Q-TRAN DW-HE24-1.5 Dynamic White High Efficacy Linear LED Strip Installation Guide

Contents

Q-TRAN DW-HE24-1.5 Dynamic White High Efficacy Linear LED Strip

Product Information

- Product Name: Linear LED Strip
- IP Rating: Dry IP20, DMP IP54, Wet IP67
- Compliance: Compliant with regulations
- Warranty: 5 years
- Buy American Act: Supported

Product Usage Instructions

Methods of Installation:

- Adhesive Mount: Use VHB Tape included on the backside of the strip to mount it on the desired surface (not rated for walkover floor)
- Ceiling Installation: Mount the strip on the ceiling using adhesive or silicone (sold separately)
- Wall Installation: Mount the strip on the wall using adhesive or silicone (sold separately)

LED Strip Lead Wire & Jumper Instructions (Dry IP20 and DMP IP54):

1. Measure and cut the LED strip to the desired length along the designated cut point
2. Solder the lead wire onto the solder pad of the strip. Make sure to match the wires correctly before soldering. Refer to the wiring diagrams for specific light engine details.
3. If LED wires are pre-soldered from the factory, skip to the next step
4. Connect the LED strip to a power supply to ensure it is working properly and all non-factory soldered connections are secure
5. Once all connections are functioning properly, disconnect the power and proceed with heat-shrinking instructions
6. To heat shrink, place the provided shrink tubes on the lead wire and use a heat gun to shrink the tubes

Important Notes:

- For Wet IP67 installation, refer to page 6 of the manual
- Make sure to perform surface preparation before installation
- Once a damp strip is cut, it cannot be reconnected

