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Installation Instructions For TruLine .5A 24VDC

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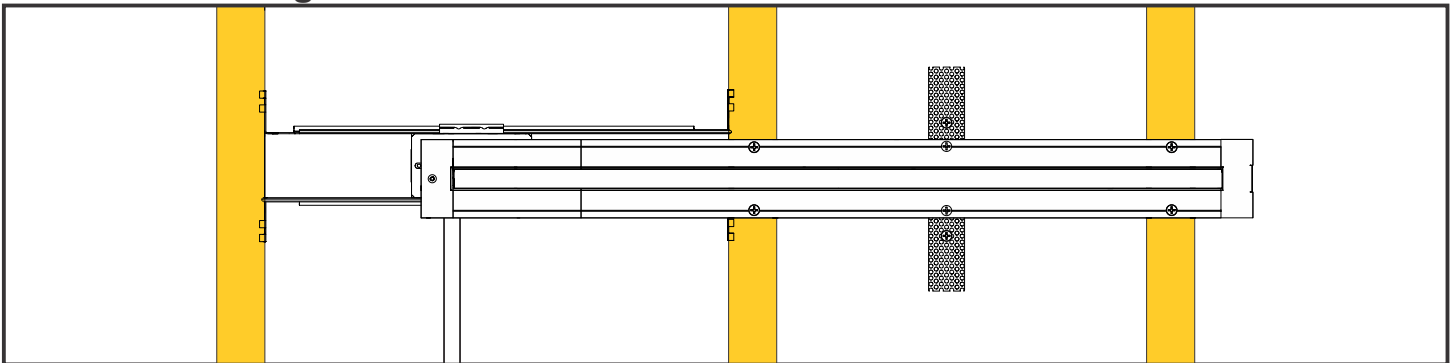
IMPORTANT INFORMATION

- This fixture is wall or ceiling mount.
- This instruction shows a typical installation.
- **Consult the configuration notes on Page 1 before beginning any installation.**
- This product is ETL listed for indoor use.

SAVE THESE INSTRUCTIONS!

Section One: Basic Configuration Options

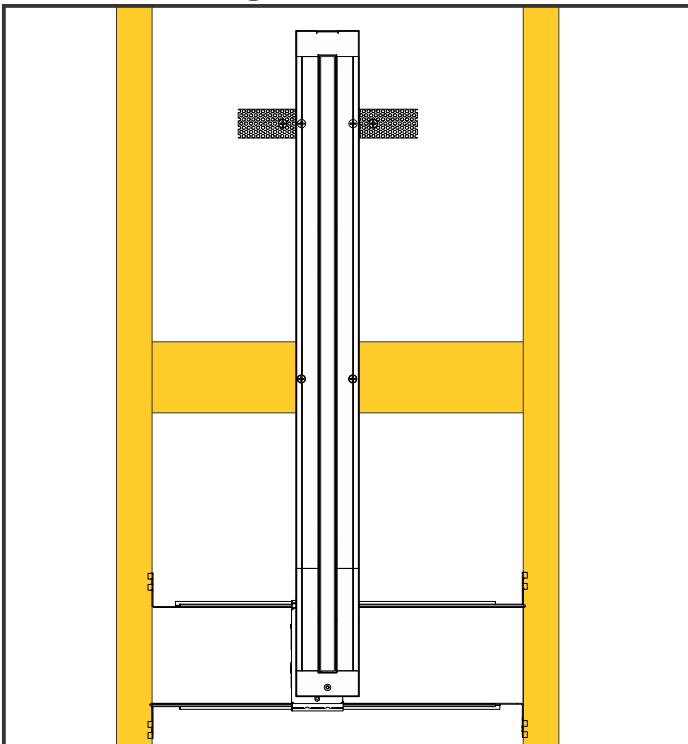
Horizontal Configuration



Horizontal installations are linear runs of channel beginning and ending at an end cap and junction/take-up box on a single plane surface. Runs can be up to 40' in length and the LED strip lays in the bottom of the channel.

Horizontal installations are typically installed perpendicular to wall studs or ceiling joists. Where no stud/joist is present (or in a remodel installation) a mounting strap may be used to secure the channel to the drywall.

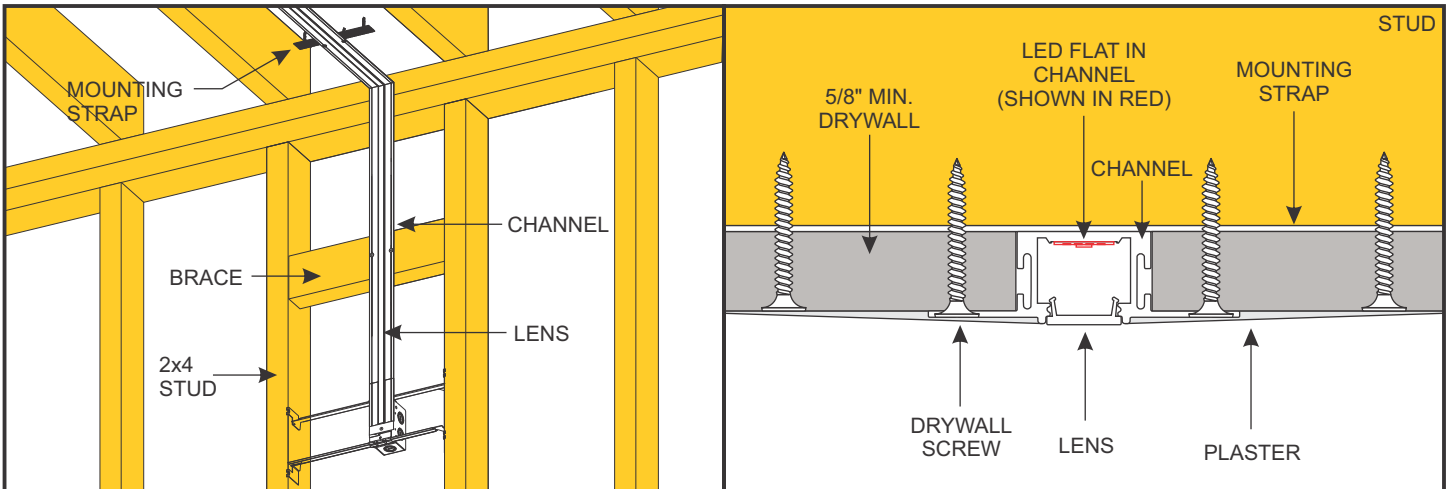
Vertical Configuration



Vertical installations are linear runs of channel beginning and ending at an end cap and junction/take-up box on a single plane surface. Runs can be up to 40' in length and the LED strip lays in the bottom of the channel.

Horizontal installations are typically installed between wall studs or ceiling joists. Cross-braced stud sections or mounting straps are suggested to provide additional support every 32".

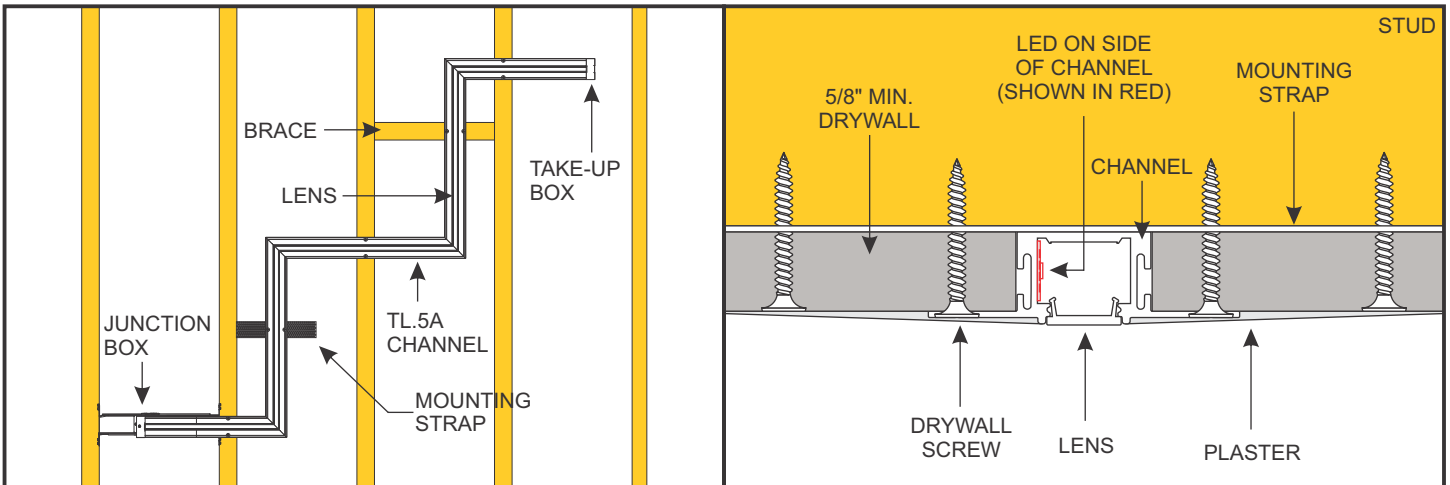
Room-Wrapping Configuration



Room-wrapping configurations are used for installations that join runs of **TruLine .5A** on multiple planes (like a ceiling and a wall) using miter-cut linear sections of channel.

For room-wrapping installations, the LED strip will be installed in the bottom of the channel.

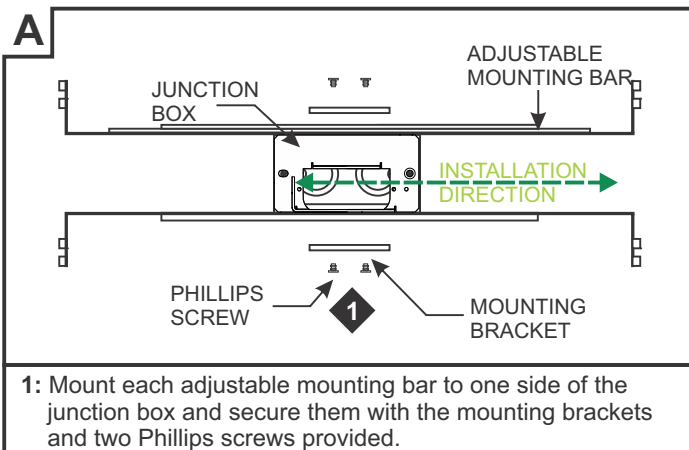
Zig Zag Configuration



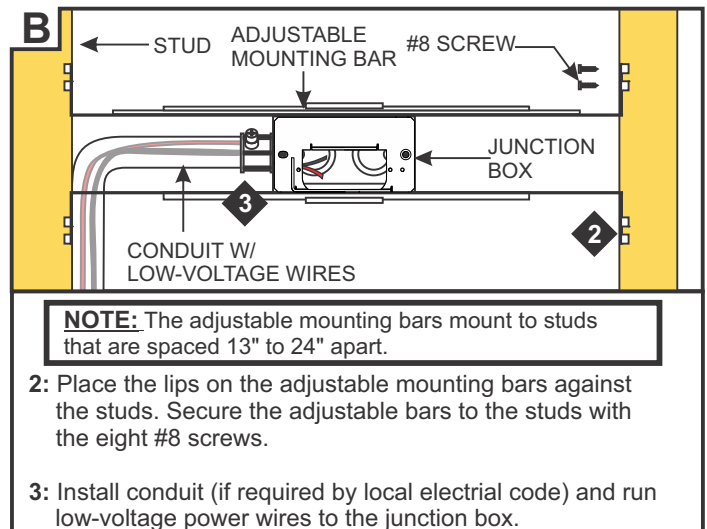
Zig Zag configurations are used for installations that join runs of **TruLine .5A** on a single plane (like a ceiling or a wall) using miter-cut sections of channel.

For Zig Zag installations, the LED strip will be installed in the side of the channel to allow the strip to follow the channel corners.

Section Two: Standard Horizontal Installation



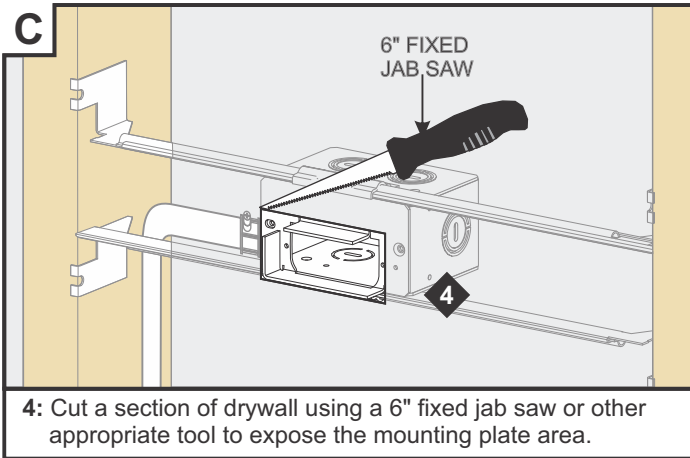
1: Mount each adjustable mounting bar to one side of the junction box and secure them with the mounting brackets and two Phillips screws provided.



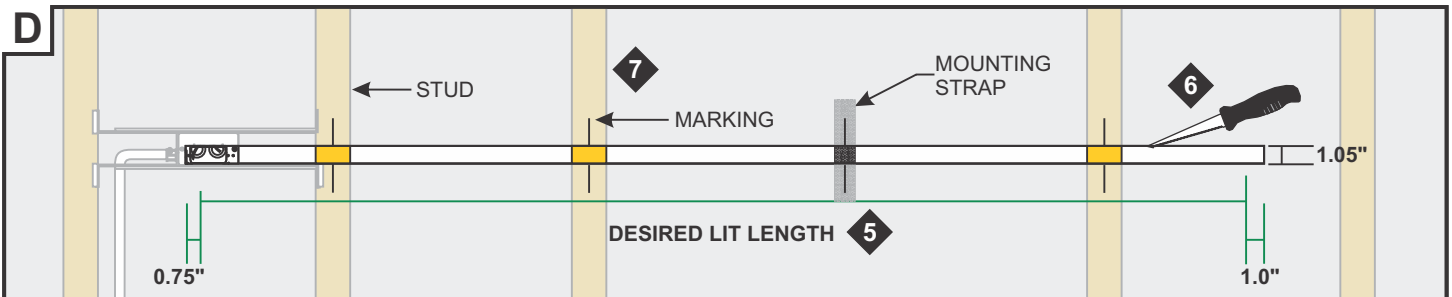
NOTE: The adjustable mounting bars mount to studs that are spaced 13" to 24" apart.

