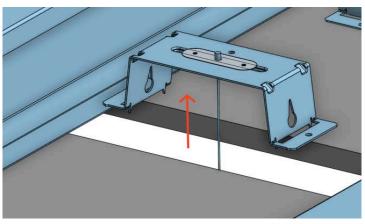
Once the cut out location or start end is determined the mounting bracket can be placed relative to a distance from the opening of the cut out. If at 0-position bracket may be inserted and rest against stud.

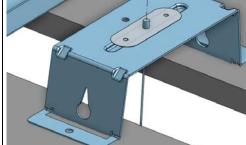
Install the A/C cable into the middle hole of the spring plate on the mounting bracket.

WARNING!: Puncture tabs are sharp on the bottom of the bracket

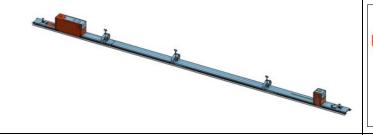


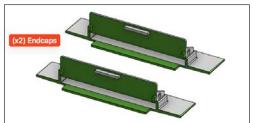
- Raise the bracket with A/C into the cut out pocket as determined based on distance from cut out start. This bracket must be centered between the cut out to ensure the fixture is centered once suspended and raised into final position.
- Rotate and place onto sheet rock. Mind the puncture tabs and ensure the bracket is placed in the middle of the cut out opening. Pull down on the bracket to ensure the puncture tabs bite into the sheet rock board.



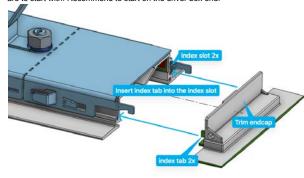


- 3. Prepare the starter fixture. Open packaging and remove fixtures from packaging. Lay fixture on ground optical cavity face down.
- 4. Next locate the endcap kits for the next step.

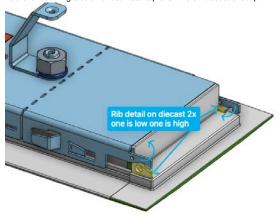




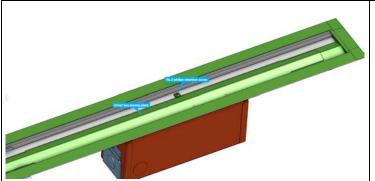
5. Unpackage the endcaps and install both if standalone. For continuous run install the end you are to start with. Recommend to start on the driver box end.



6. Fold over securing tabs on sheet metal top over ribs on diecast endcap.



- 7. Turn the fixture over and slide mud guard out of the way to gain access to the driver access plate found in the optical cavity.
- 8. On the opposite end you will find the access cover plate for the jumper box cavity. Again slide mud guard of the way if covering the access plate.



Driver Box access plate:

Standalone: Only remove this cover plate if power is to be connected at the driver connection end.

Use NO 2. philips screw driver to remove retention screw

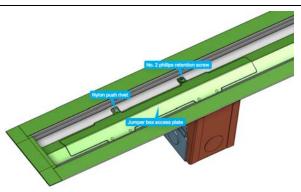
(Note: the retention screw is a captive screw no need to remove fully it will stay with the cover plate).

Continuous run:

Each fixture will require this access plate to be removed to make power connection to the connecting fixture in the run.

Note: with the exception of the end conditions this plate may not need to be removed.

9 . Once the appropriate access plates are removed, the gripper(s) will become accessible from the room side of the fixture to feed the suspension cable through.



Jumper Box access plate.

<u>Standalone</u>: Only remove this cover plate if power is to be connected at jumper connection end. Use NO 2. philips screw driver to remove retention screw.(**Note**: the retention screw is a captive screw no need to remove fully it will stay with the cover plate).

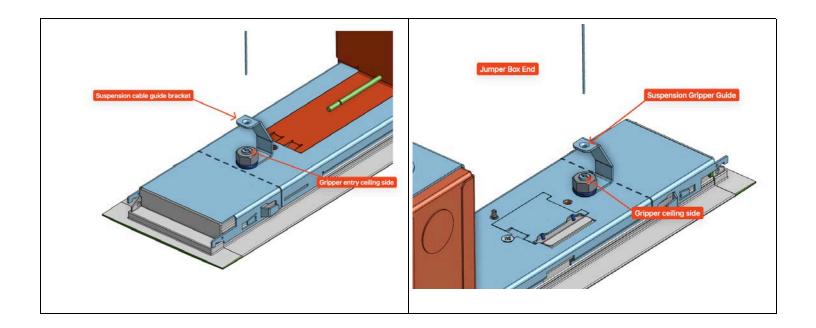
Push rivets do not need to be removed from the access plate.