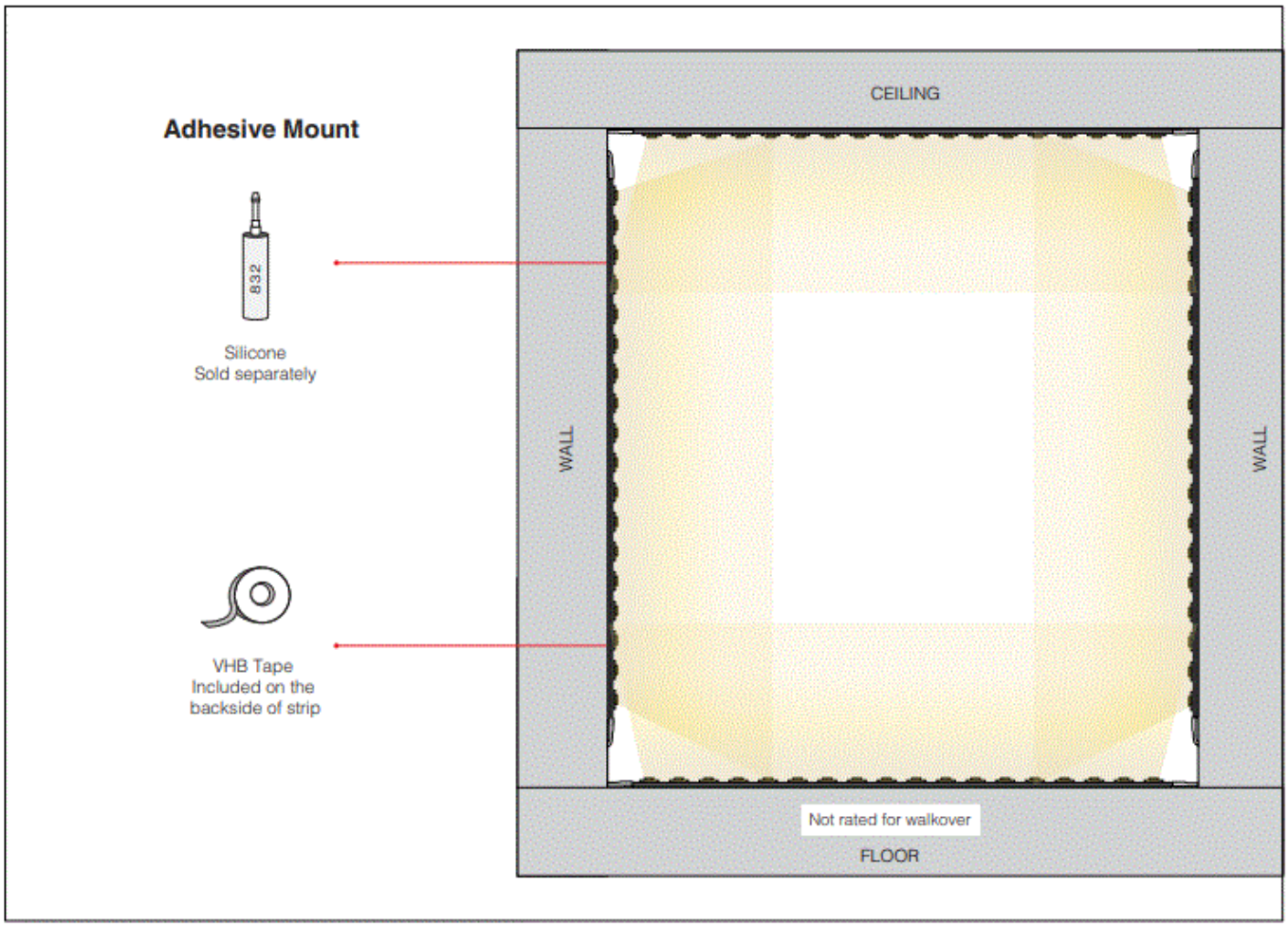
INSTALLATION INSTRUCTIONS

LINEAR LED STRIP
ATTENTION: Please read all instructions BEFORE installation

- Product to be installed by a licensed electrician
- Always ensure the power supply connection to the electrical circuit is disconnected before working on it

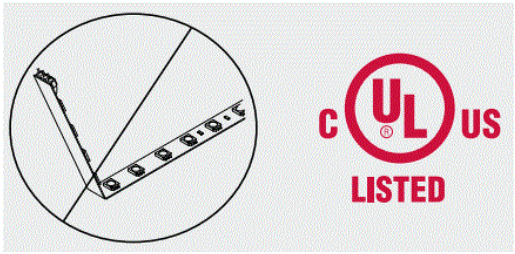
- Follow the diagram to connect Secondary Voltage wires to the power supply. Refer to Q-Tran power supply instructions for wiring
- Use only with Class 2 power supply unit — Compatible for use with Q-Tran power supplies
- Suitable for DRY, DAMP, and WET locations
- Suitable for installation in the storage area of a clothes closet when assembled as a finished extrusion up to 4W/ft at the Q-Tran facility
- Temp Rating: Refer to the cut sheet
- Not rated for walkover
- Input Voltage: 24VDC
- Diagrams for representation only and not to scale.
- Once a wet strip or a damp strip is cut, it cannot be reconnected.

METHODS OF INSTALLATION

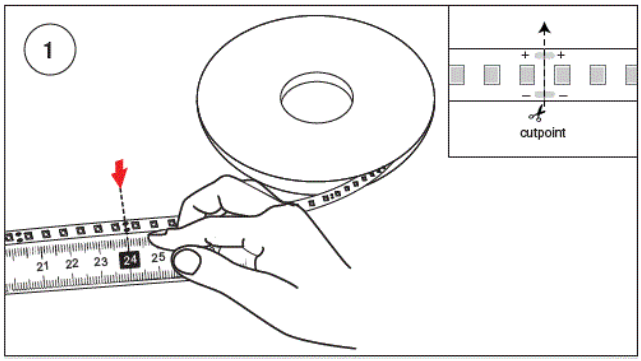


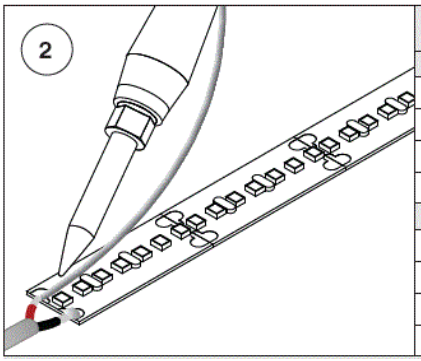
NOTES:

- Avoid bending in sharp angles which may damage the LED.
- Always test LED operation before installing in extrusion. Connect LED to power supply to ensure it is working properly and all non-factory soldered connections are secure.
- Diagrams for representation only and not to scale.



