



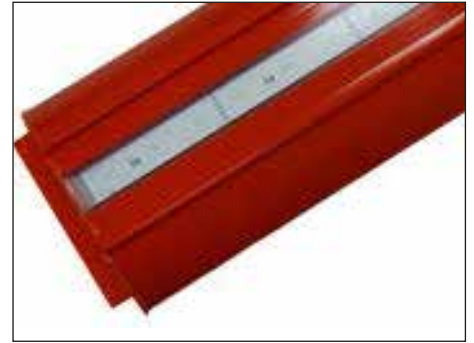
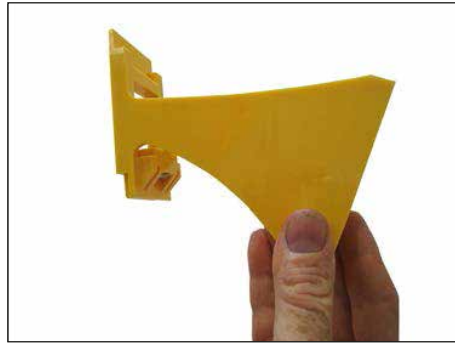
Shell Red Bar 4.0

Installation Guide

Shell Red Bar 4.0

STEP 1:

Mount brackets to canopy



Mounting Shell Red Bar 4.0 (SRB). There must be three brackets for each full section and two for each short section. The center bracket on a full section must be in the center of the SRB section. The other two brackets should be equally spaced on either side, approximately 90 mm, center to center. Mount brackets to the yellow fascia at the designated locations using appropriate hardware. Select which direction you want the cable to be on when the SRB section is mounted. There is no top or bottom to the SRB so you can have the cable on whichever end is most convenient for connection to the power supply.

STEP 2:

Hang Red Bar on brackets



Hang the SRB section on the top piece of the brackets. The left photo above shows the SRB section on the two brackets at the ends. The right photo above shows the SRB section at the center bracket. Adjust the SRB section left or right by sliding it until it's in the desired location (pictures show brackets unmounted so track can be seen).

STEP 3:

Attach brackets



Push up on the screw until the bottom piece of the bracket is above the bottom track on the extrusion. Tighten the screw so the bottom piece of the bracket engages the bottom track of the extrusion. Tighten the screw until bottom piece of the bracket is firmly seated against the top piece of the bracket.

Shell Red Bar 4.0

Warning: Cut off the end without the cable only. Do not cut off the end with the cable.

STEP 4:

Push cable in.



Push the Power Connection Cable (PCC) into the extrusion until the Printed Circuit Board Assembly (PCBA) hits the far end silicone plug/end cap.

WARNING: Failure to strictly follow these instructions may subject the installer or others to personal injury. Failure to strictly follow these instructions will also void the manufacturer's warranties and may cause risk of fire, product damage, damage to property and injury to persons. Please read all warnings contained below and follow all instructions carefully. **WARNING:** When cutting to length, cut off the end without the cable. Do not cut off the end with the cable.

STEP 5:

Gather materials and cut extrusion



Gather materials: Sandpaper, Weld-On #16, silicone end plug, Humiseal 1B73 conformal coat (for sealing edge of LED board), and acrylic (field) end-cap. Cut the extrusion with a power miter saw (Chop Saw) at the desired length. Red Bar can be cut at any length measured from the end with the cable. (Cut off the end without the cable). The cut must be clean, straight and free of burrs. Remove any saw dust from the inside of the extrusion.

STEP 6:

Cut PCB on nearest black line



After cutting the extrusion, push the PCC until the next black cut line on the PCBA is exposed. Cut the PCB on this next black cut line. This will allow the LEDs to illuminate up to this last black cut line. Not trimming the PCB to the last black line may cause some of the red LEDs to not illuminate.

Shell Red Bar 4.0

STEP 7:

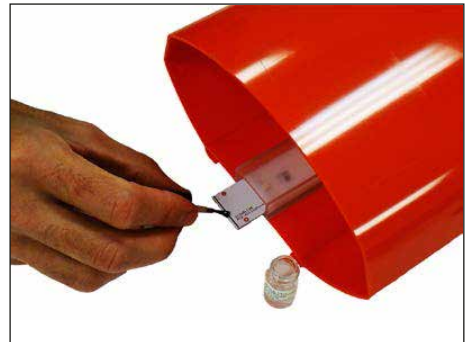
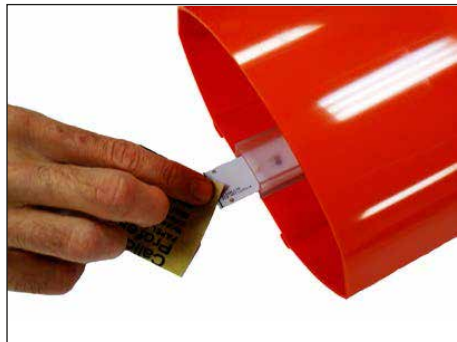
Trim loose wires



On the Red Side of the PCBA, trim the loose wires back to just before the next connection so they do not block LEDs or short inside the extrusion.