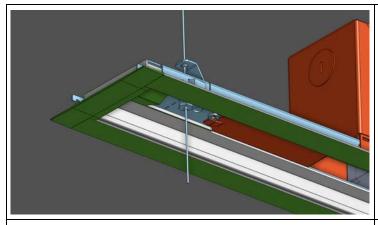
<u>Continuous run:</u> Each fixture will require this access plate to be removed to make power connection

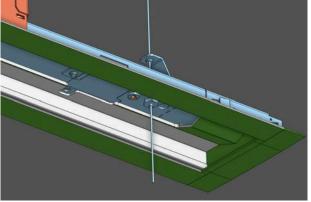
to the connecting fixture in the run.

Note: with the exception of the end conditions this plate may not need to be removed.

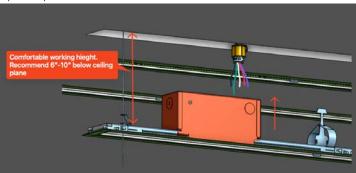
10. Jumper box gripper end. Standalone shown for reference





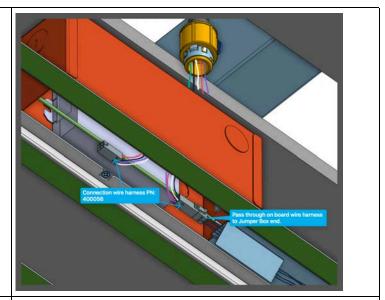


11. Raise the fixture up to the power connection point to prepare to make the electrical connections at power drop location.



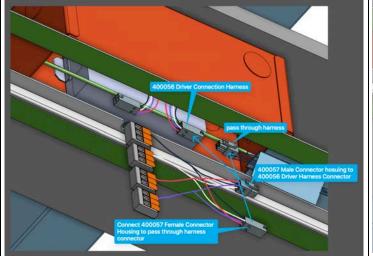
12. Next steps are to prepare a starter fixture or for a fixture in a run to make the electrical power

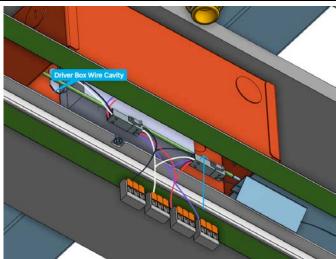
To prepare fixture for power connection in the (Driver Box End)
First you must disconnect the wire harness 400056 from the connected pass through harness.



13. Next connect the power connection harness 400057 between 400056 and the pass through wire harness connector within the driver box.

 $14.\ \,$ Once 400057 is connected between 400056 and the pass through, feed the power connection harness into the driver cavity.





15. Remove the WAC from the top of the driver box to access the leads from 400057 with the 3-way lever WAGOs attached.



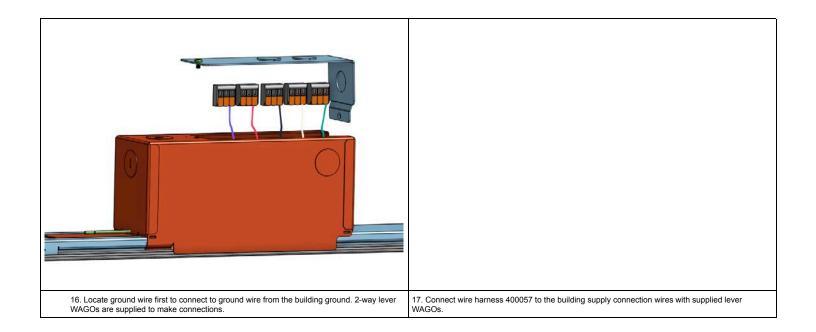
WARNING: SHOCK HAZARD! Ensure supply power is off.