LED STRIP LEAD WIRE & JUMPER INSTRUCTIONS: DRY IP20 If LED wires are pre-soldered from the factory

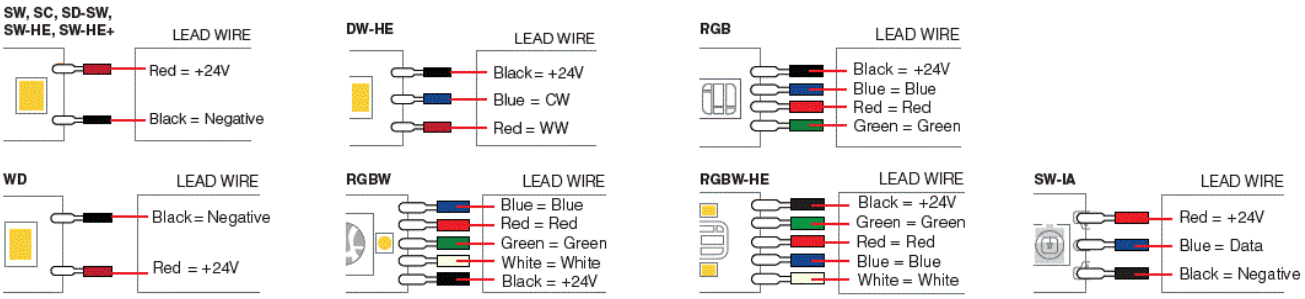




ITEMS INCLUDED
iQ-LED-24-KIT
(1) 24" Lead wire
(1) 6" Solder
(1) 1" Shrink Tube
(1) 1/2" Shrink Tube
iQ-JUMP-6-KIT
(1) 6" Lead wire
(1) 6" Solder
(2) 1" Shrink Tube
(2) 1/2" Shrink Tube

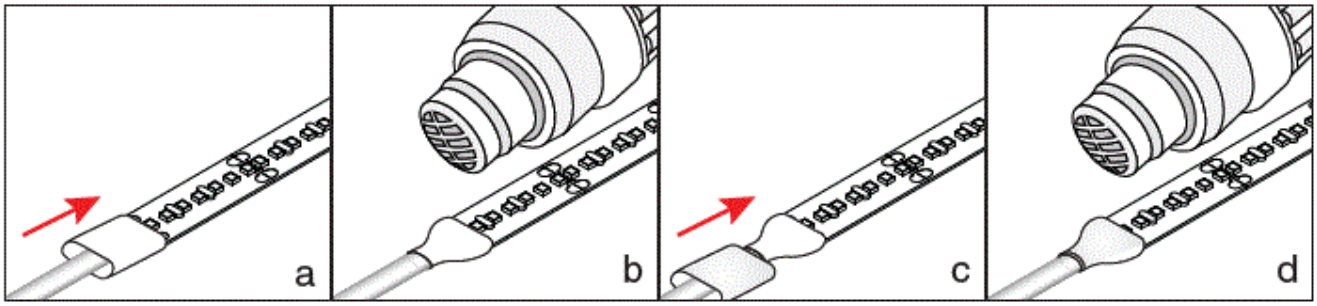
1. LED STRIP LEAD WIRE & JUMPER INSTRUCTIONS: DRY IP20 If LED wires are pre-soldered from the factory, skip to page 6.
2. Solder lead wire onto solder pad. Confirm wires are matched up correctly before soldering. See wiring diagrams below for specific light engine details.

   NOTE: Recommended soldering iron temperature of 650˚ – 700˚F for lead-free solder.



3. **NOTE:**

   Connect LED to a power supply to ensure it is working properly and all non-factory soldered connections are secure before proceeding with step #3.



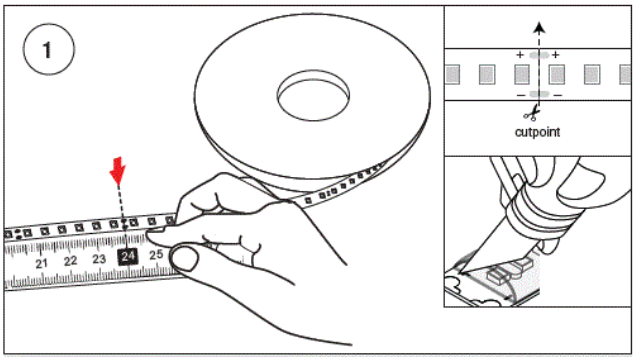
ONCE ALL CONNECTIONS ARE FUNCTIONING PROPERLY, DISCONNECT THE POWER AND BEGIN HEAT SHRINKING INSTRUCTIONS BELOW:

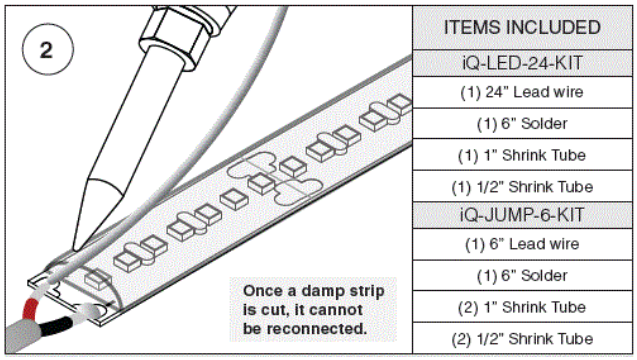
- a: Place 1st sleeve (1/2” Shrink Tube) on the lead wire.
- b: Shrink the tube with the heat gun.
- c: Place 2nd sleeve (1” Shrink Tube) on lead wire.
- d: Shrink the tube with a heat gun.

NOTES:

- Avoid bending in sharp angles which may damage the LED.
- Always test LED operation before installing in extrusion. Connect LED to a power supply to ensure it is working properly and all non-factory soldered connections are secure.
- Diagrams for representation only and not to scale.

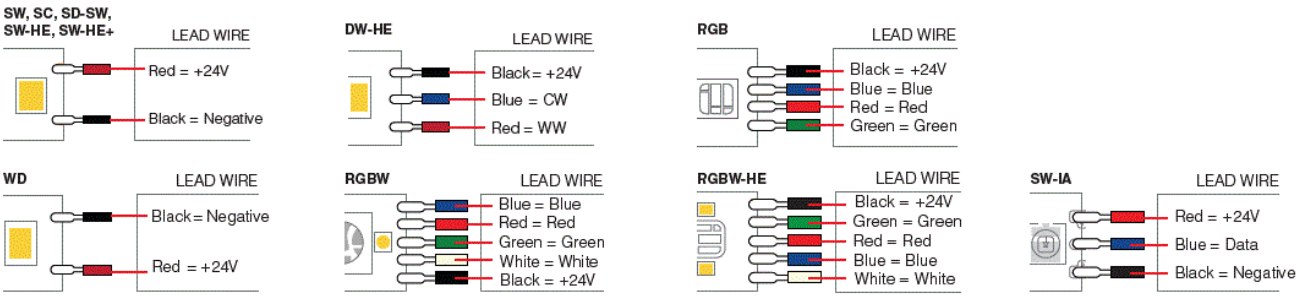
LED STRIP LEAD WIRE & JUMPER INSTRUCTIONS: DMP IP54 If LED wires are pre-soldered from the factory.





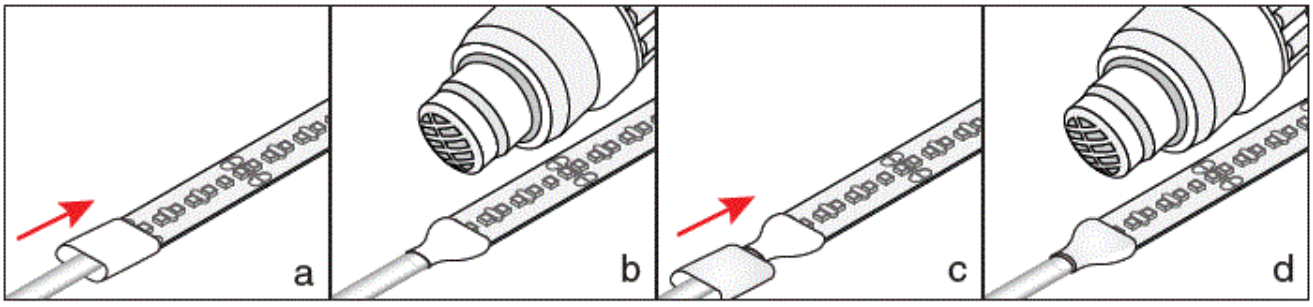
1. Measure and cut the LED strip to the desired length with scissors along the cut point.
    - Carefully peel the polyurethane back to expose the solder pads.
2. Solder lead wire onto solder pad. Confirm wires are matched up correctly before soldering. See the wiring diagrams below for specific light engine details.