2: Place the lips on the adjustable mounting bars against the studs. Secure the adjustable bars to the studs with the eight #8 screws.

3: Install conduit (if required by local electrical code) and run low-voltage power wires to the junction box.



4: Cut a section of drywall using a 6" fixed jab saw or other appropriate tool to expose the mounting plate area.

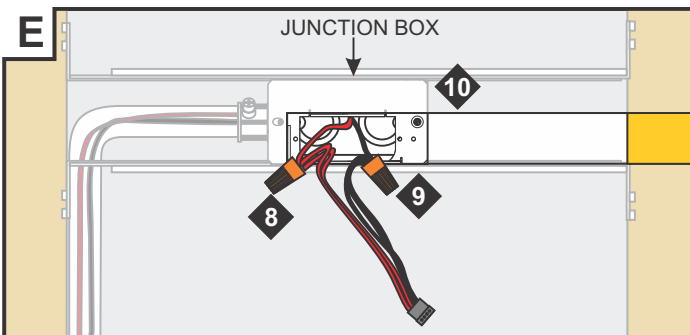


5: Determine the desired length of lit installation area and mark on wall. The total installation length cut will need to be 1-3/4" longer than the desired lit installation area to account for the fixture end caps. (For example, a desired 48" lit area will require a drywall cut of 49-3/4"). Mark this length on the wall using the junction box mounting plate and a level as a guide.

6: Cut out the marked area using a "Dremel Multi-Max" or a 6" Fixed Jab Saw.

7: Mark the location of the studs to the drywall for future reference.

NOTE: To install channel in a wall without standard-spaced studs, install perforated mounting straps every 32" behind drywall and secure using two drywall screws. Mark the location of any mounting straps to the drywall.

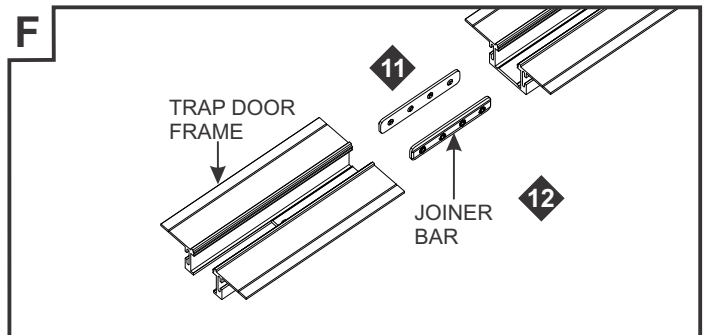


NOTE: Remote power supply wires must be present in the junction box. Refer to the instructions provided with the power supply.

8: Connect the red power supply (24VDC+) wire to the red power connector wires with a wire nut.

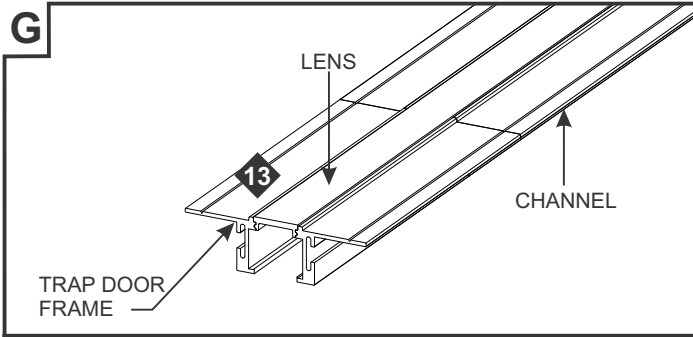
9: Connect the black power supply (24VDC-) wire to the black power connector wires with a wire nut.

10: Place the wire nut connections inside junction box.

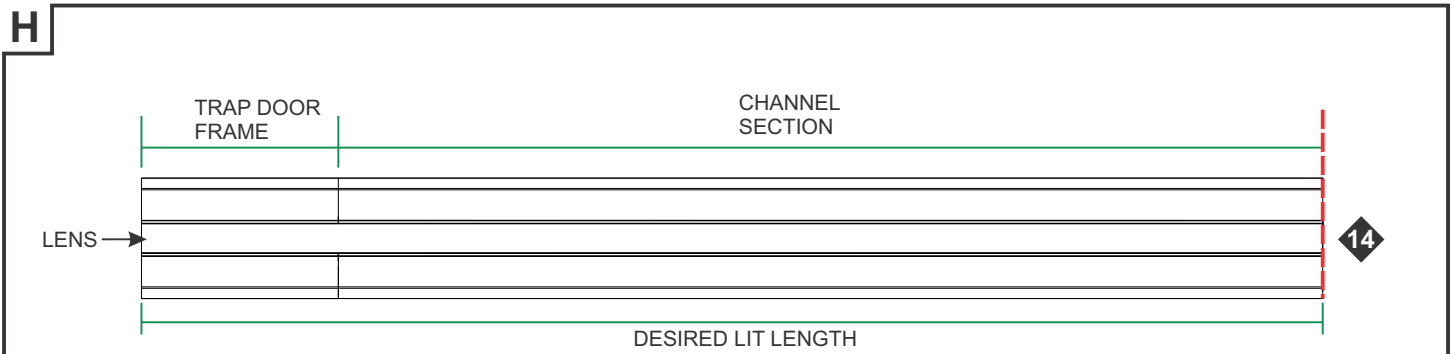


11: Insert the joiner bars halfway into the channel trap door frame. Tighten the two M3 set screws on each joiner bar with a 1.5mm Allen wrench.

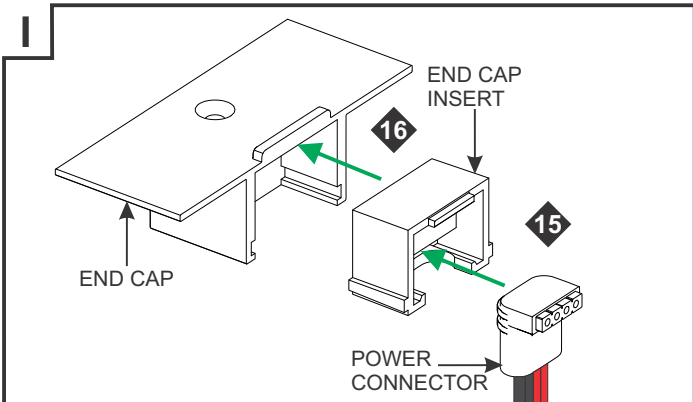
12: Slide the other section of channel onto the joiner bars and tighten the remaining M3 set screws with a 1.5mm Allen wrench.



13: Snap the lens into the assembled trap door frame and channel **BEFORE** cutting to length. This ensures a proper fit after installation.

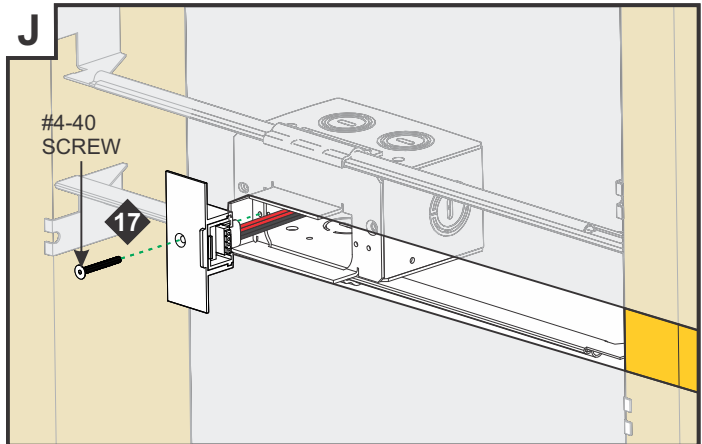


14: Cut the assembled trap door frame, channel, and lens to match the desired lit installation length.

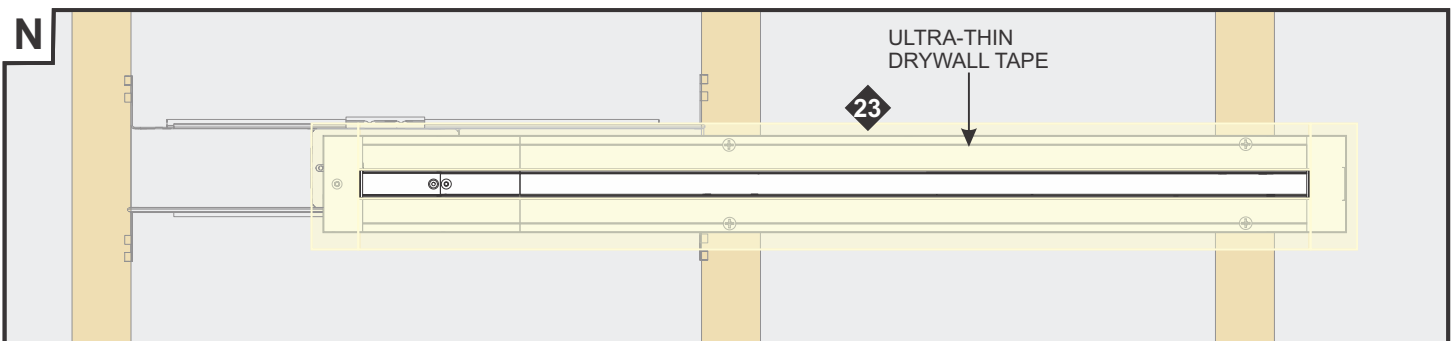
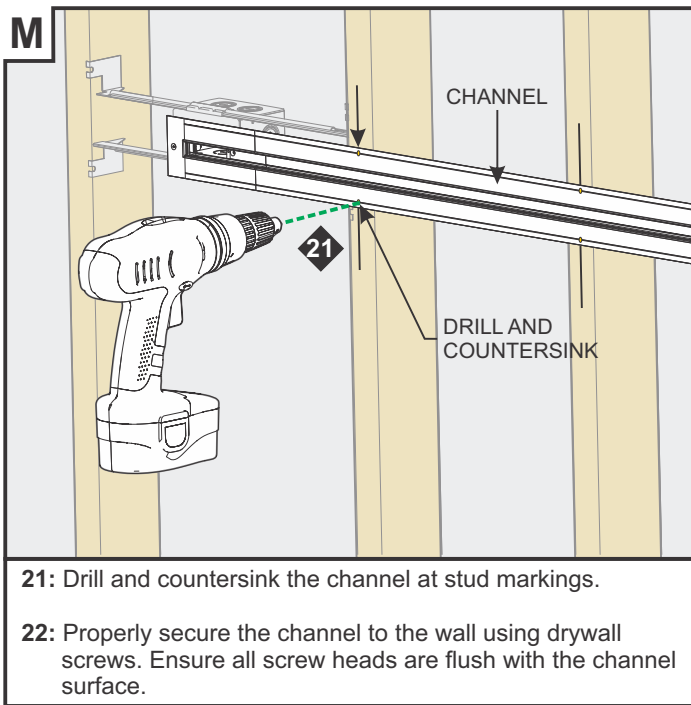
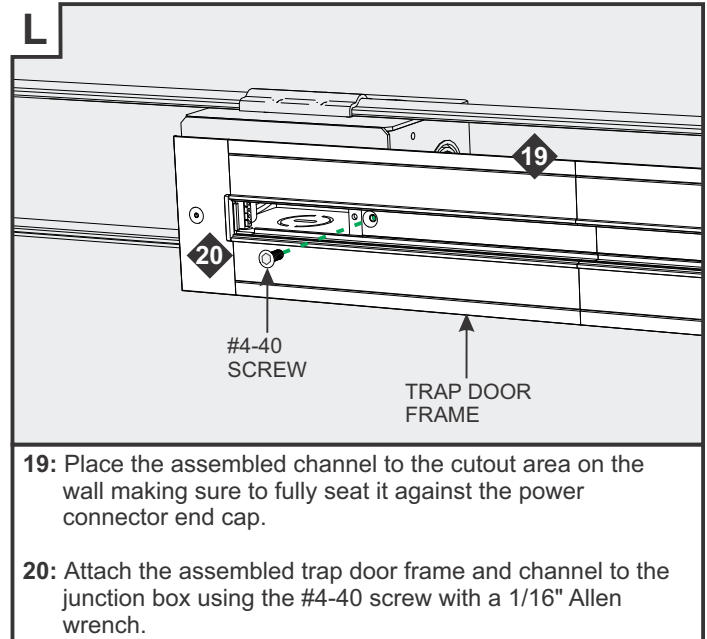
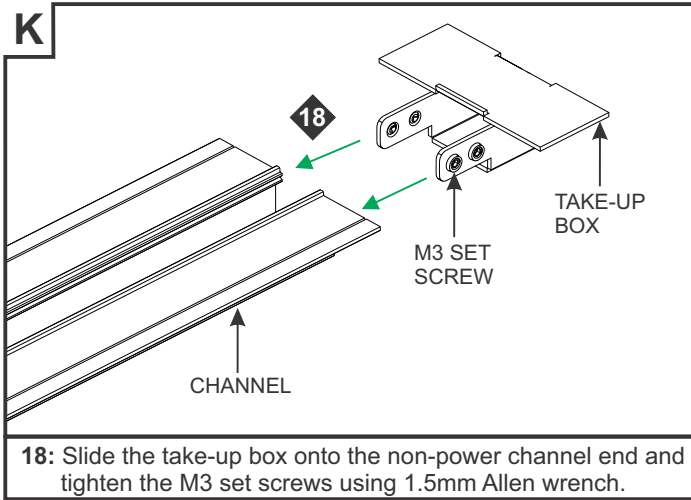


15: Place the power connector into the end cap insert.

16: Slide the assembled end cap insert and power connector into the end cap.