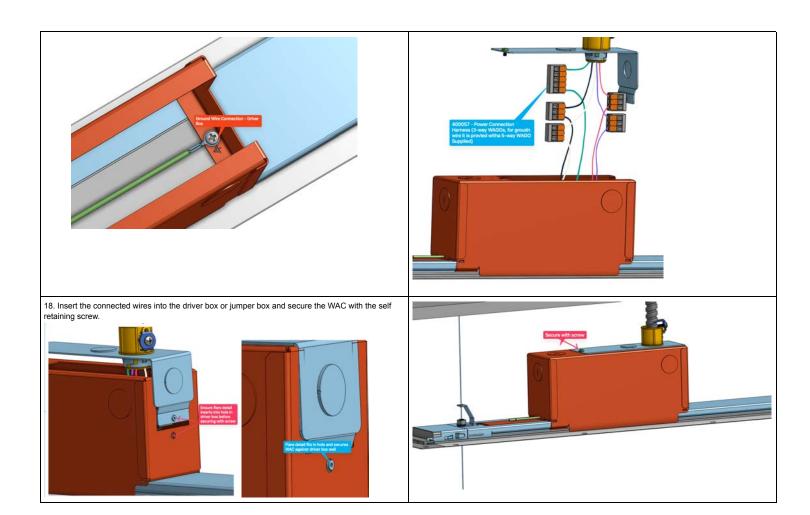


Make Ground Connection First (Driver Box End)

Wiring connections:
Green: Ground Wire (Ground Wire on terminal ring connected to to driver box)
Power Connection Harness - PN: 400057

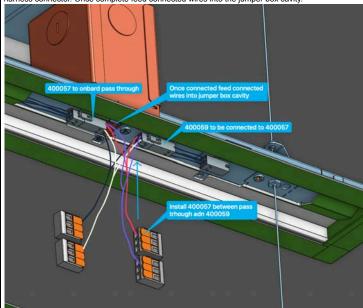
Black: Hot
White: Neutral
Purple (Violet): Dimming
Pink: Dimming







20. Next connect the power connection harness 400057 between 400059 and the pass through harness connector. Once complete feed connected wires into the jumper box cavity.



WARNING: SHOCK HAZARD! Ensure supply power is off.

Wiring connections:

Make Ground Connection First (Jumper Box End)

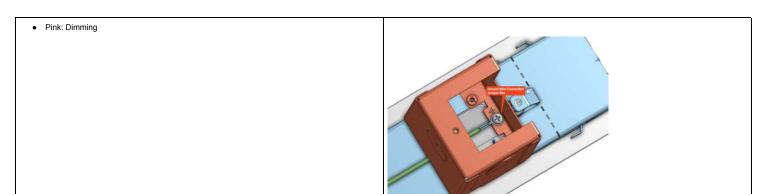
Green: Ground (Ground Wire not connected to harness 400057 on 9" lead inside jumper box)

Power Connection Harness - PN: 400057

Black: Hot

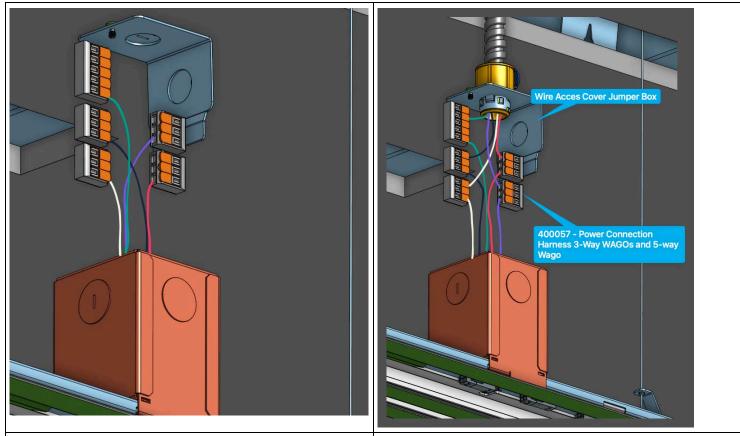
- White: Neutral Purple (Violet): Dimming

21. Remove jumper box WAC to locate ground wire first to connect to ground wire from the building ground. 2-way lever WAGOs are supplied to make connections.