    NOTE: Recommended soldering iron temperature of 650˚ – 700˚F for lead-free solder.



3. **NOTE:**

    Connect the LED to a power supply to ensure it is working properly and all non-factory soldered connections are secure before proceeding with step #3.

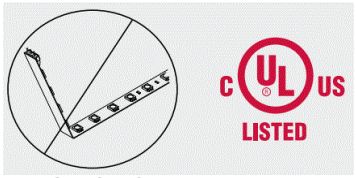


ONCE ALL CONNECTIONS ARE FUNCTIONING PROPERLY, DISCONNECT THE POWER AND BEGIN HEAT SHRINKING INSTRUCTIONS BELOW:

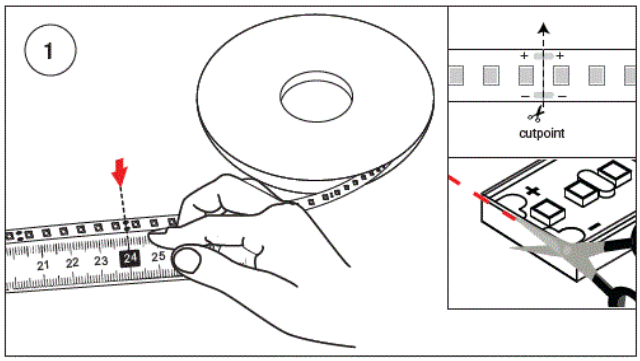
- a: Place 1st sleeve (1/2” Shrink Tube) on the lead wire.
- b: Shrink the tube with a heat gun.
- c: Place 2nd sleeve (1” Shrink Tube) on lead wire.
- d: Shrink the tube with a heat gun.

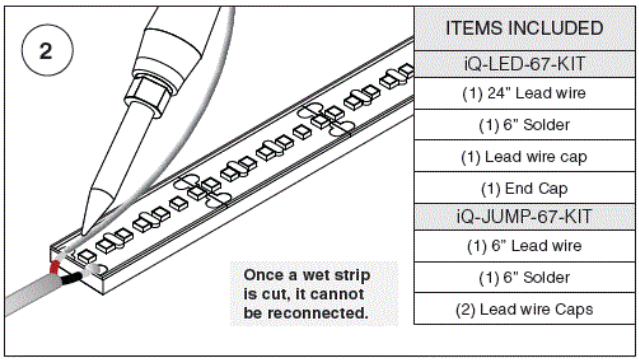
NOTES:

- Avoid bending in sharp angles which may damage the LED.
- Always test LED operation before installing in extrusion. Connect LED to power supply to ensure it is working properly and all non-factory soldered connections are secure.
- Diagrams for representation only and not to scale.

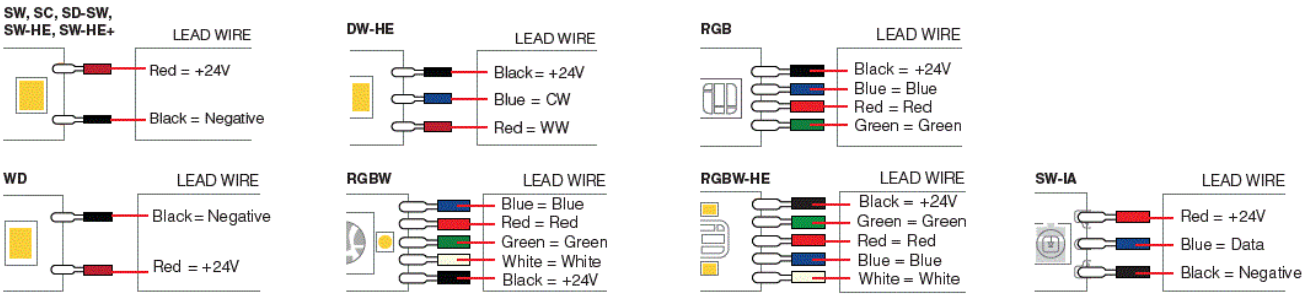


LED STRIP LEAD WIRE & JUMPER INSTRUCTIONS: WET IP67 If LED wires are pre-soldered from the factory