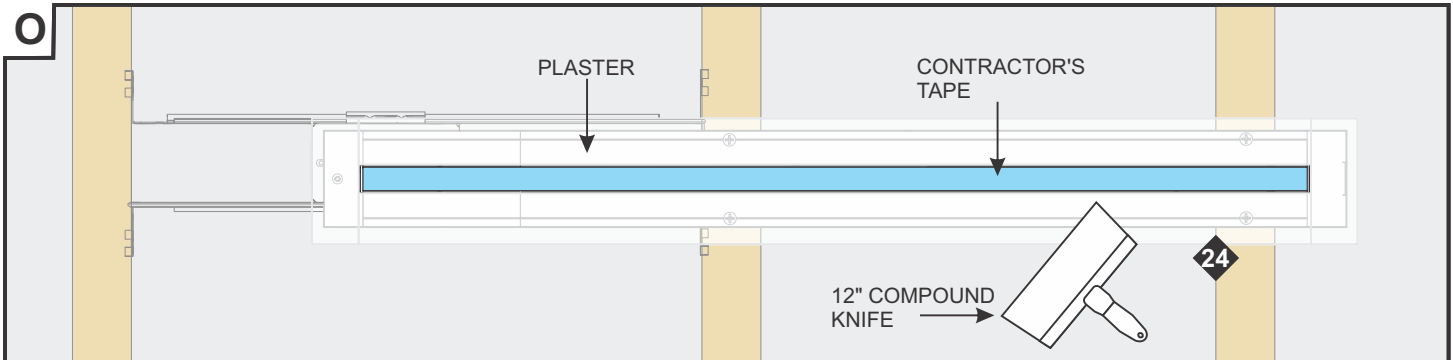
17: Secure the assembled power connector end cap to the junction box with the #4-40 screw using a 1/16" Allen wrench.



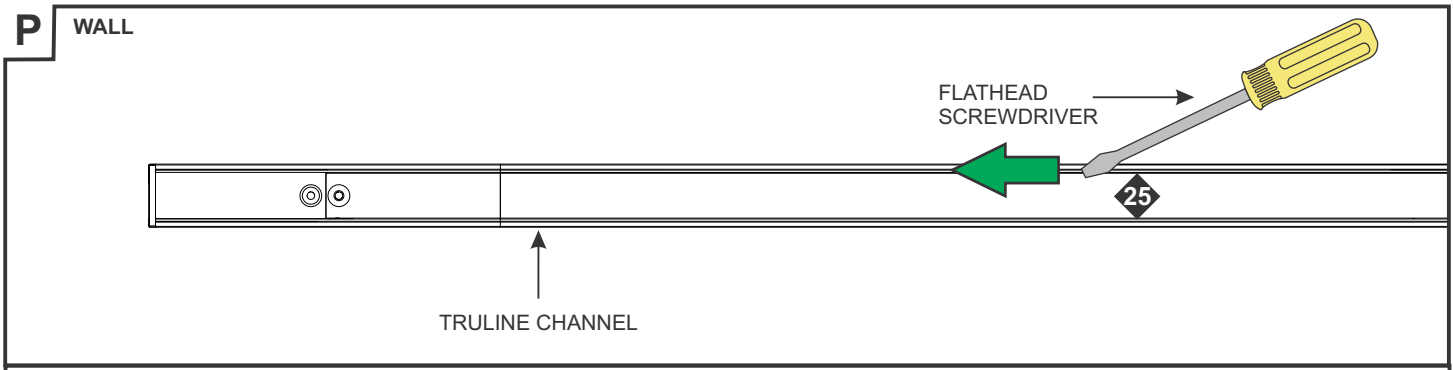
NOTE: Test the LED strip before any plaster work is done.

NOTE: Cover the channel opening with contractor's tape before plastering.

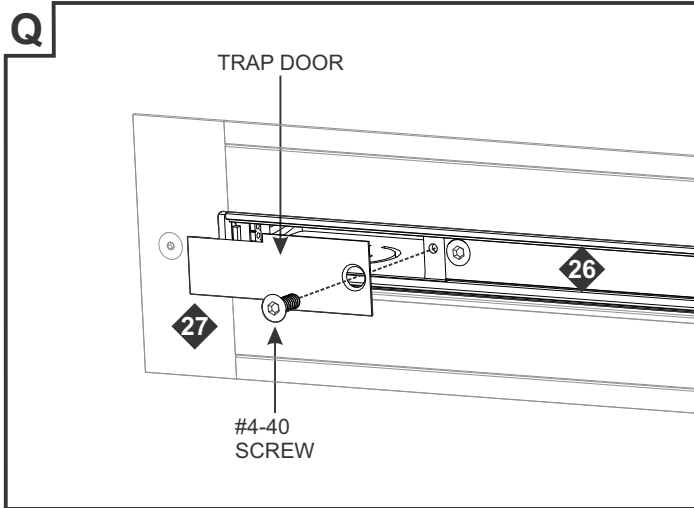
23: Apply ultra-thin drywall tape along edges of channel to prevent cracking of plaster after installation. **DO NOT** overlap strips of drywall tape.



24: Use a 12" compound knife for a smooth compound spread. Sand, paint, and finish the plaster and drywall before removing the blue contractor's tape.



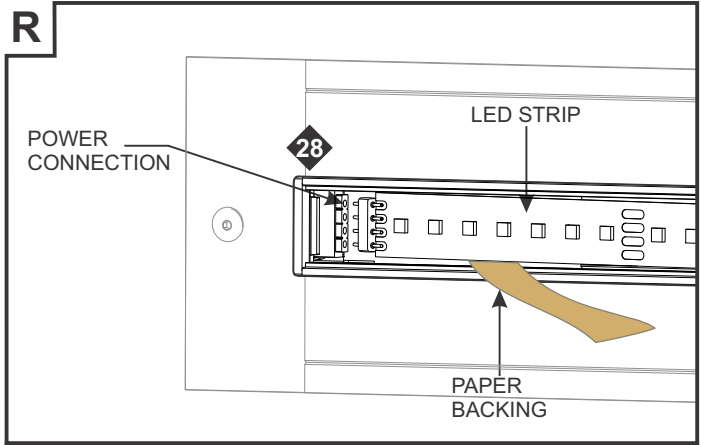
25: Carefully use a flathead screwdriver to remove excess drywall from the internal bevel/edge.



26: Remove the blue contractor's tape from the inside of the channel. Clean the channel surface with alcohol to remove any dust or debris before continuing.

IMPORTANT: Soft strip may not properly adhere to channel surface unless the channel is cleaned with alcohol prior to application.

27: Attach the trap door to the junction box using the #4-40 screw.



NOTE: If installation requires RGB, RGB+W, or Tunable White, refer to wiring diagrams on pages 18-20.

28: Carefully remove the backing from the LED strip, making sure not to remove the tape from the LED strip. Line up the red wire side of the power connector with the "+24VDC" marking on the Soft Strip. Push the male connector of the Soft Strip into the female power connector.

S

LED STRIP

PAPER BACKING

29

29: Firmly press down the adhesive portion of the soft strip onto the channel surface while removing the rest of the backing, making sure there are no air bubbles that can cause surface irregularities.

T

TAKE-UP BOX

30

30: If required, trim the soft strip on the dashed cuttable section, place the excess soft strip inside the take up box (see inset). Ensure the entire length of the channel is covered with Soft Strip to avoid unlit areas.

U

31

CORRECT

31: Snap the lens back onto the channel. Ensure lens is fully seated.

31

NOT INSTALLED CORRECTLY

Section Three: Vertical Installation

V

VERTICAL ORIENTATION

ADJUSTABLE MOUNTING BAR

JUNCTION BOX

PHILLIPS SCREW

MOUNTING BRACKET

1

1: Mount each adjustable mounting bar to one side of the junction box and secure them with the mounting brackets and two Phillips screws provided.

W

STUD

CONDUIT

JUNCTION BOX

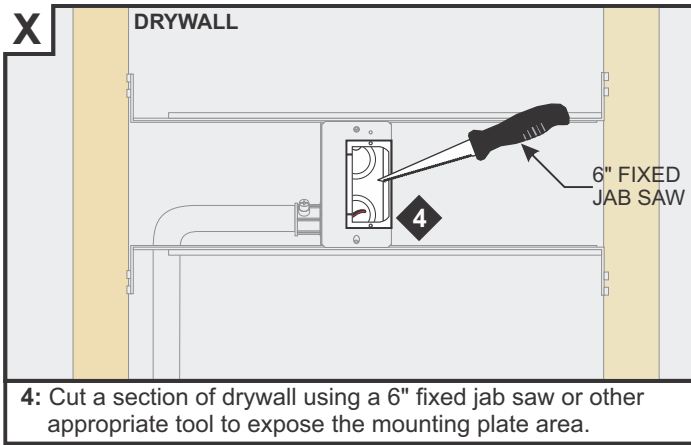
ADJUSTABLE MOUNTING BAR

2

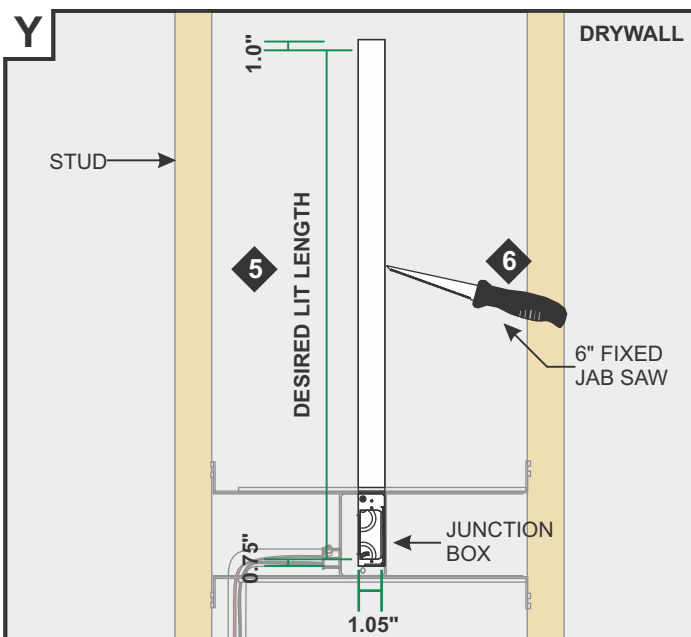
3

2: Remove a knockout to install the power line conduit (if required by local electrical code).

3: Install the conduit and run the low voltage 24VDC power wires coming from the remote power supply to the junction box.



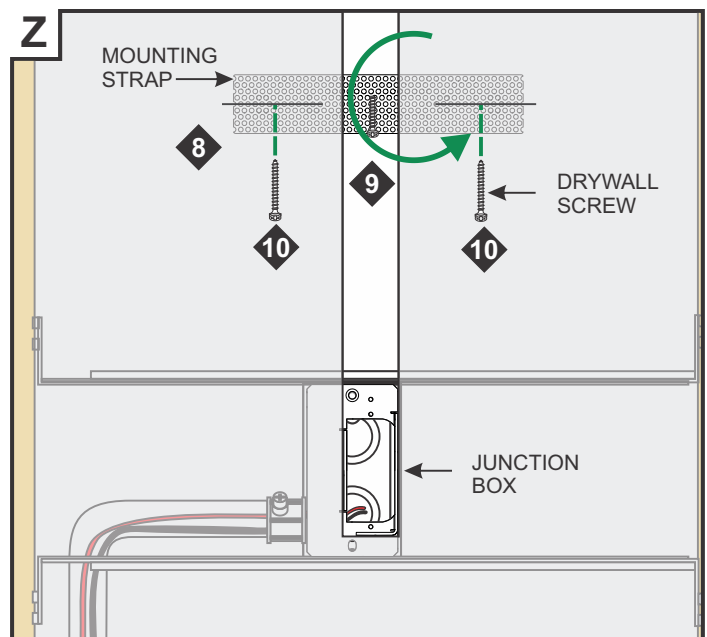
4: Cut a section of drywall using a 6" fixed jab saw or other appropriate tool to expose the mounting plate area.



5: Determine the desired length of lit installation area and mark on wall. The total installation length cut will need to be 1-3/4" taller than the desired lit installation area to account for the fixture end caps. **(For example, a desired 48" lit area will require a drywall cut of 49-3/4")** Mark this length on the wall using the junction box mounting plate and a level as a guide.

6: Cut out the marked area using a "Dremel Multi-Max" or a 6" Fixed Jab Saw.

7: Mark the location of the studs on the drywall for future reference.

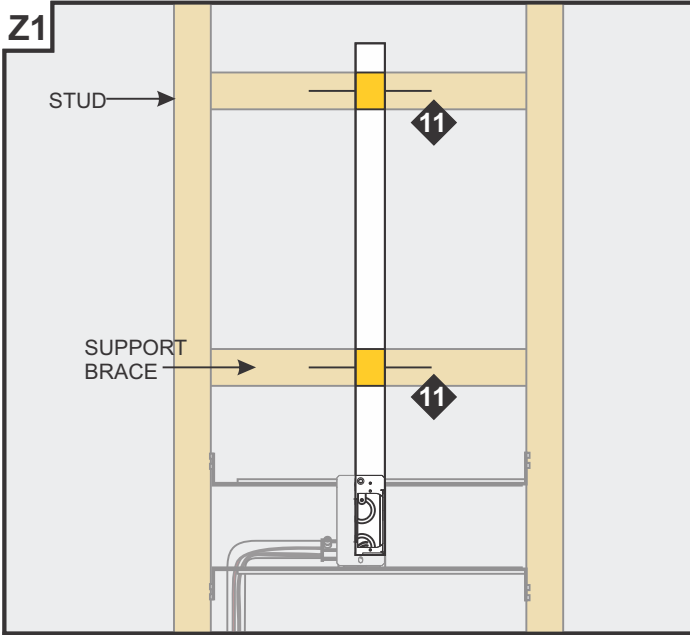


8: Install mounting straps behind the drywall (suggested spacing is every 32") by threading a drywall screw into the perforated material.

9: Place the mounting strap behind the cut drywall and rotate into place using the drywall screw as a handle.