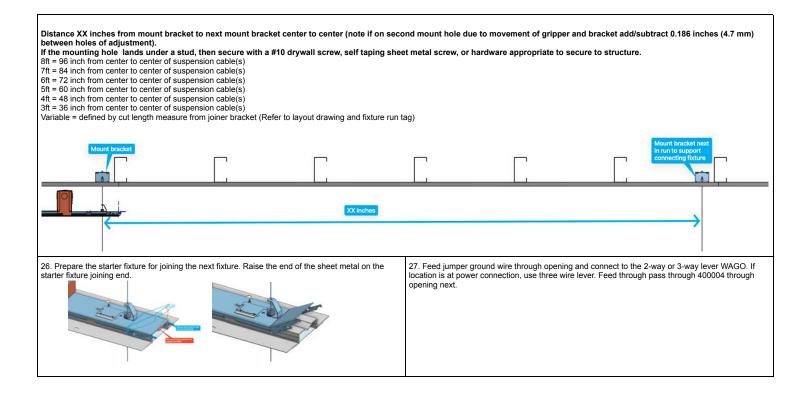
22. Remove the WAC from the Jumper Box to access the leads from 400057 with the 3-way lever WAGOs attached switch ground wire WAGO with provided 5-way lever WAGO.

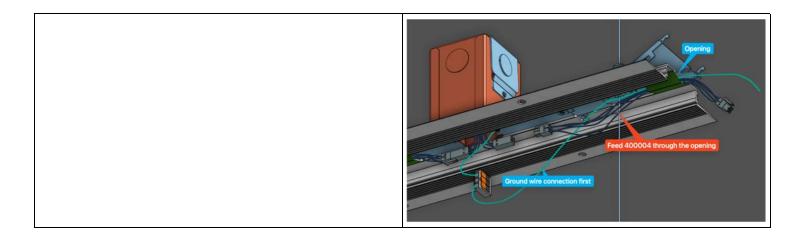
23. Connect wire harness 400057 to the building supply connection wires.

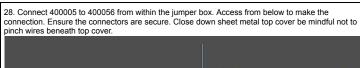


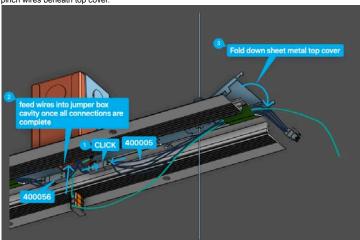
24. For Standalone fixtures move to step 40, for continuous run installation move to the next step.

Continuous Row Installation Steps
25. Install the next mounting bracket and suspension cable in the correct location based on the length of the next fixture.

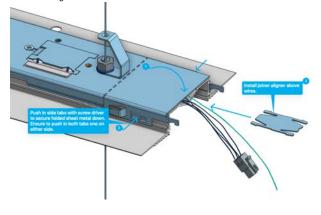






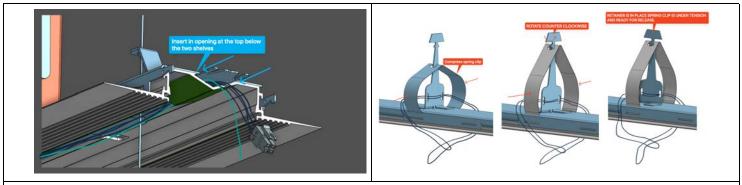


29. Secure folded down top cover with push in side tabs on both sides. Install joiner aligner biscuit next above connecting wire harness.

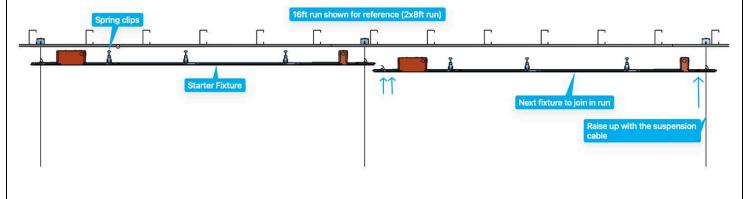


30. Install joiner aligner in-center of opening above the wire harness and ground wire.

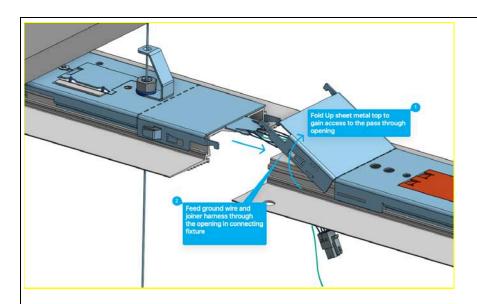
31. Steps to prepare spring clip assembly before raising into the ceiling. On the starter fixture at a comfortable height (~8 inches), compress the spring clip(s), next rotate the retainer bracket(s) COUNTER CLOCKWISE to set into place.