STEP 8:

Seal edge of circuit board



Deburr cut-end of LED board and extrusion with enclosed sandpaper. Make sure to remove all debris from LED board and extrusion. Seal end of LED board with conformal coat: Brush Humiseal 1B73 conformal coat onto cut edge of LED board to seal from moisture. Allow to dry for 7 minutes. Do not apply conformal coat to cut edge of extrusion or end cap. After sealing circuit board, pull the PCC so the PCBA is drawn back into the extrusion. Be careful not to damage any of the LEDs and electrical components as the PCBA is drawn back into the extrusion.

STEP 9:

Plug end



Push the silicone end plug into the PCBA cavity of the extrusion until it is flush with the end of the cut extrusion.

Shell Red Bar 4.0

STEP 10:

Bond end caps



Use IPS Weldon #16 to bond a new end cap onto the cut extrusion. Put Weldon #16 around the entire end cap perimeter in all areas it will make contact with the extrusion. Put Weldon #16 around the entire perimeter of the cut extrusion including the small cavity where the PCBA is contained.

STEP 11:

Press end cap on extrusion



Press the end cap onto the extrusion and make sure it is aligned to cover the entire extrusion opening. **Apply even pressure to the end cap for at least 15 minutes.** Strong tape can be used to maintain pressure on the cap for the curing period.

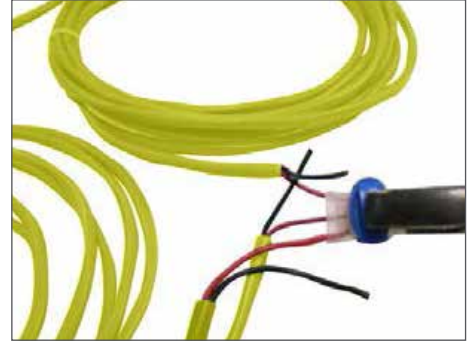
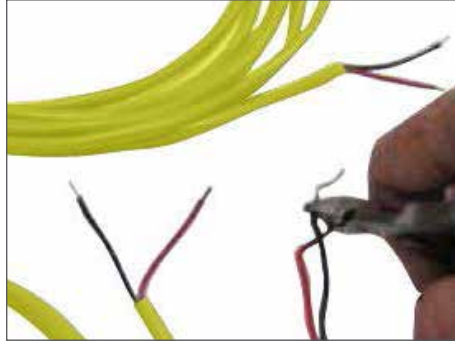


After bonding, inspect the joint to make sure there are no gaps. If a gap is seen, fill it with Weldon #16 and reapply pressure to that area for an additional 15 minutes. This seal is critical for keeping water out of the extrusion. Do not use Silicone on this seal. Silicone will not bond to the extrusion material.

Shell Red Bar 4.0

STEP 12:

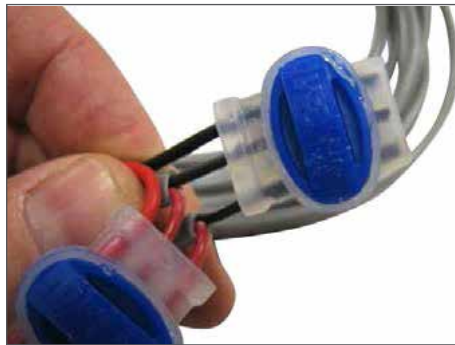
Connect power supply



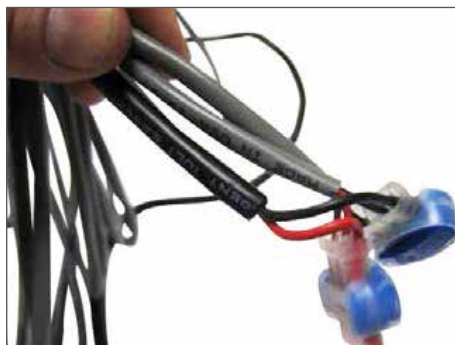
On the secondary side, attach connection cables from Red Bar to power supply secondary output. Trim any stripped wire ends so the insulation is flush with the copper conductors at the wire ends. Use the gel filled IDCs provided. All secondary connections are red to red and black to black. A reverse polarity will make the product not light and may damage the LEDs.

STEP 13:

Check connectors



Make sure the wires are pushed all the way into the connectors so you can see them on the other side of the blue oval. Make sure the blue oval is fully depressed to make a secure electrical connection.



After the electrical connection is made, secure the connectors so the ends of the gray cable are down. This is to make sure water will not get into the cable jacket and make its way to the connector at the other end. Water getting into the jacket may cause the connector to corrode and fail.

NOTE: Four full length Red Bar sections can be powered with each Contour Power Supply 12 Volt DC 60W.





Bever Innovations B.V.

Industrieweg 32 | 4301 RS Zierikzee
The Netherlands

Tel. +31 111 45 32 32
info@beverinnovations.com
www.beverinnovations.com