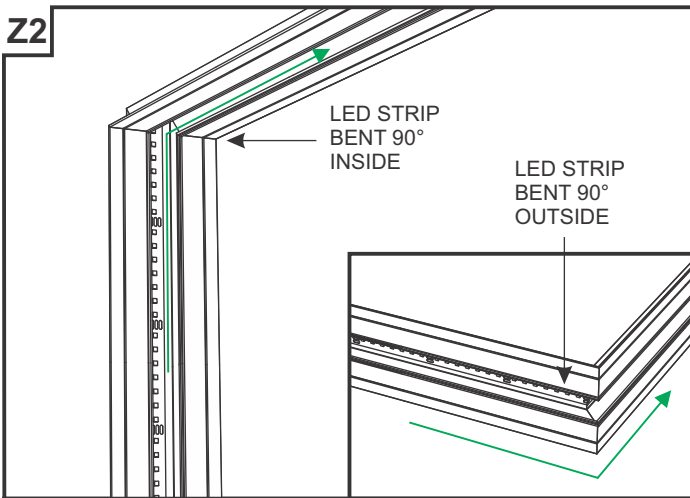
10: Secure the mounting strap to the drywall using two drywall screws. Mark the location on the drywall.

NOTE: Complete cutting, mounting, plastering, painting, and LED strip installation by following Steps 8 through 31 on Pages 3 through 7.

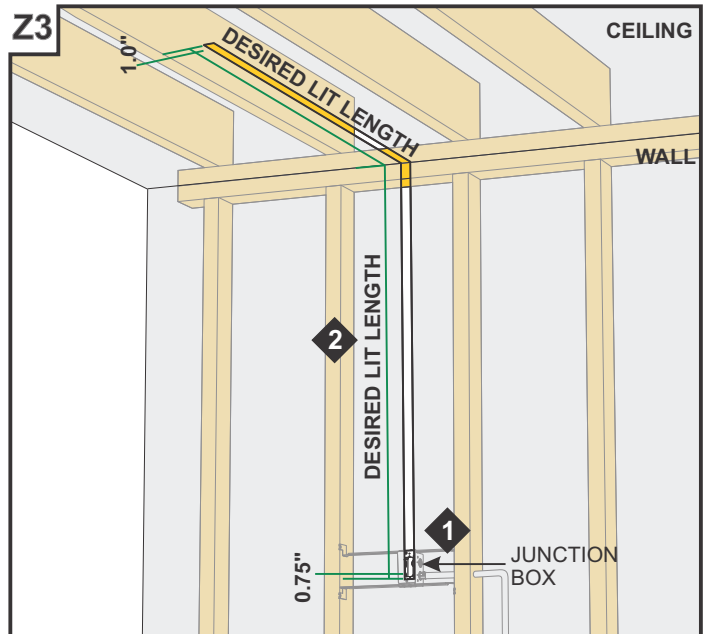


ALTERNATE VERTICAL INSTALLATION OPTION:
11: Install 2x4 support braces (suggested spacing is every 32") before installing and finishing drywall.

Section Four: Room-Wrapping Configuration



INSTALLATION NOTES
 Room-wrapping installations use LED strip bent 90° for inside or outside corner configurations. Channel sections will be miter cut on-site.



- 1:** Install junction box and low-voltage power.
- 2:** Measure and mark installation length, allowing for 0.75" extra space at junction box for power end cap and 1.0" at the end of the installation for the take-up box. Cut out marked areas using appropriate tools.

Z4

TRAP DOOR FRAME

JOINER BAR

3

4

3: Insert the joiner bars halfway into the channel trap door frame. Tighten the two M3 set screws on each joiner bar with a 1.5mm Allen wrench.

4: Slide the other section of channel onto the joiner bars and tighten the remaining M3 set screws with a 1.5mm Allen wrench.

Z5

LENS

TRAP DOOR FRAME

CHANNEL

5

5: Snap the lens into the assembled trap door frame and channel **BEFORE** cutting to length. This ensures a proper fit after installation.

Z6

MARK DESIRED LIT LENGTH

ASSEMBLED LENS AND CHANNEL w/TRAP DOOR FRAME

ADDITIONAL CHANNEL AND LENS SECTIONS AS REQUIRED

6

6: Mark the desired lit length on the assembled channel and lens lengths.

Z7

MITER CUT

7

7: Miter cut each section of assembled channel and lens to match the corner angle. In a 90° inside corner installation as shown, each channel section is cut at a 45° angle to form a complete corner.

Z8

JUNCTION BOX

8

9

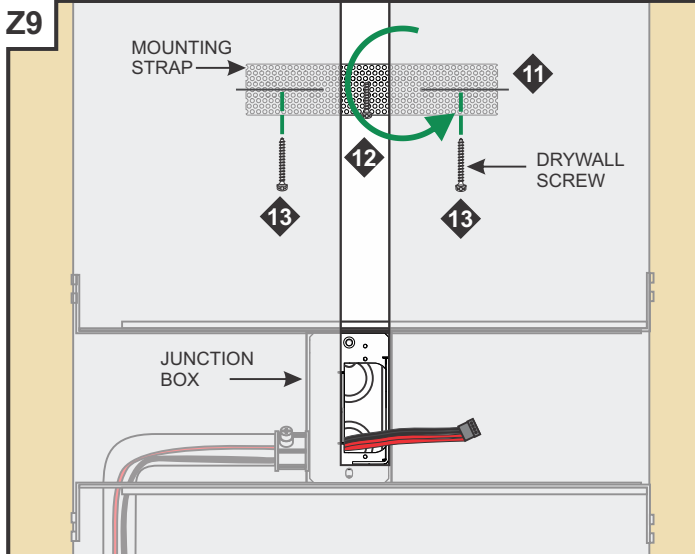
10

NOTE: Remote power supply wires must be present in the junction box. Refer to the instructions provided with the power supply.

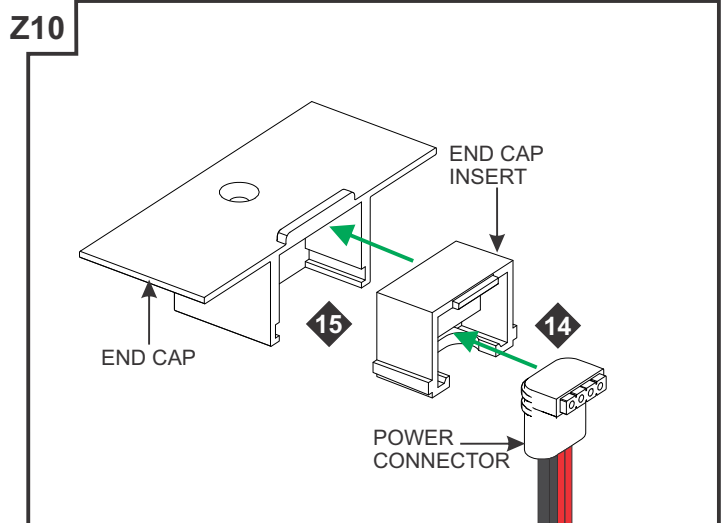
8: Connect the red power supply (24VDC+) wire to the red power connector wires with a wire nut.

9: Connect the black power supply (24VDC-) wire to the black power connector wires with a wire nut.

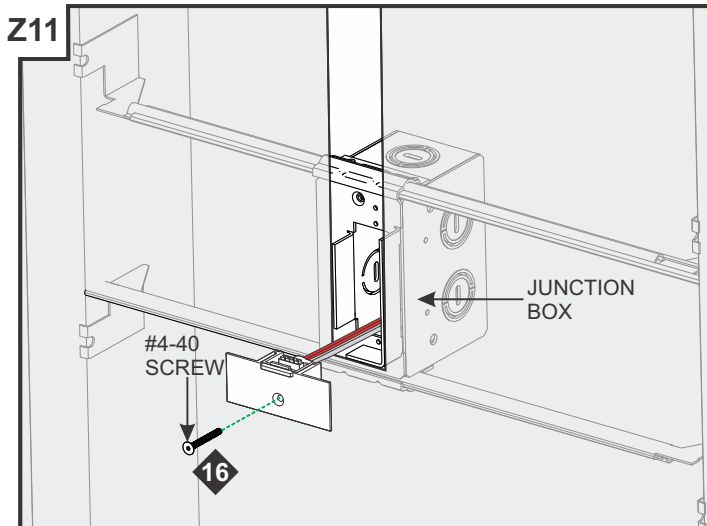
10: Place the wire nut connections inside junction box.



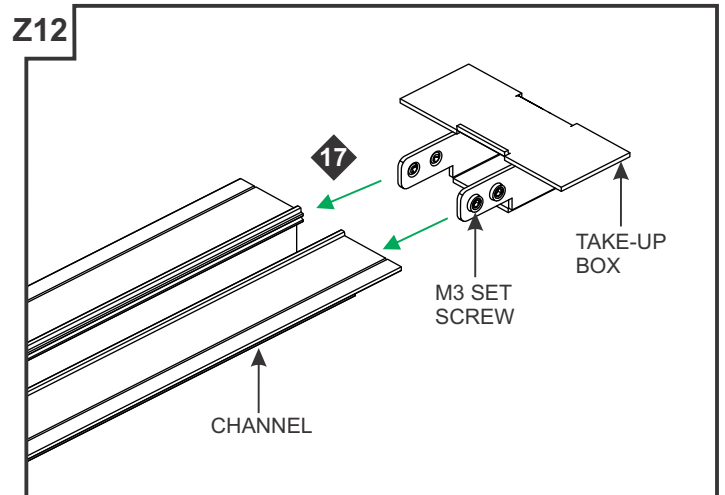
- 11:** Install mounting straps behind the drywall (suggested spacing is every 32") by threading a drywall screw into the perforated material.
- 12:** Place the mounting strap behind the cut drywall and rotate into place using the drywall screw as a handle.
- 13:** Secure the mounting strap to the drywall using two drywall screws. Mark the location on the drywall.



- 14:** Place the power connector into the end cap insert.
- 15:** Slide the assembled end cap insert and power connector into the end cap.

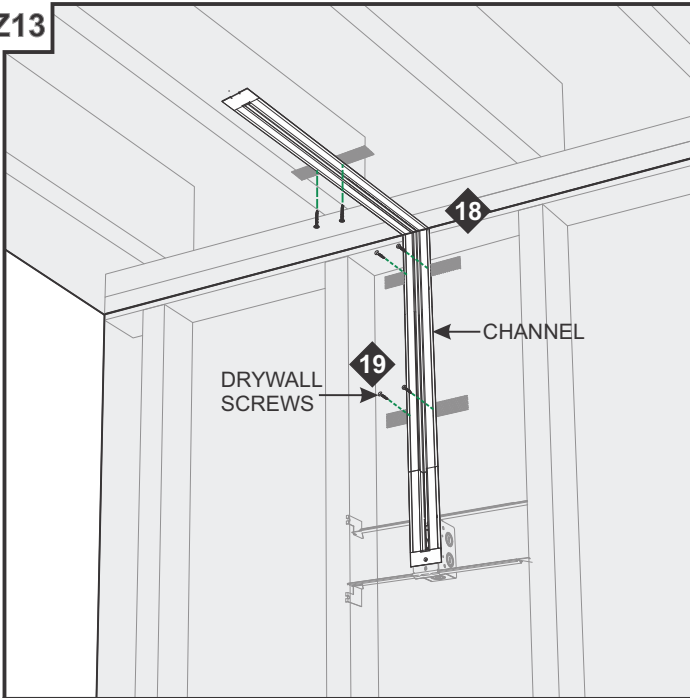


- 16:** Secure the assembled power connector end cap to the junction box with the #4-40 screw using a 1/16" Allen wrench.



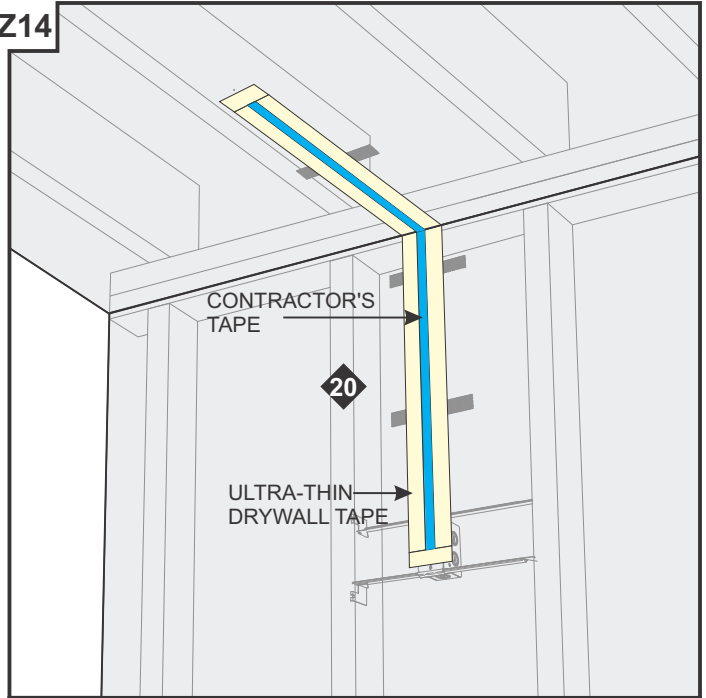
- 17:** Slide the take-up box onto the non-power channel end and tighten the M3 set screws with a 1.5mm Allen wrench.

Z13



- 18:** Using the marked locations on the drywall, carefully make holes in the channel flange using the provided square drill with counter sink bit.
- 19:** Secure the channel using drywall screws. Ensure all screws are flush to the channel.

Z14

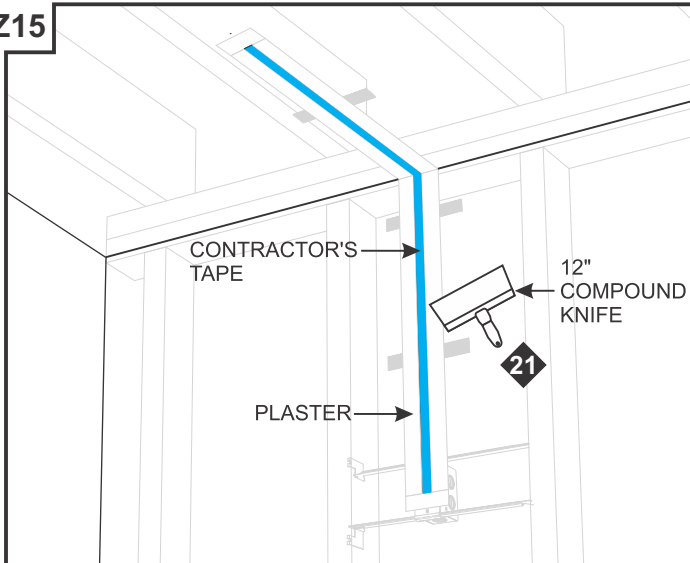


NOTE: Test the LED strip before any plaster work is done.