- 32. Prepare the next fixture to raise up to join the starter fixture in the run. Remove the driver access plate and the jumper access plate. See steps 7 & 8 for reference.
- 33. Go to the opposite end of the fixture that is to be joined to the next fixture in the run. Raise up the fixture to the suspension cable on the far end and insert the suspension cable into the gripper. You will have to support the fixture on the connecting end during the connection steps. Recommend two people for these steps.

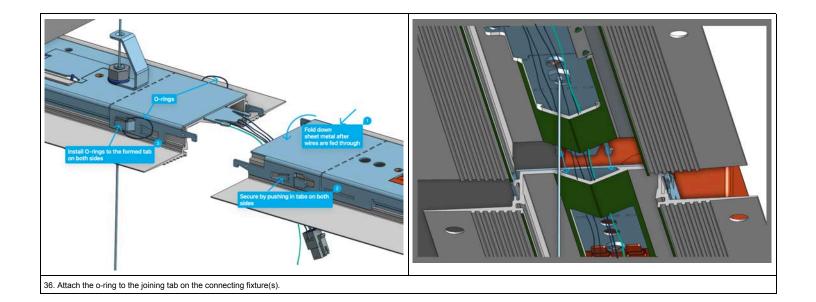


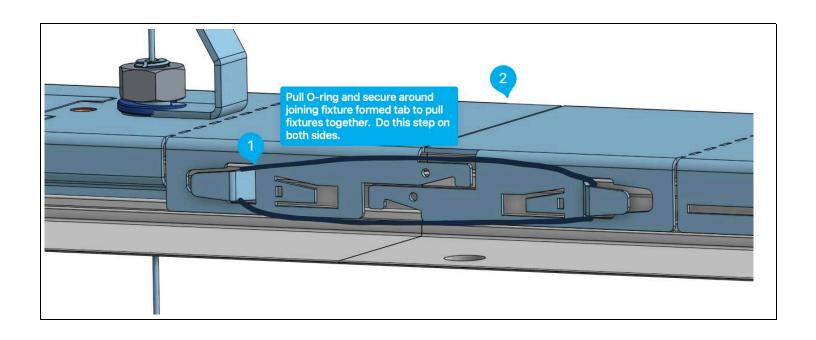
33. Raise the fixture just below the ceiling plane (approx. 3 inches) to prepare for the joining of the next fixture. Fold up sheet metal tab to gain access to the pass through opening. Feed the ground wire and join the harness through the opening. Let wires rest below the fixture before final joining of the fixtures. If a standalone fixture move to step ##.

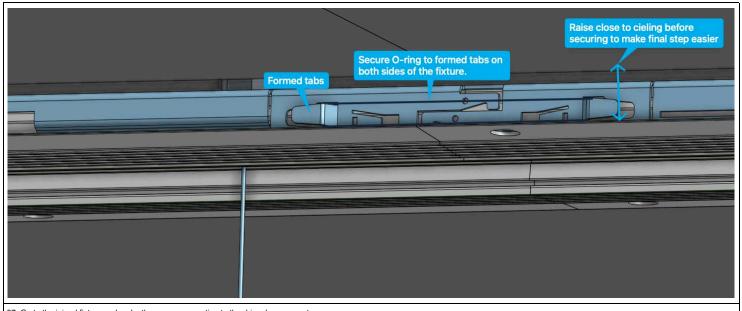


34. Fold down the sheet metal top on the fixture to be joined and secure by pressing in the side tabs. Install the o-rings to the form tabs on the suspended fixture on both sides.

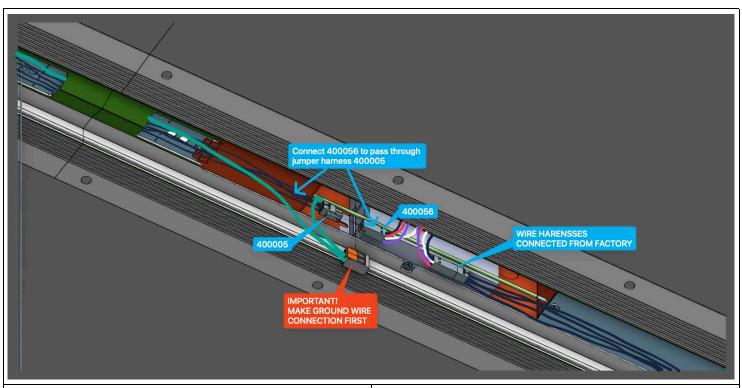
35. It is now time to raise all the starter fixtures closer to the ceiling. Leave enough room to complete the final connection step with the O-rings. Raise the joining fixture to match the height. Proceed to join the fixtures together by guiding the joiner aligner biscuit into the opening above the wires in the connecting fixture.







