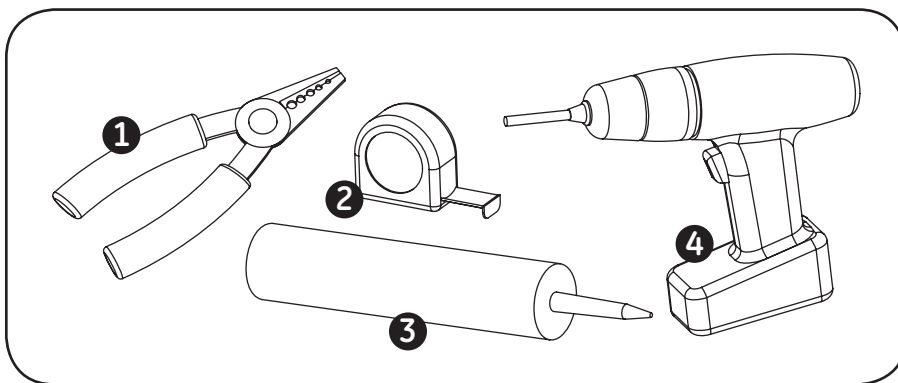# Tetra® Contour LS
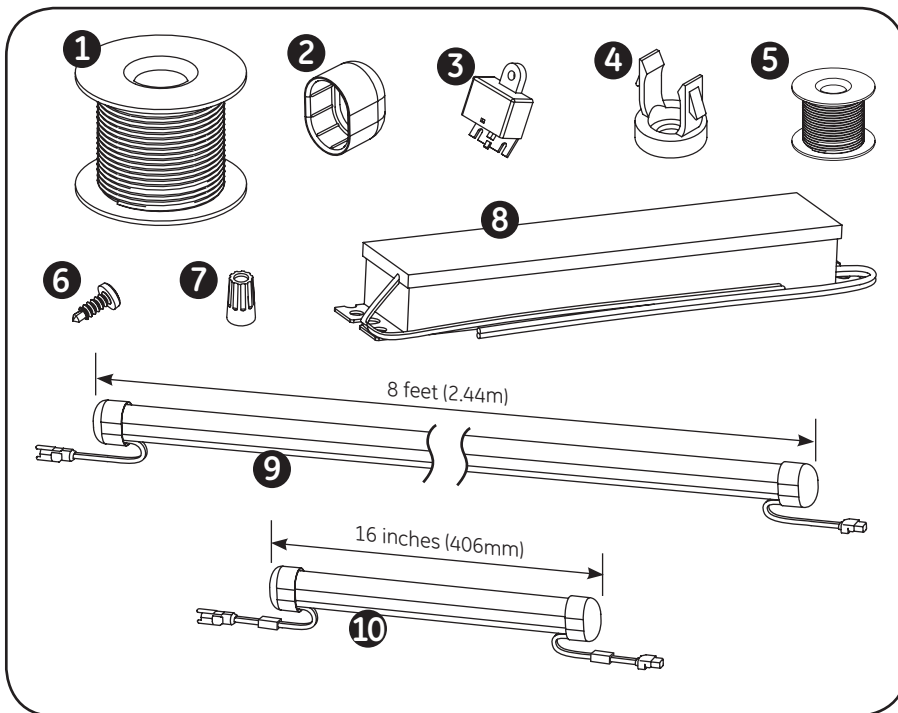## LED Lighting System

## Tools and Components

**Tools required:**

1. Wire stripper/cutter
2. Tape measure
3. Electrical grade silicone
4. Cordless drill

**Components required:**

1. UL approved 18 AWG (0.82mm²) supply wire
2. End Caps
3. Weather Boxes
4. Light Guide Mounting Clips
5. 22 AWG (0.33mm²) tie-wire
6. #6, #8 or #10 (M2, M3 or M4) self drilling pan headed screws
7. UL approved twist-on wire connectors fitting both 18 and 20 AWG wire (0.82mm², 0.52mm²)
8. Tetra® 24 Volt Power Supply
9. Tetra® Contour LS
10. *Optional:* Tetra® Contour LS extension

8 feet (2.44m)

16 inches (406mm)

imagination at work

# Planning

For planning the layout, measure the perimeter of the building and divide by 8 ft. (2.44m) to determine the required quantity of Tetra Contour LS systems. See table below for guidelines about cutting resolution.