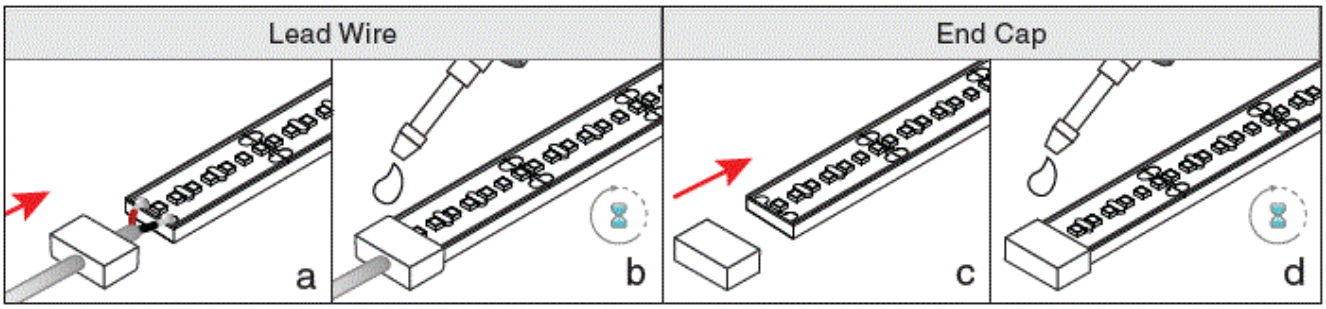


1. Measure and cut the LED strip to the desired length with scissors along the cut point.
2. Solder lead wire onto solder pad. Confirm wires are matched up correctly before soldering. See the wiring diagrams below for specific light engine details.
   NOTE: Recommended soldering iron temperature of 650˚ – 700˚F for lead-free solder.



3. **NOTE:**

   Connect LED to power supply to ensure it is working properly and all non-factory soldered connections are secure before proceeding with step #3.



ONCE ALL CONNECTIONS ARE FUNCTIONING PROPERLY, DISCONNECT THE POWER AND BEGIN HEAT SHRINKING INSTRUCTIONS BELOW:

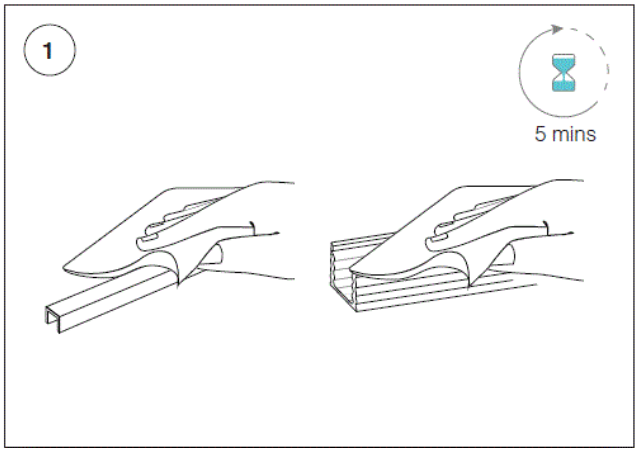
- a: Place lead wire cap over the wire
- b: Add silicone inside the connector and glue around the edge to secure the gap; allow time for the glue to dry.
- c: Place end cap over the end of the LED
- d: Add silicone inside the connector and glue around the edge to secure gap; allow time for the glue to dry.

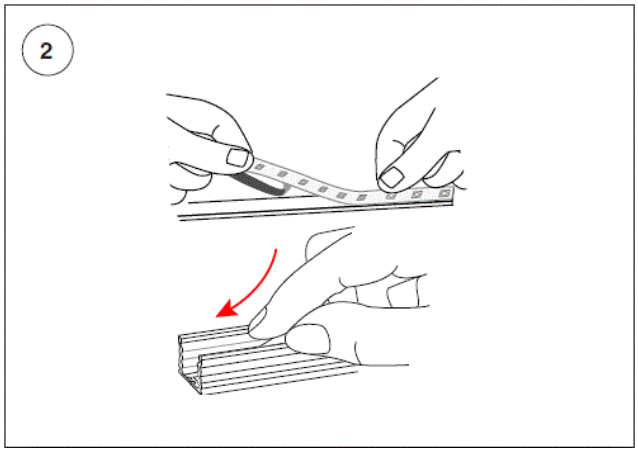
NOTES:

- Avoid bending in sharp angles which may damage the LED.
- Always test LED operation before installing in extrusion. Connect LED to power supply to ensure it is working properly and all non-factory soldered connections are secure.
- Diagrams for representation only and not to scale.