NOTE: Cover the channel opening with contractor's tape before plastering.

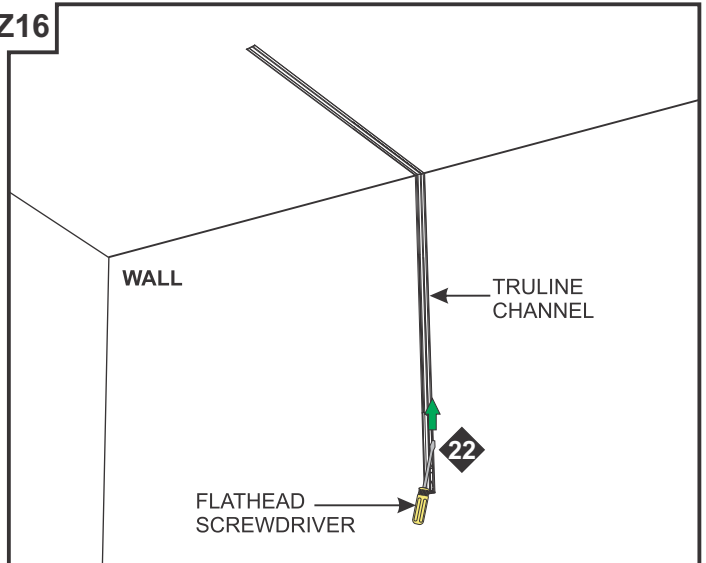
- 20:** Apply ultra-thin drywall tape along edges of channel to prevent cracking of plaster after installation.

Z15

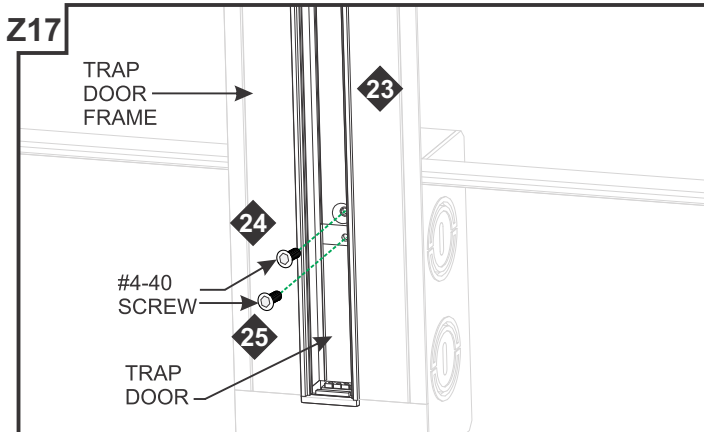


- 21:** Use a 12" compound knife for a smooth compound spread. Sand, paint, and finish the plaster and drywall before removing the contractor's tape.

Z16



- 22:** Carefully use a flathead screwdriver to remove excess drywall from the internal bevel/edge.

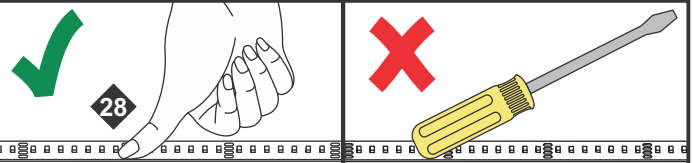
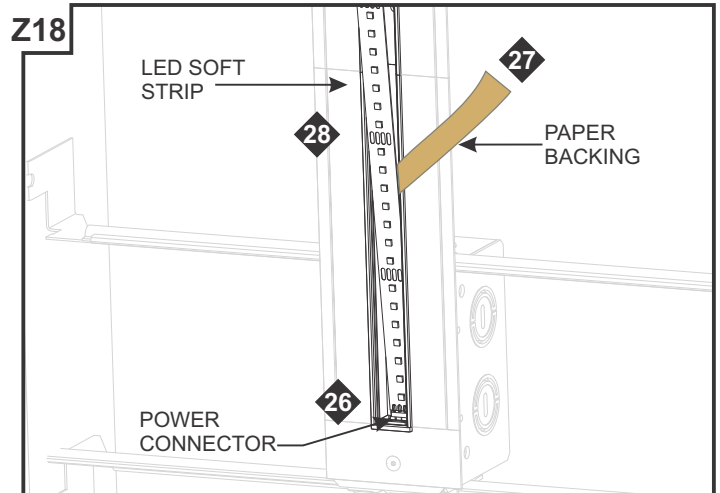


23: Remove the blue contractor's tape from the inside of the channel. Clean the channel surface with alcohol to remove any dust or debris before continuing.

IMPORTANT: Soft strip may not properly adhere to channel surface unless the channel is cleaned with alcohol prior to application.

24: Attach the trap door frame to the junction box with a #4-40 screw using a 1/16" Allen wrench.

25: Attach the trap door to the junction box with a #4-40 screw using a 1/16" Allen wrench.

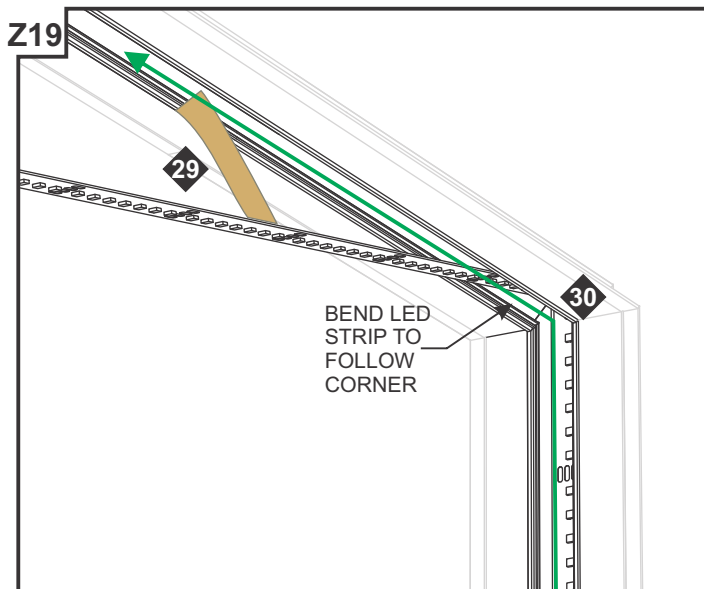


NOTE: If installation requires RGB, RGB+W, or Tunable White, refer to wiring diagrams on pages 18-20.

26: Line up the red wire side of the power connector with the "+24VDC" marking on the LED strip. Push the male connector of the LED strip into the female connector of the power cables.

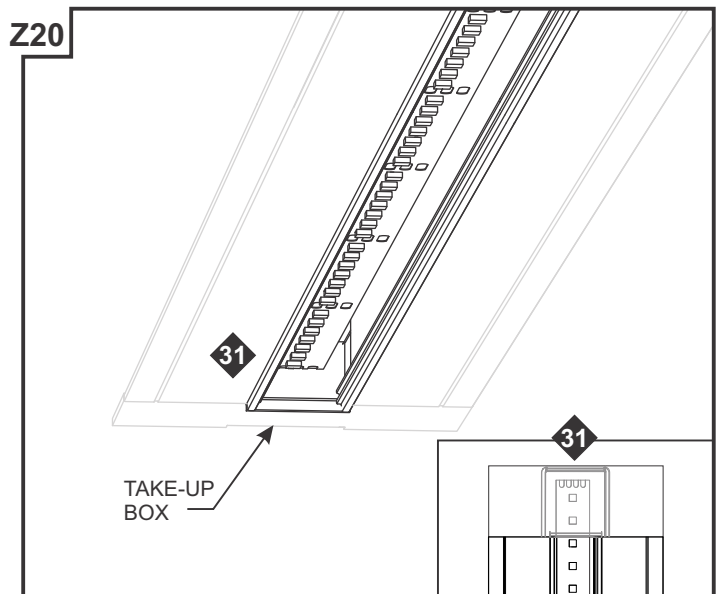
27: Carefully remove the backing from the LED strip, making sure not to remove the tape from the strip.

28: Firmly press down the adhesive portion of the LED strip onto the channel surface while removing the rest of the backing, making sure there are no air bubbles that can cause surface irregularities.



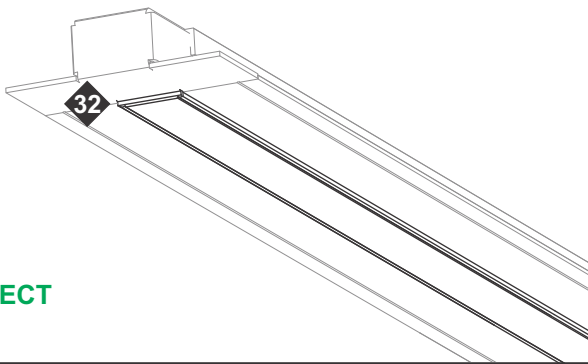
29: Continue removing the paper backing from the LED strip and installing along channel, pressing adhesive into place using **ONLY** a finger.

30: Bend the LED strip to match the installation corner.

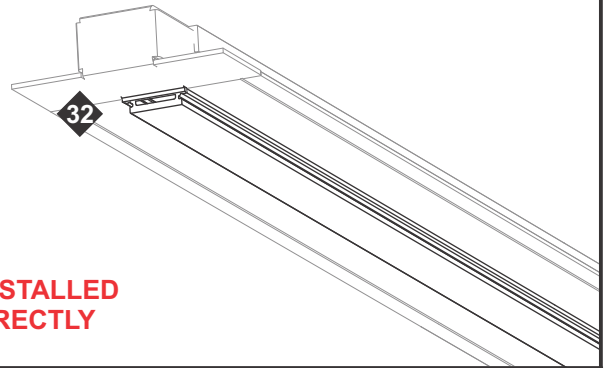


31: If required, trim the LED strip on the dashed cutting lines **ONLY**. Ensure the entire length of the channel is covered with LED Strip to avoid unlit areas. Place any excess LED strip inside the take-up box.

Z21



CORRECT

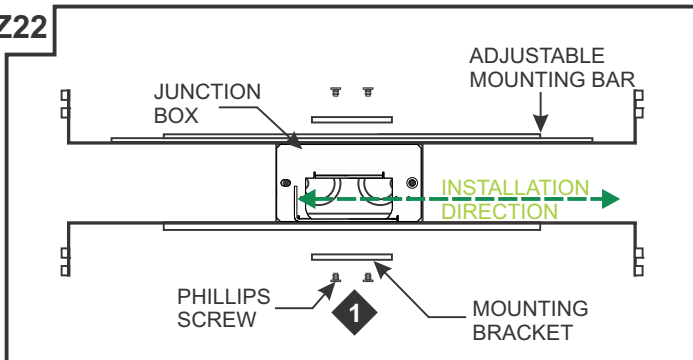


NOT INSTALLED CORRECTLY

32: Snap the lens back onto the channel sections. Ensure lens is fully seated.

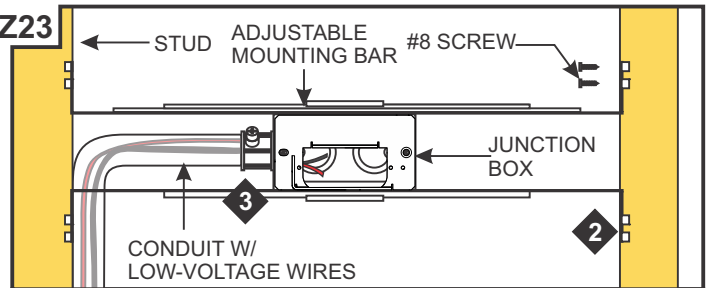
Section Five: Zig Zag Installation

Z22



1: Mount each adjustable mounting bar to one side of the junction box and secure them with the mounting brackets and two Phillips screws provided.

Z23

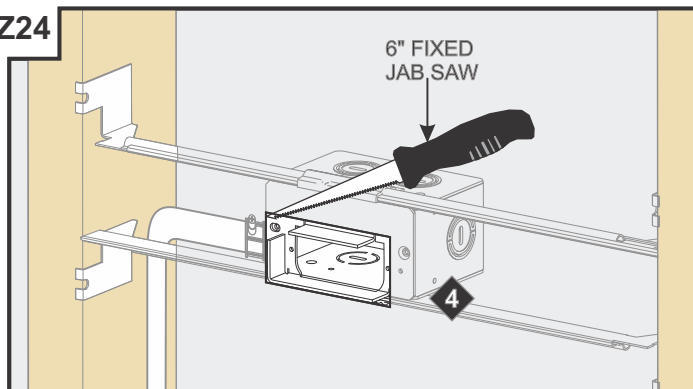


NOTE: The adjustable mounting bars mount to studs that are spaced 13" to 24" apart.

2: Place the lips on the adjustable mounting bars against the studs. Secure the adjustable bars to the studs with the eight #8 screws.

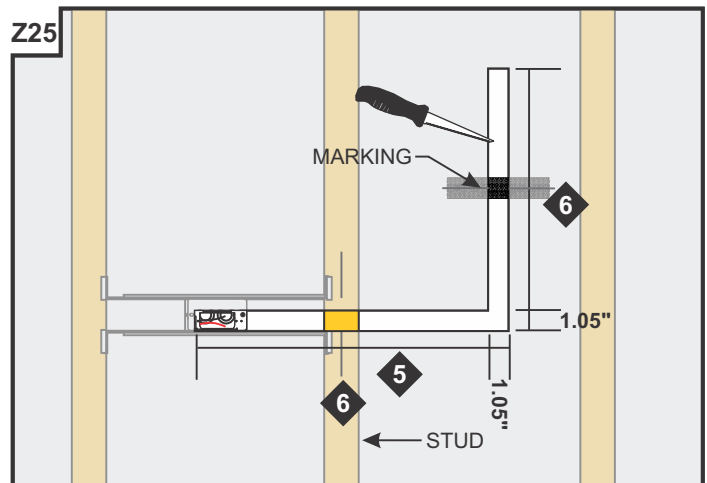
3: Install conduit (if required by local electrical code) and run low-voltage power wires to the junction box.

Z24



4: Cut a section of drywall using a 6" fixed jab saw or other appropriate tool to expose the mounting plate area.