37. Go to the joined fixture and make the power connection to the driver box connector.

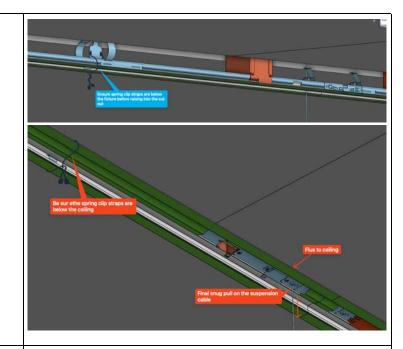


38. Pause: If joining more fixtures in the run, repeat the steps starting from step 25 to prepare the next fixture(s) in the run. If complete, move to the next step.

39. Once all fixtures are securely fastened together with the O-ring step. Raise the fixtures in the run in the ceiling until flush. Before snug pull on suspension cable ensure the spring clip pull strap is below the trim and accessible.

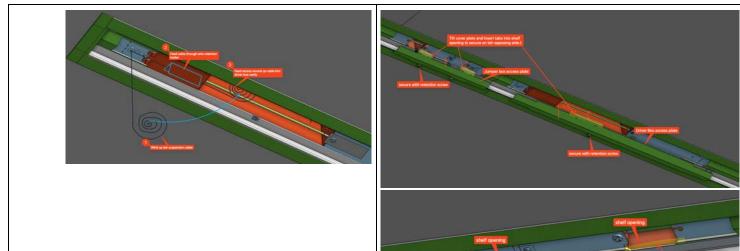
below the trim and accessible.

IMPORTANT: Raise each section by little increments not to miss align the fixtures to ensure they are level before the final pull on the suspension cable to snug the fixtures tight to the ceiling.



42. Ensure all suspension cables have been pulled snug for the final pull. Next wind up the remaining cable and feed into the driver box or jumper box cavity. Do not trim the suspension cable.

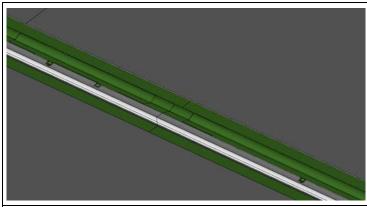
Reinstall the driver box access covers and the jumper box access covers once suspension cables and electrical connections are safely fed into the cavities and out of the way. Continuous run shown ftdaor reference. Same steps can be followed for standalone.

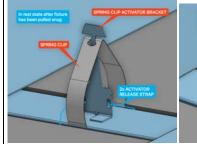


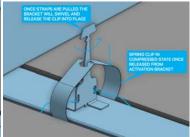
42. After securing the WAC to the driver or jumper box. Do a final check to make sure there are no wires exposed or pinched.

43. Pull the spring clip straps to activate the spring clip to release from the holder. The fixture will suck the trim up to the ceiling.

Above ceiling to show what the spring clip and activation bracket are doing.





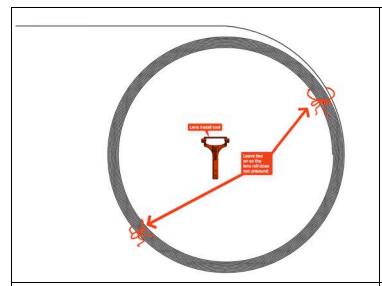


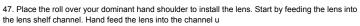
44. Once spring clip activation steps are complete. Cut any excess strap? Confirm all straps are removed.

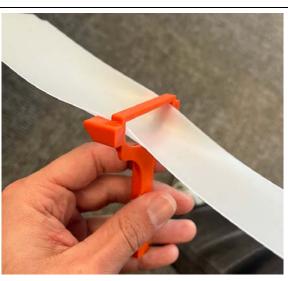
45. Install the continuous roll lens after finishing work is complete. Remove mud guard(s) from the fixtures. Prepare the lens roll. Identify the correct lens for the run based on the layout drawings, unpackage the lens roll.

IMPORTANT: Do not untie the bound roll.

