

LED Flex Tube Assembly Guide

WARNING: NEVER APPLY POWER TO FLEX TUBE WHILE COILED!!!

Please read entire guide before beginning assembly or installation.



Licensed electricians should provide all electrical installation services for connections. Only qualified personnel should perform installation. To avoid electrical shock or component damage, disconnect power source before installing power supplies. Failure to install LED Flex Tube in accordance with the National Electric Code (NEC), all applicable federal, state, and local electric codes, as well as, the specific Underwriters Laboratories (UL) safety standards for the installation, location and application may cause serious personal injury, death, property damage and/or product malfunction. These instructions are guidelines for installation of JS LED Flex Tube product. Installation requirements may vary depending on application.

1.0 What you'll need:

1.1 Tools & materials:

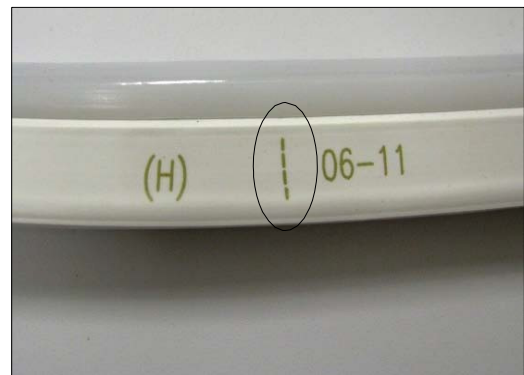
- LED Flex Tube & accessories
- Cutting Shears (PVC Pipe Cutters recommended)
- Hack Saw for cutting metal
- Clear 100% Silicone Sealant
- Blunt nose pliers
- Heat gun
- Phillips Screwdriver (#2)

Mechanical and Electrical Assembly

2.1 Measure the appropriate amount of Flex Tube for the length of the application and cut precisely along dotted cutting lines only.



PVC Pipe Cutter Shears



Cutting Line

2.2 Slide Heat Shrink tubing over both ends of cut Flex Tube in preparation for sealing.



Heat Shrink tubing over cut end
(End cap shown)

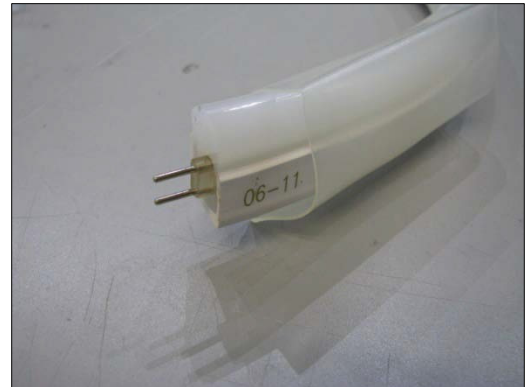


Heat Shrink tubing over power cord end

2.3 IMPORTANT: Power cord needs to be connected to Flex Tube where the two conductors are located off-center toward the **right** side of the cut surface. Install power to tube pin (FN 102) into LED Flex Tube where the power cord will be connected using blunt nose pliers. Power to tube pins have barbed pins on one end and smooth pins on other end separated by a plastic spacer. Using blunt nose pliers to hold the smooth end, insert the 2 barbed pins into the Flex Tube directly into the center of each of the 2 exposed conductors until the spacer bottoms out.



Blunt nose pliers holding power pin
(Note: conductors toward right)

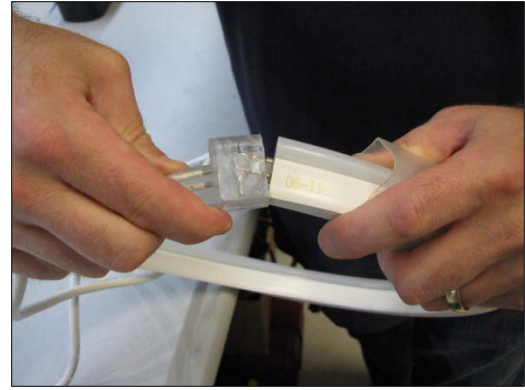


Power pin inserted up to the spacer

2.4 Apply a generous bead of 100% Silicone around the power pins and insert Flex Tube into power cord. Trim edges of flex tube as necessary to make insertion easier. Carefully align male power pins with female power cord receptacles inside the power cord while gently pushing together.



Apply Silicone around power pin
100% silicone sealant



Join Flex Tube to power cord

2.5 Apply a bead of PVC Glue **71364 BRFX/GLUE/PVC** around the edge of the Power Cord shell to bond the Flex Tube to the Power Cord. Allow the PVC Glue to dry 10 -15 minutes for handling (allow 24 hrs cure time before exposure to weather). Then apply a bead of 100% silicone sealant around the edge of the Power Cord to seal any gaps around the Power Cord. Allow the Silicone sealant to dry 15 minutes to "skin" over before applying shrink tubing (allow 24 hrs cure time before exposure to adverse weather).



PVC glue around power cord shell



100% Silicone sealant

2.6 Slide Heat Shrink Tubing **71360 BRFX/ST** over Power Cord bridging Flex Tube and power cord. Use heat gun with continuous motion around shrink tubing to seal joint. Do not over-heat shrink tubing.