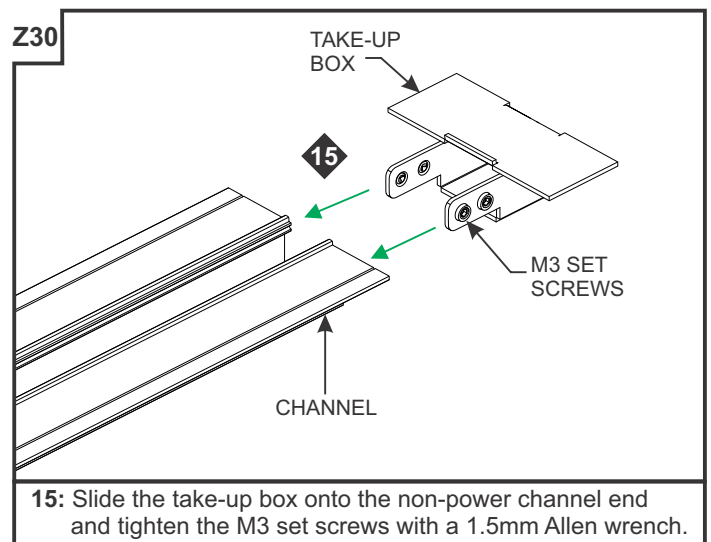
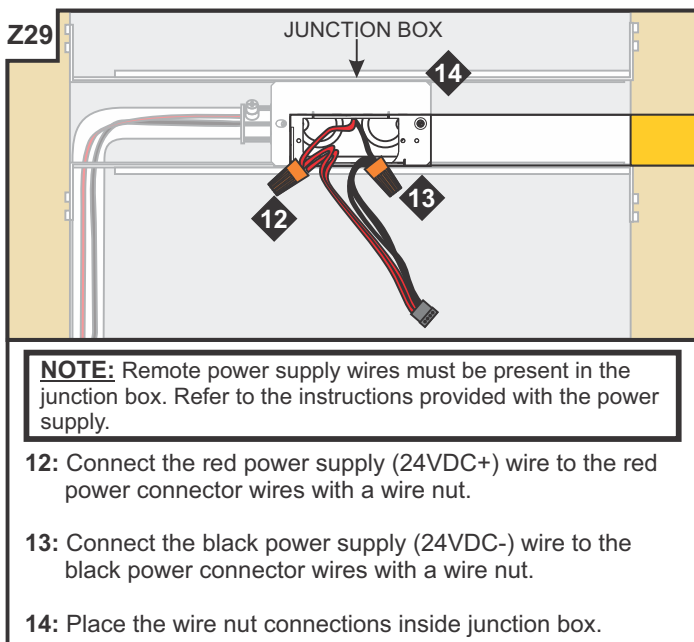
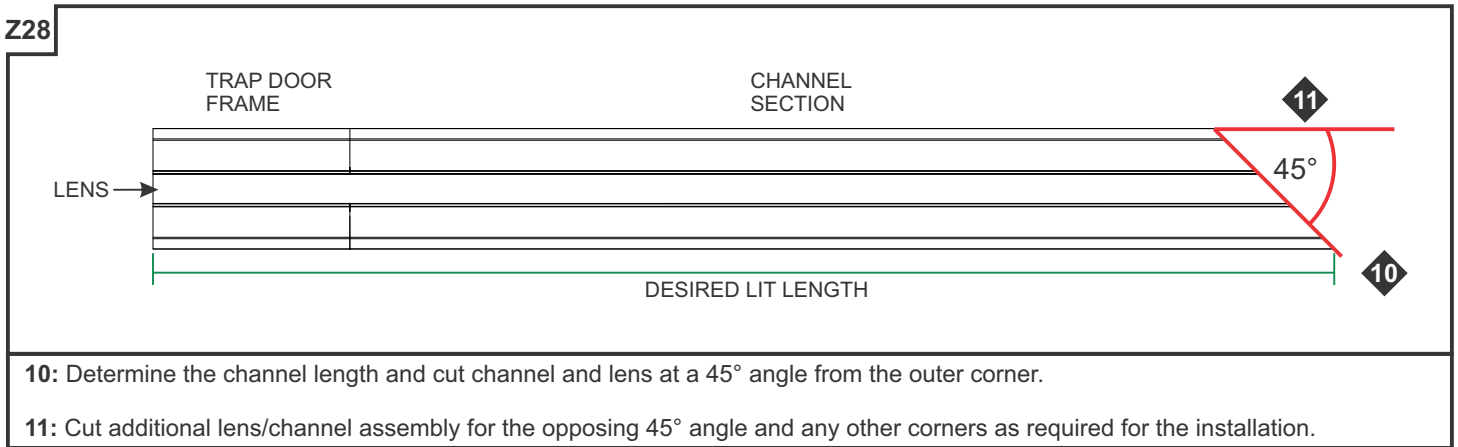
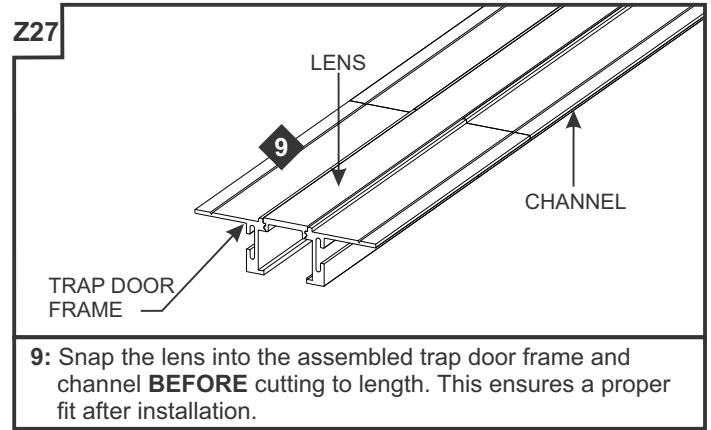
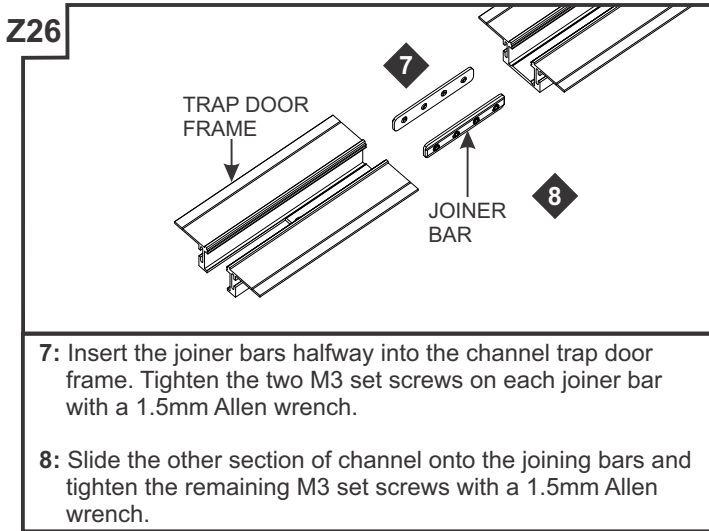
Z25

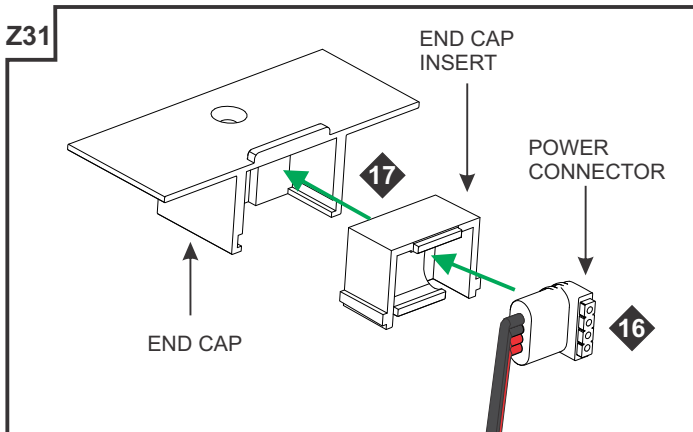


5: Measure and mark installation length, allowing for 0.75" extra space at junction box for power end cap and 1" at the end of the installation for the take-up box. Cut out marked areas using appropriate tools.

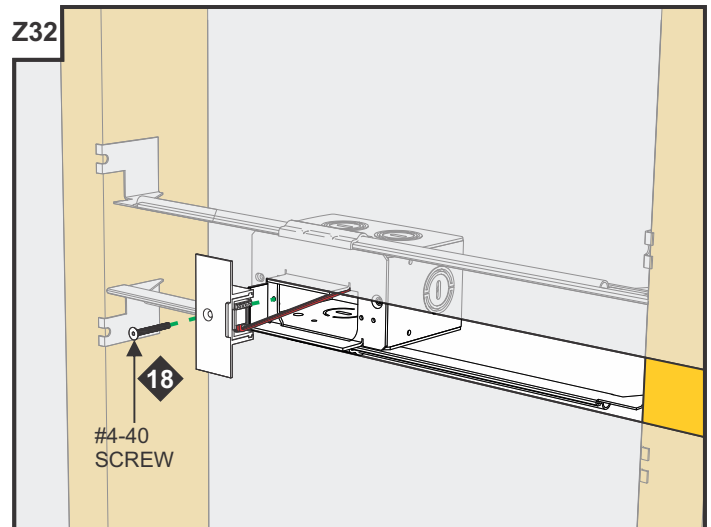
6: Mark the location of the studs to the drywall for future reference.

NOTE: To install channel vertically or in a wall without standard-spaced studs, install perforated mounting straps every 32" behind drywall and secure using two drywall screws. Mark the location of any mounting straps to the drywall.

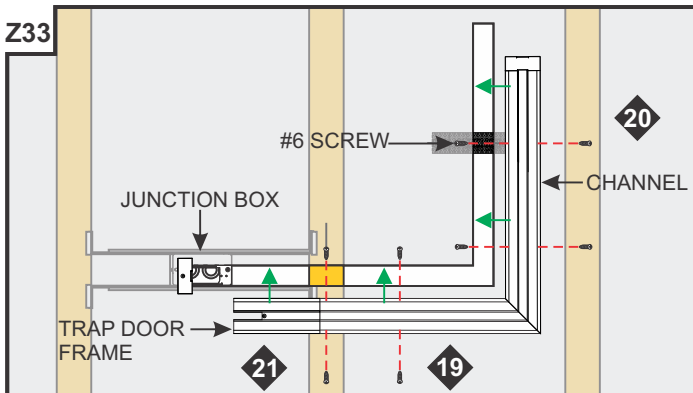




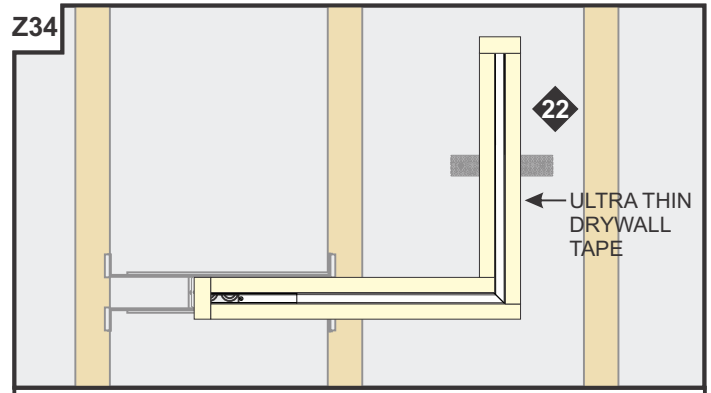
- 16:** Rotate the connector and bend power connection wires to place the power connector into the end cap insert.
- 17:** Slide the assembled end cap insert and power connector into the end cap.



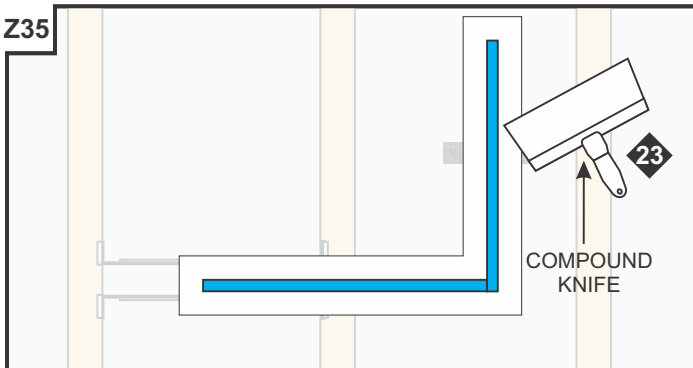
- 18:** Secure the assembled power connector end cap to the junction box with the #4-40 screw.