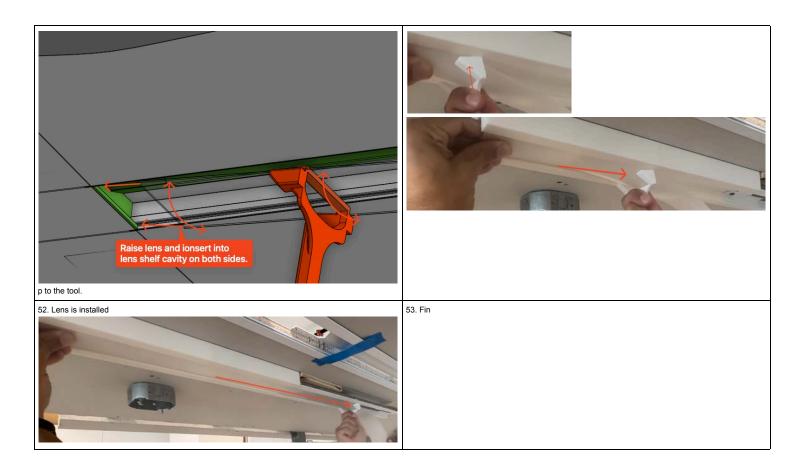
46. Take the part of the lens and insert it approximately 4" beyond the back of the tool.



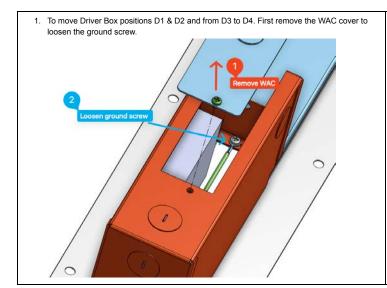


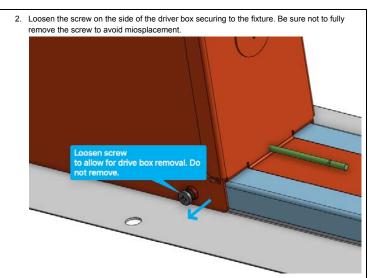


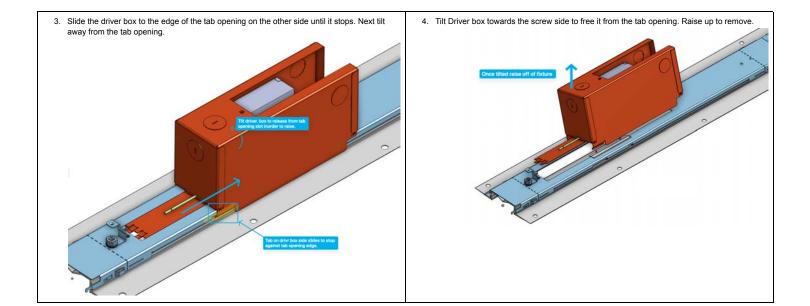
48. Raise tool into the optical cavity opening and the lens will snap into place. Hold the lens at the end, then proceed to run the tool along the run install. This is to get the lens installation started. seat into the shelf as you move along the run.

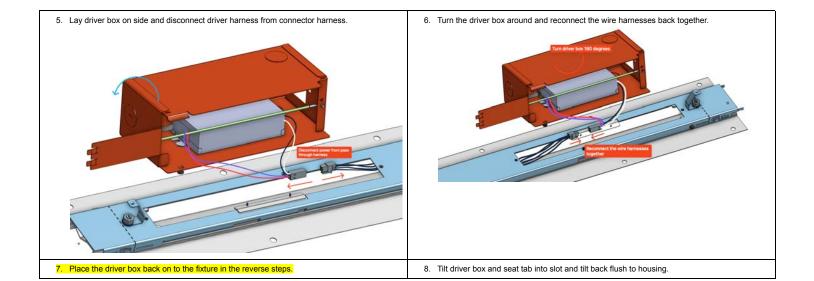


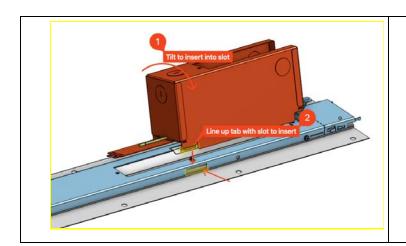
STEPS TO MOVE DRIVER BOX AND JUMPER BOX AND STEP TO MOVE GRIPPER TO AVOID STUDS. Note trimless shown for reference. Steps are the same for the Trim product option.