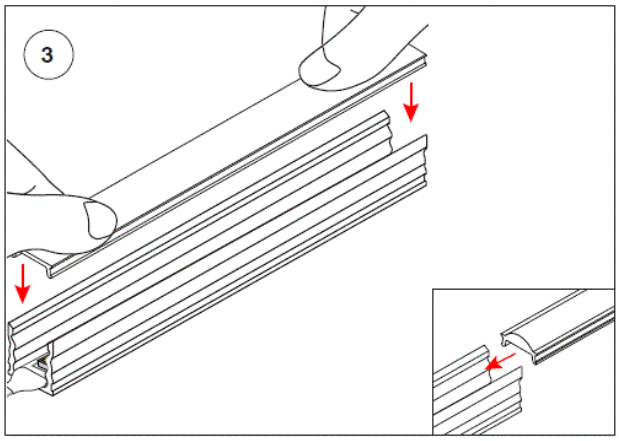
LED INSERTION FOR IN-FIELD ASSEMBLY INSTALLATION

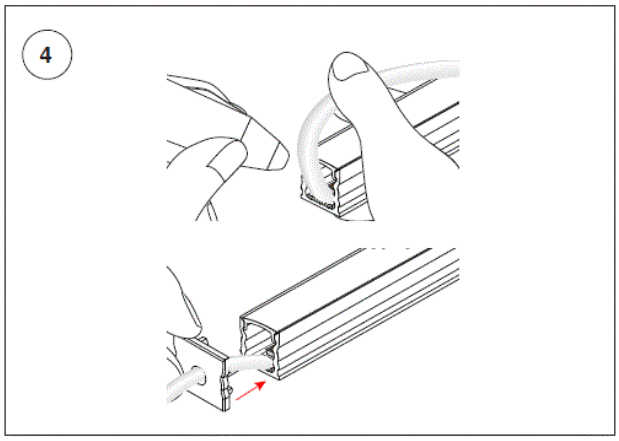
STRIP IN EXTRUSION





1. Using a 50/50 alcohol mix throughly clean, the surface of the extrusion and the multi-tray surface. Allow time to dry (about 5 minutes).
2. Gently place LED in extrusion/tray. Apply firm pressure to the bonding surface. This will reduce the chances of dust and debris from contaminate adhesive. The smallest amount of exposed adhesive is the best case

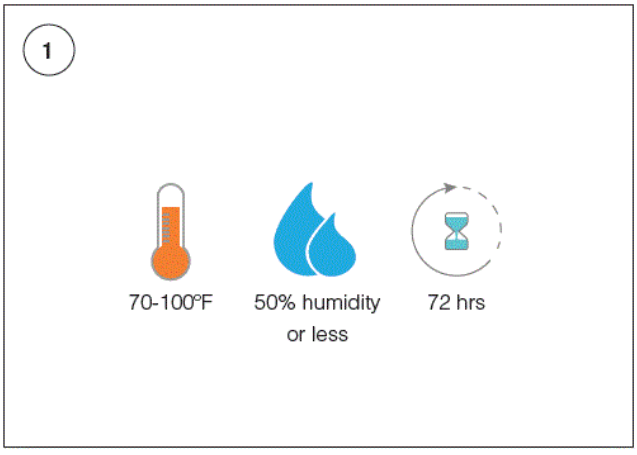


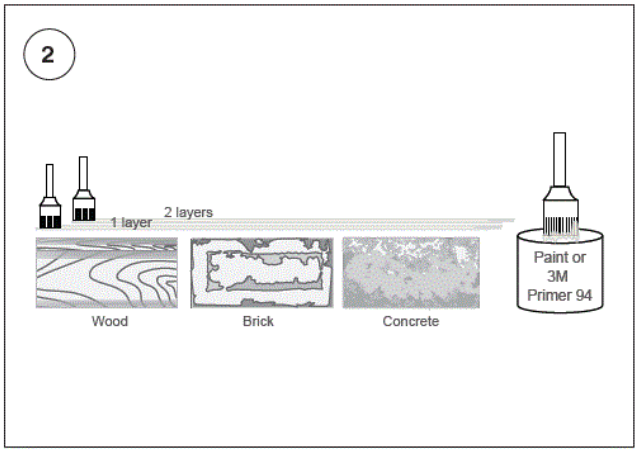


3. Flat Lenses: Apply uniform pressure until the extrusion and lens snap securely together.
   Optical Lenses: Starting from one end of the extrusion, slide the lens into the grooved lip of the extrusion until secured in place.
4. Add glue inside the end cap and glue around edges to secure end cap in place. Do not allow glue to come in contact with LED.