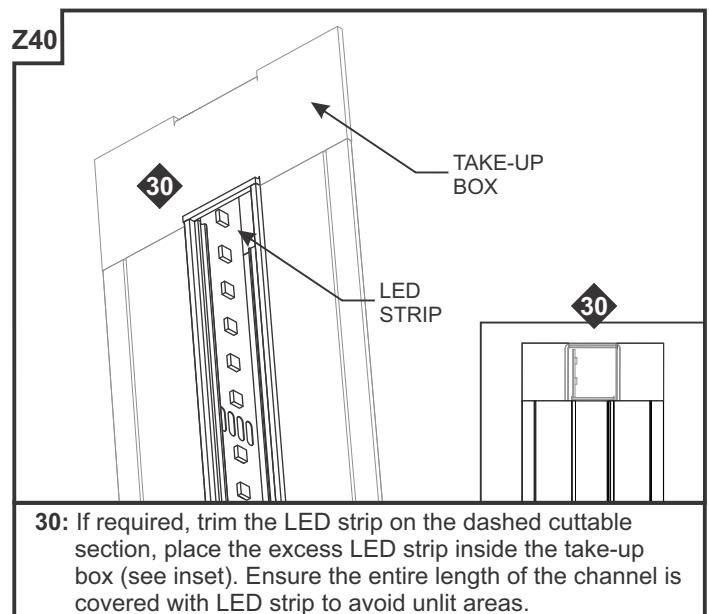
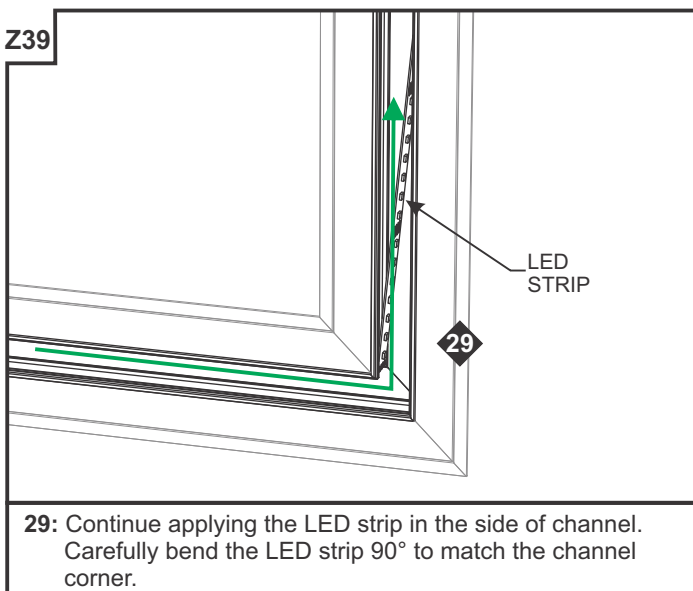
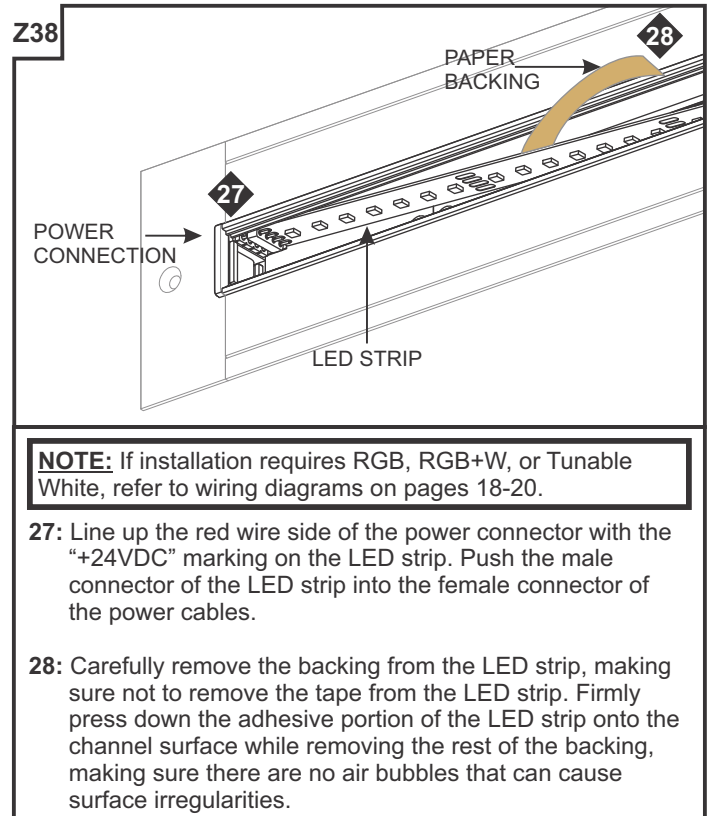
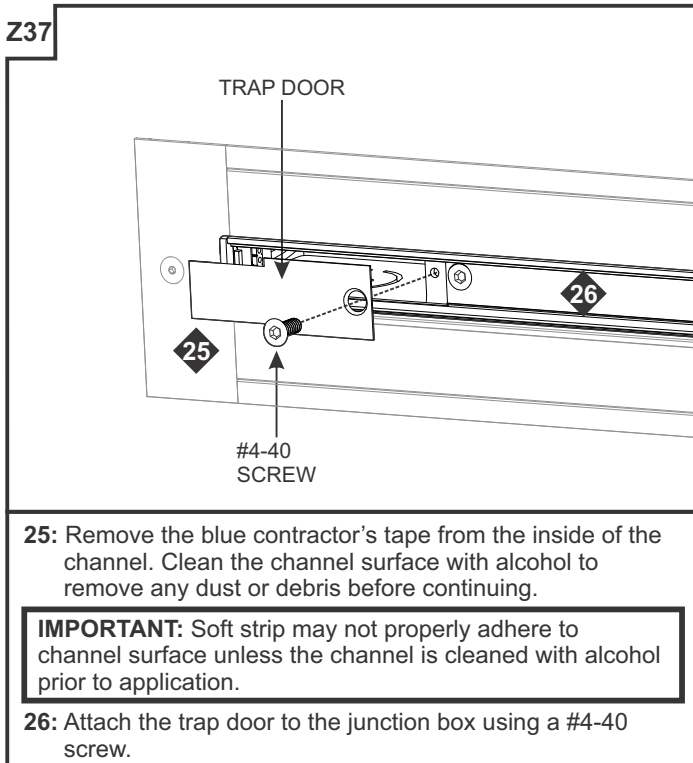
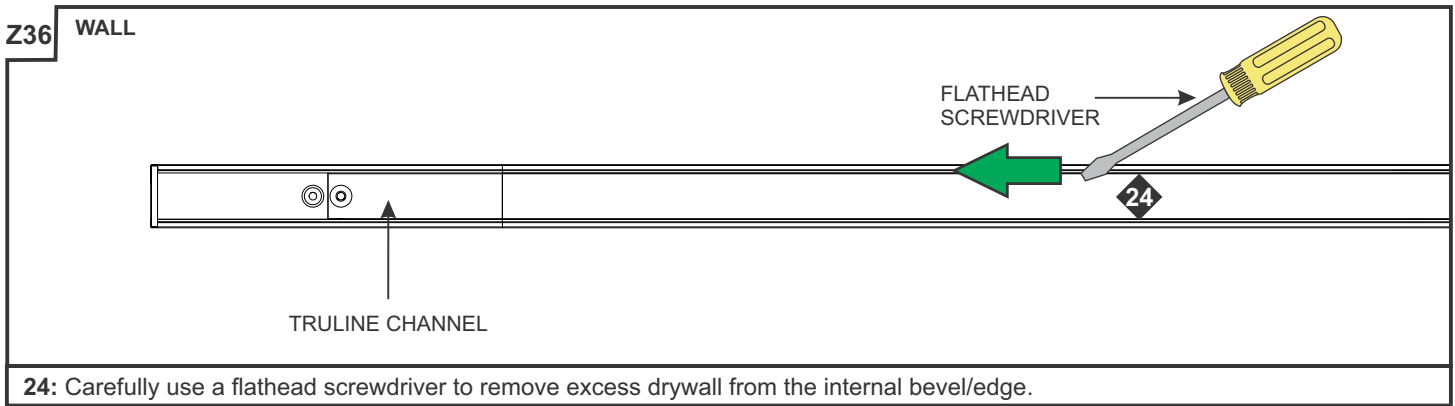
- 19:** Using the mark locations on the drywall, carefully make a hole to channel using the provided square drill with counter sink bit.
- 20:** Secure the channel to the studs/mounting straps through the drywall with the #6 screws using the provided square recess bit.
- 21:** Secure the trap door frame to the junction box with the #4-40 screw.



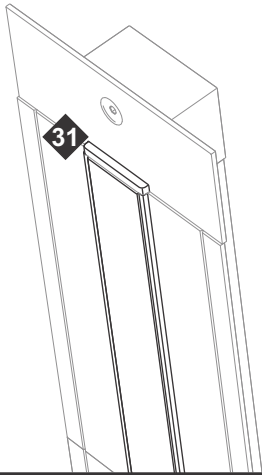
- NOTE:** Test the LED strip before any plaster work is done.
- NOTE:** Cover the channel opening with blue contractor's tape before plastering.
- 22:** Apply ultra-thin drywall tape along edges of channel to prevent cracking of plaster after installation. **DO NOT** overlap strips of drywall tape.



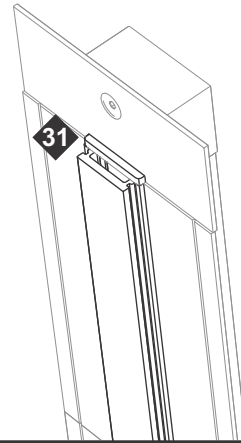
- 23:** Use a 12" compound knife for a smooth compound spread. Sand, paint, and finish the plaster and drywall before removing the blue contractors tape.



Z41



CORRECT

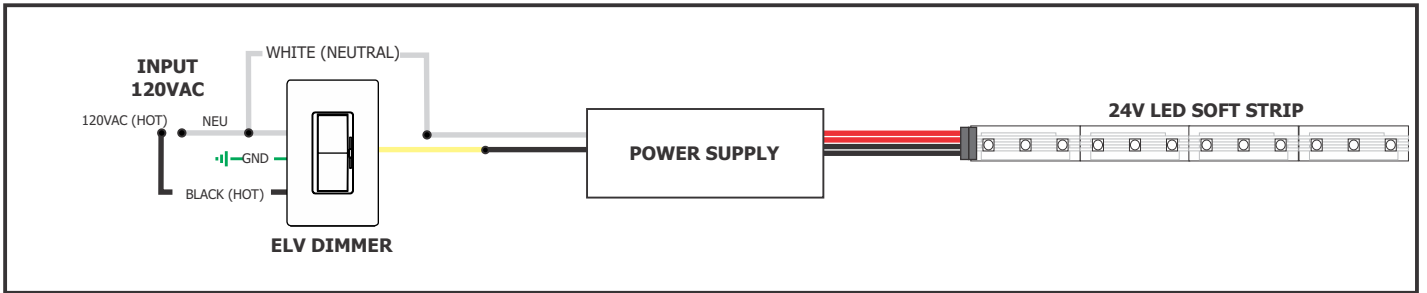


NOT INSTALLED CORRECTLY

31: Snap the lens back onto the channel. Ensure lens is fully seated.