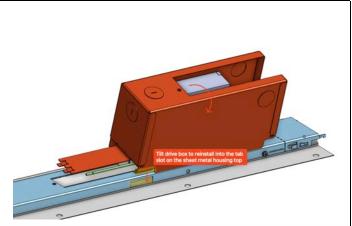


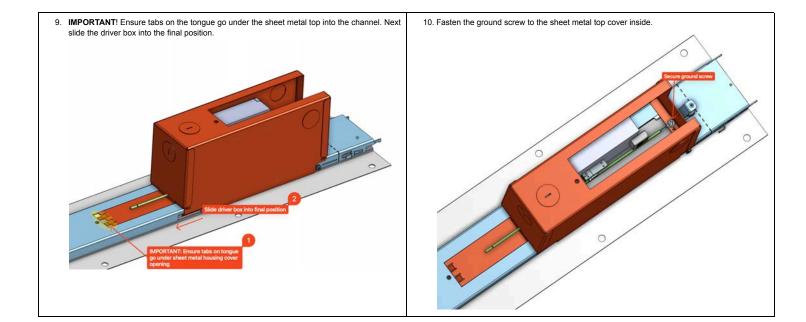


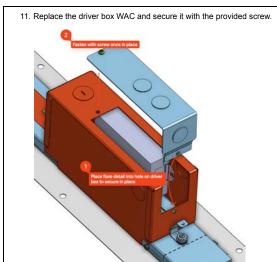




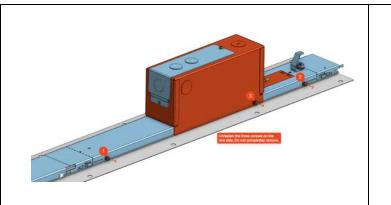


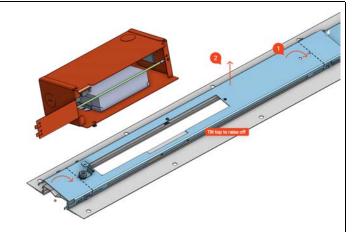




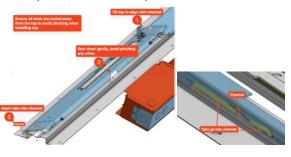


- 13. Moving driver box to position 3 & 4. To move the driver box to position 3 & 4 you must turn the sheet metal top cover around. First loosen the screws on the side of the sheet metal top and loosen the driver box fastening screw. The screws do not need to be fully removed.
- 12. Final step to secure screw to fasten driver box to fixture chassis. You are ready to move to the installation steps.
- 14. Remove the driver box first see steps 1-6. Once the driver box is removed, ensure access plate is removed, see step 7 for steps. Next proceed to remove the sheet metal top cover. Tilt the sheet metal top cover towards the bend tab and raise up.

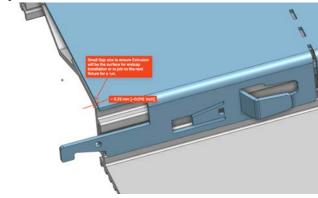


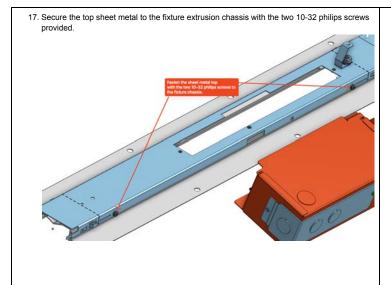


15. Turn top around and re-install by tilting and inserting the tabs into the fixture channel on the outside of the extrusion. Once the tab is in the channel, gently lay down into position. Ensure you do not pinch the wires beneath the top.



16. Once the top is at rest leave a small gap 0.25 mm [0.01 inch] from the end of the extrusion to the edge of the sheet metal cover.



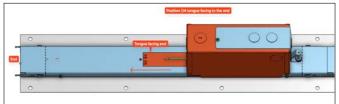


19. Fix the driver box into position once the final position is determined. Fasten screw on side of driver box to secure into place.

- 18. Proceed to reinstall the driver box to the top. Refer to steps 5-13. Positions: Driver box is in position D3 when the tongue faces the middle; driver box is in position D4 when driver box tongue is facing the end.
 - D3



D4



20. Pause: If you do not need to adjust the jumper box proceed to step 9 to begin installation. Else, continue to the next step. To remove the jumper box to adjust from J1 to J2 go to the jumper box end of the fixture and remove the WAC.*