SURFACE MOUNTING METHOD

SURFACE PREPARATION

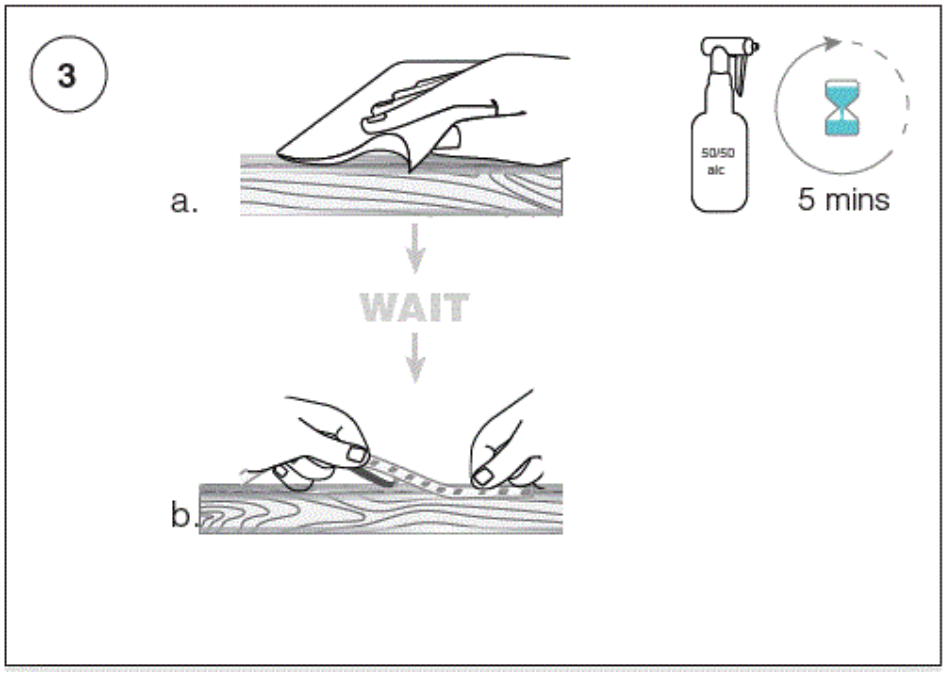




1. Temperature and environmental concerns:

- Ideal application environment is 70-100ºF in 50% humidity or less.
- Minimum application temperature: 50ºF
- This temperature and humidity should be maintained for 72 hours after application for maximum bond strength.

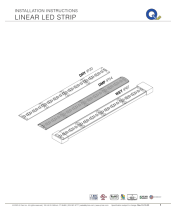
2. For porous materials (Wood, Brick, Concrete etc.) apply two layers of paint or primer to the surface. This will help create a better bonding surface for these materials. These can be purchased from a local hardware store.



MATERIALS	SUGGESTED EPOXIES
Concrete, Stone, Cinderblock, Metal, and Brick	Loctite Metal and Concrete Two-Part Epoxy
ABS, Fiberglass, Plastic, and PVC	Loctite Plastic Two-Part Epoxy
Tile, Wood, Ceramic, Glass, or Metal	Loctite Clear Two-Part Epoxy
All Purpose	Strong Stik

3. a. Using a 50/50 alcohol mix, thoroughly clean the surface area where the LED will be installed. Allow 5 minutes to dry.
   b. Peel back 0.5″ of the VHB tape's protective film on one end of the LED and use firm pressure to adhere it to the desired surface, avoiding air bubbles. Continue peeling the film and adhering the strip in small sections until the entire length is installed.

Documents / Resources

	Q-TRAN DW-HE24-1.5 Dynamic White High Efficacy Linear LED Strip [pdf] Installation Guide DW-HE24-1.5 Dynamic White High Efficacy Linear LED Strip, DW-HE24-1.5, Dynamic White High Efficacy Linear LED Strip, White High Efficacy Linear LED Strip, High Efficacy Linear LED Strip, Efficacy Linear LED Strip, Linear LED Strip, LED Strip

References

- Your Name as Your Email | Hover Realnames
- LED Lighting Systems, Linear LED Lights, LED transformers | Q-Tran
- User Manual