Position Shrink Tubing over power cord



Apply heat to seal joint

2.7 At splice connections, slide Heat Shrink tubing **71360 BRFX/ST** over cut Flex Tube. Insert End to End connector pin **70928 BRFX/M/PINS/ST** into exposed Flex Tube conductors, join Flex Tube pieces together and apply a generous amount of 100% silicone sealant into gap and fill gap. Allow the Silicone sealant to dry 15 minutes to “skin” over before applying shrink tubing (allow 24 hrs cure time before exposure to weather). Center Heat Shrink Tubing over splice joint gap, apply heat, sealing joint. Do not over-heat shrink tubing.



End to End Connector Pin 70928



100% silicone sealant



Heat shrink tubing at splice

2.8 At End Cap connections, apply a generous bead of RTV Silicone sealant into Flex Tube End Cap **70934 BRFX/ENDCAP/ST**, apply end cap to non-powered end of Flex Tube.



End cap with 100% silicone sealant



Shrink tubing the end cap

2.9 Apply a bead of PVC Glue **71364 BRFX/GLUE/PVC** around the edge of the End Cap to bond the Flex Tube to the End Cap. Allow the PVC Glue to dry 10 -15 minutes for handling (allow 24 hrs cure time before exposure to weather). Then apply a bead of 100% silicone sealant around the edge of the End Cap to seal any gaps around it. Allow the Silicone sealant to dry 15 minutes to “skin” over before applying shrink tubing (allow 24 hrs cure time before exposure to weather).

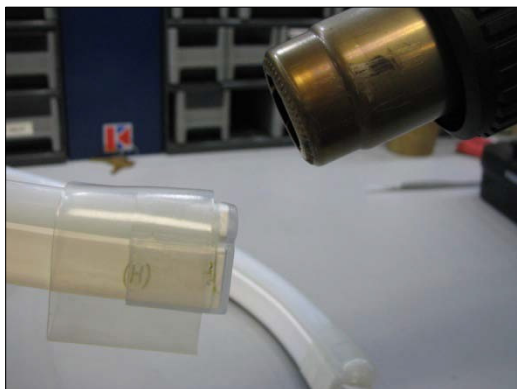


PVC glue



100% Silicone sealant

3.0 Slide Heat Shrink Tubing **71360 BRFX/ST** over end-cap bridging Flex Tube and end-cap. Use heat gun with continuous motion around shrink tubing to seal joint. Do not over-heat shrink tubing.

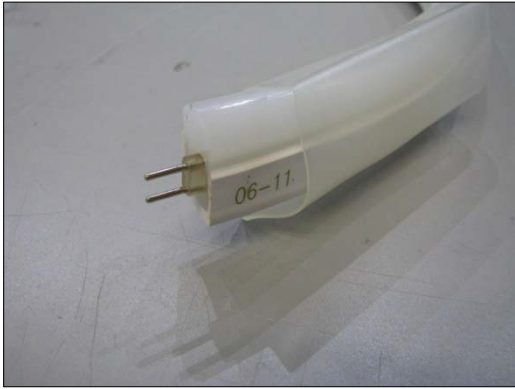


Position Shrink Tubing over end-cap



Apply heat to seal joint

4.0 Typical accessory assembly: Use appropriate Flex Tube connectors for your design.
Assembly instructions for connectors. A Up-L (FN104) connection:



4.1 Install Power to Tube Pins in each cut end to be connected



4.2 Apply 100% silicone around all power pins prior to assembly



4.3 Insert Flex Tube into all connectors



4.4 PVC glue edges of connectors



4.5 Use 100% silicone sealant to seal all connection points



4.6 Cover all connection points with Heat Shrink Tubing and apply heat to seal all joints

5.1 Installing C-Mounts

5.2 When installing on curved surfaces, screw down 2" C-Mounts in appropriate locations to achieve desired shapes and press Flex Tube into place.



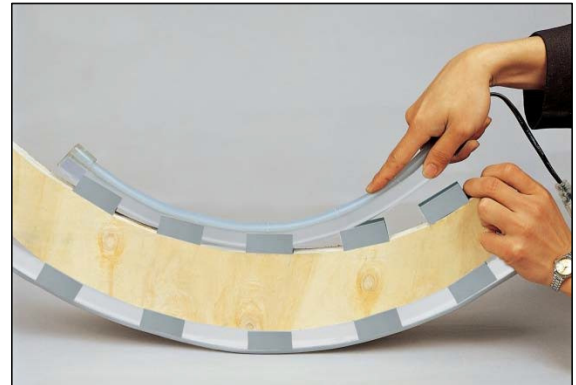
2" C-Mounts for S bend



2" C-Mounts for 90° bend



2" C-Mounts for horizontal radius



2" C-Mounts for vertical radius

5.3 . Screw track into place and press Flex Tube into track until the white material making up the base of the flex tube is grasped by the ridges inside near the top of both sides of the track.



Aluminum 36" C-Mount