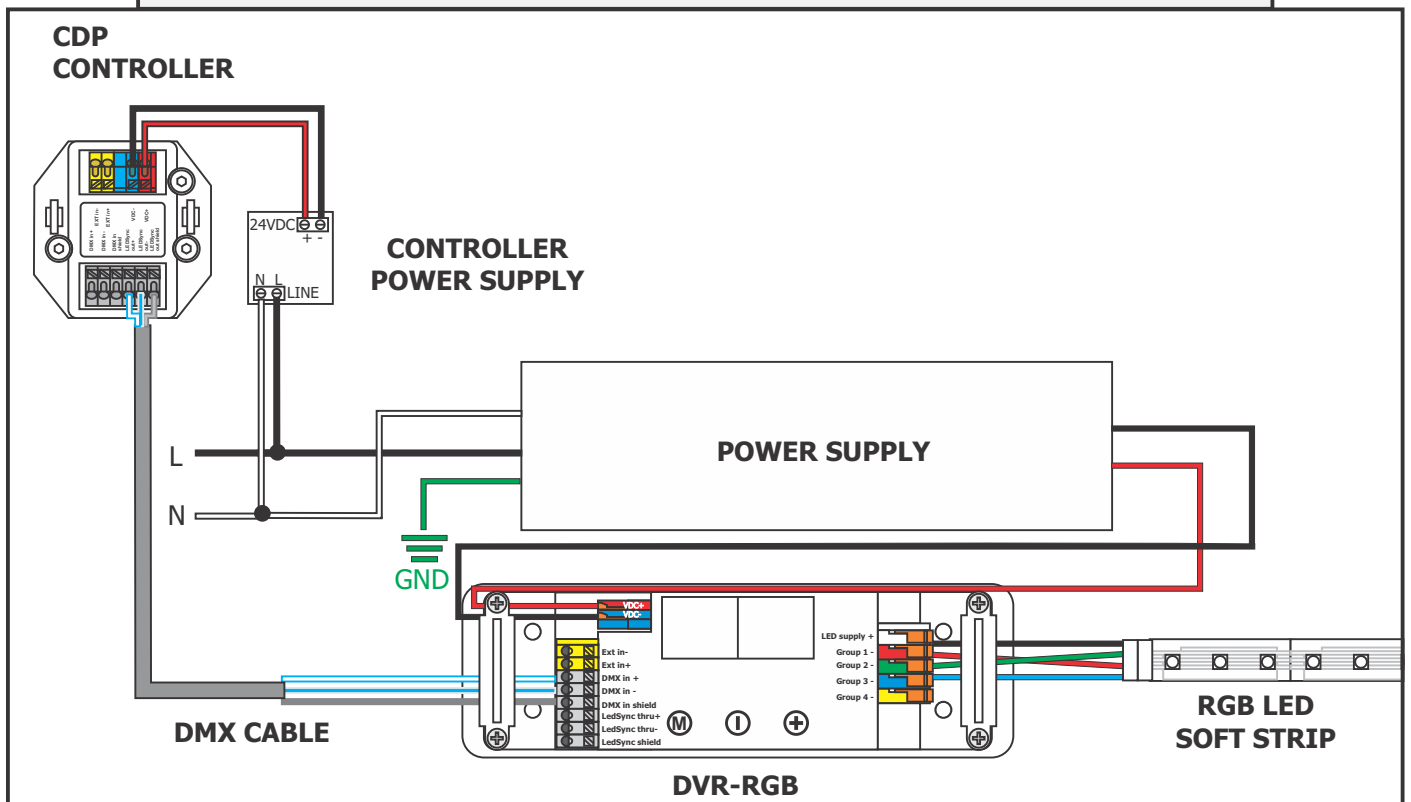
Section Six: Wiring Diagrams

General 24VDC Configuration

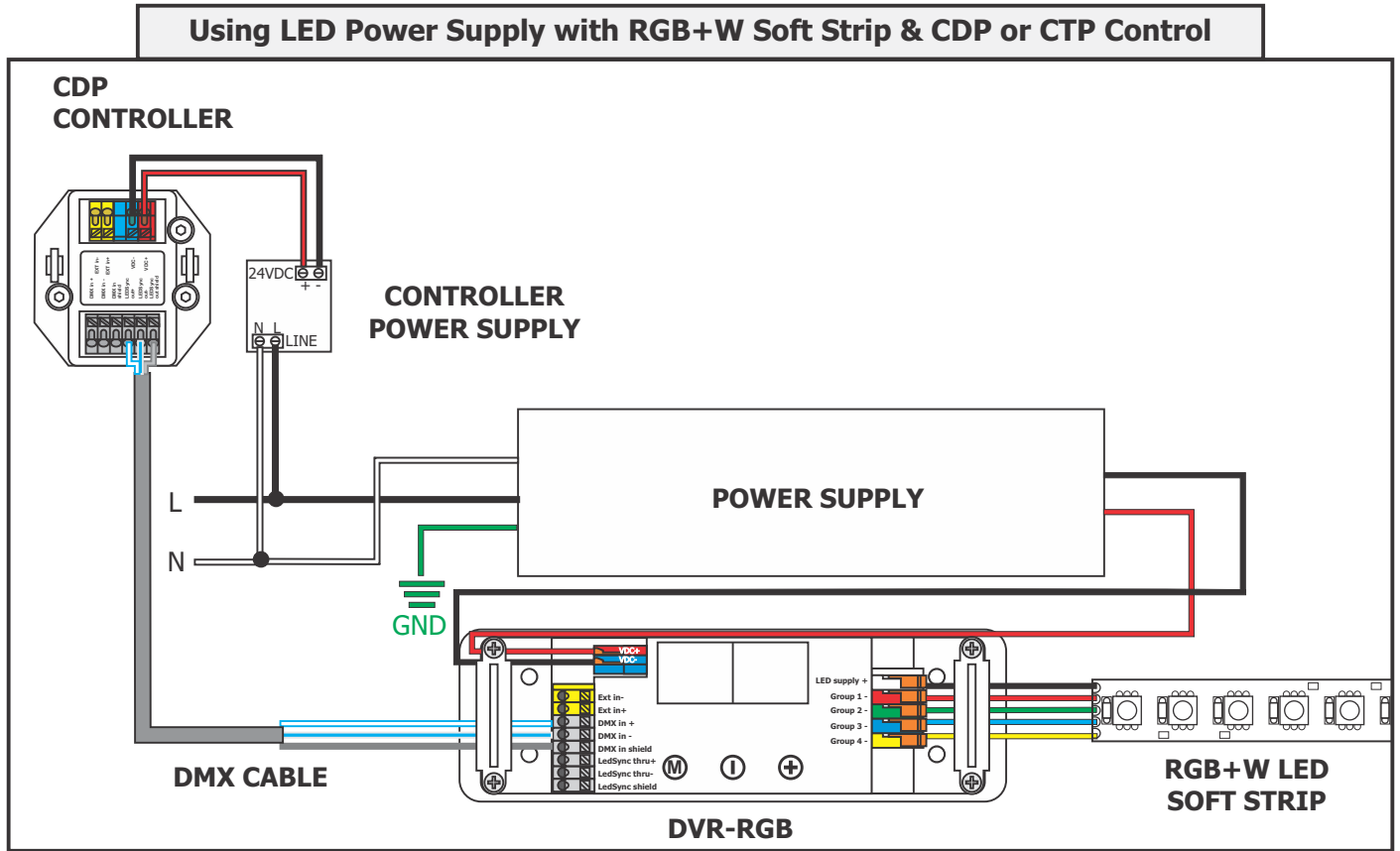


Standard RGB Configuration

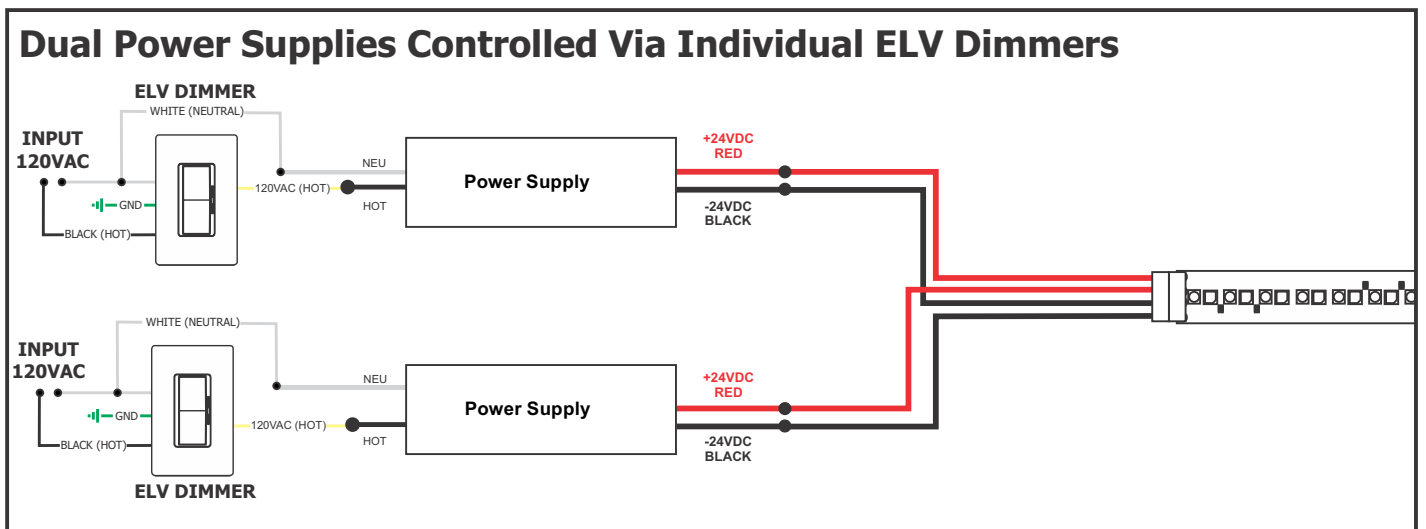
Using LED Power Supply with RGB Soft Strip & CDP or CTP Control



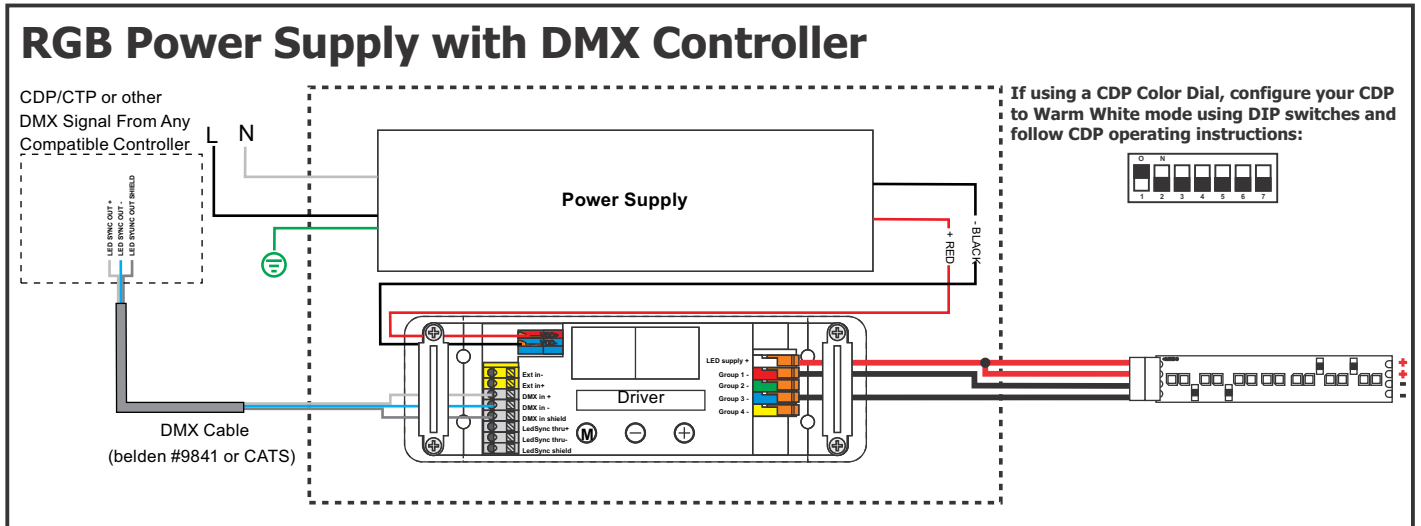
RGB+W Configuration



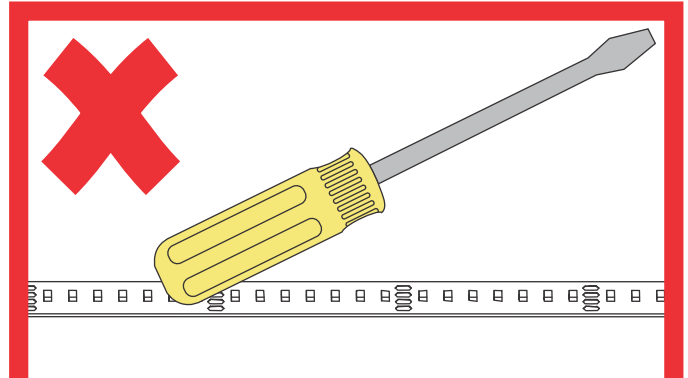
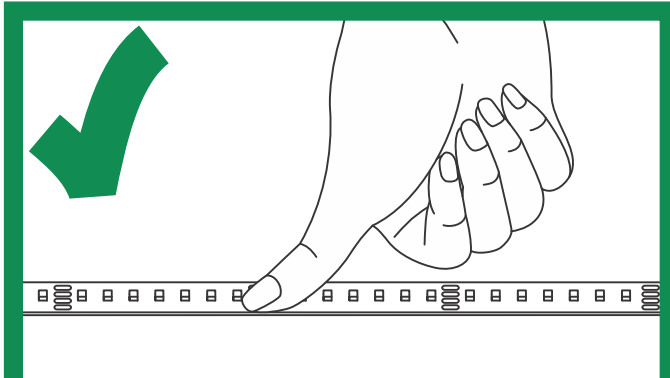
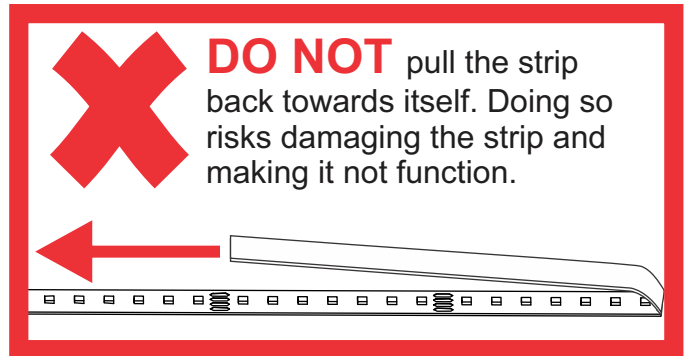
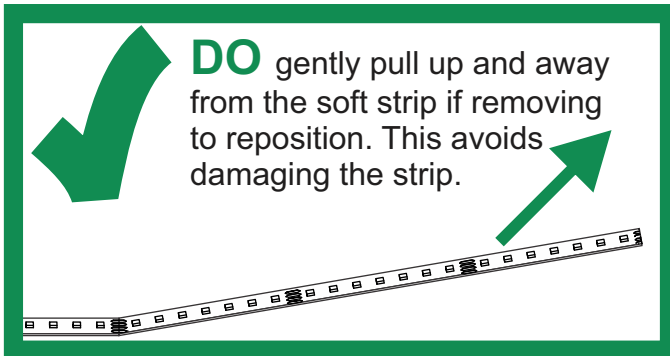
Tunable White Configuration



Tunable White Configuration



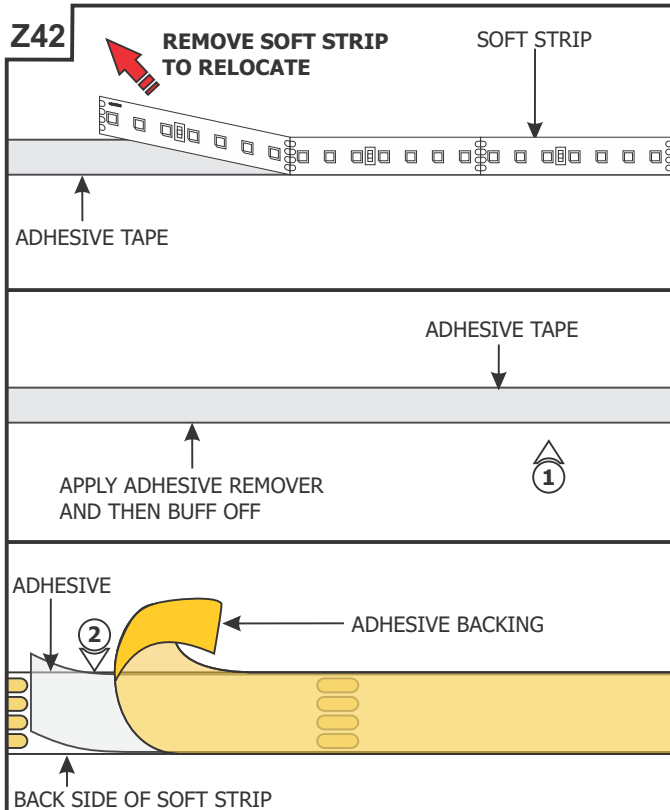
IMPORTANT INFORMATION REGARDING INSTALLATION AND REWORK OF SOFT STRIP LED



DO only ever use fingers to gently install soft strip to a surface **AFTER** cleaning the surface with alcohol.

DO NOT use any tool to install soft strip to a surface. This will damage the soft strip component.

Relocating Soft Strip (Optional)



NOTE: If relocating the installed soft strip, make sure that the adhesive tape on back of the soft strip covers the entire strip. The adhesive tape isolates the strip from the installation surface. Damaged or inconsistent adhesive tape may cause the contacts on the back of the strip to come in contact with the conductive heat sink which will cause the strip to short and burn. Call Edge Lighting to get replacement adhesive tape and/or optional aluminum heat sink tape (SS-HR-F).

- 1:** To remove tape residue from back of the strip, apply WD-40, Goo Gone, or a mixture of warm water and lemon oil to the corner of a clean, dry towel. Gently buff the area containing the adhesive residue until it is completely removed.
- 2:** Gently remove a few inches of the from one side of the tape backing. Attach the adhesive tape to the back of the soft strip and apply moderate pressure to affix the tape. Continue this step a few inches at the time until the entire adhesive tape is attached to back of the soft strip.
- 3:** Refer to pages 7, 13, or 17 to reinstall the LED soft strip.