For seamless designs, accessories are available for straight runs and 90 degree corners.

*NOTE:* Do not use more than one suffix code for each respective application, as mixing suffix codes may result in appearance variation. Suffix code can be found on the packaging label.
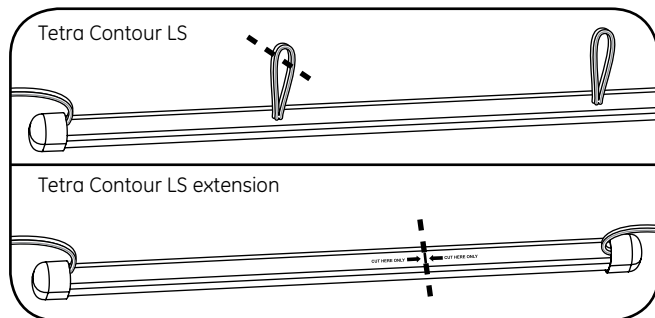
## Cutting Resolution Table

**Tetra Contour LS**

| SKU | Color | Cutting Resolution |
| --- | --- | --- |
| GERDXNLA2-RD | Red | 8 inches (203mm) |
| GEGLXNLA2-GL | Green | 8 inches (203mm) |
| GEBLXNLA2-BL | Blue | 8 inches (203mm) |
| GEWHXNLA2-WH | White | 8 inches (203mm) |

**Tetra Contour LS extension**

| SKU | Color | Cutting Resolution |
| --- | --- | --- |
| GERDXNAA2-RD | Red | 2.67 inches (68mm) |
| GEGLXNAA2-GL | Green | 2.00 inches (51mm) |
| GEBLXNAA2-BL | Blue | 2.00 inches (51mm) |
| GEWHXNAA2-WH | White | 2.00 inches (51mm) |



Tetra Contour LS

Tetra Contour LS extension

**❶** If it is necessary to cut the Tetra Contour LS for a better fit, refer to the Cutting Resolution table above.

*NOTE:* Tetra Contour LS can only be cut on wires.

*NOTE:* Tetra Contour LS extension sections can only be cut on "Cut Here" markings.



Electrical Grade Silicone
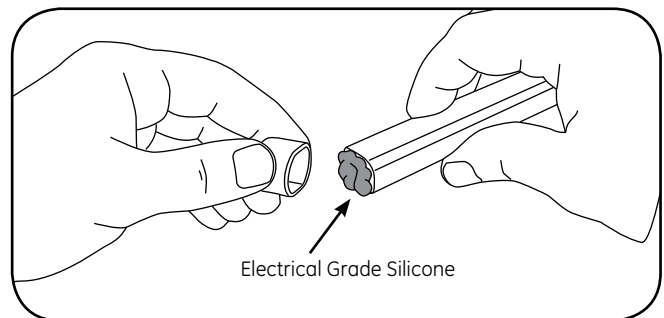
**❷** If Tetra Contour LS sections are cut, apply electrical grade silicone to exposed wires and attach end cap.

> ⚠ **CAUTION**
>
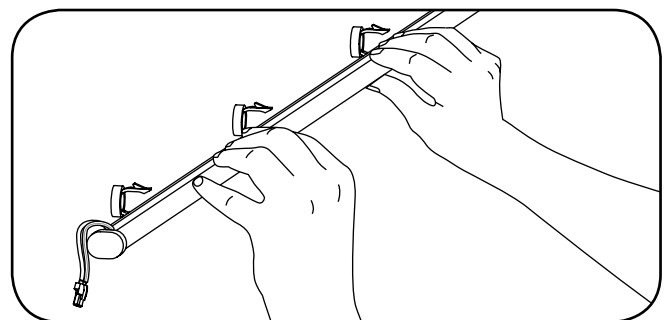> **Risk of damage.** Must use electrical grade silicone.

# Attaching Contour Sections

*NOTE:* Tetra Contour LS is intended for straight runs.



Space mounting clips 18 inches (457mm) apart
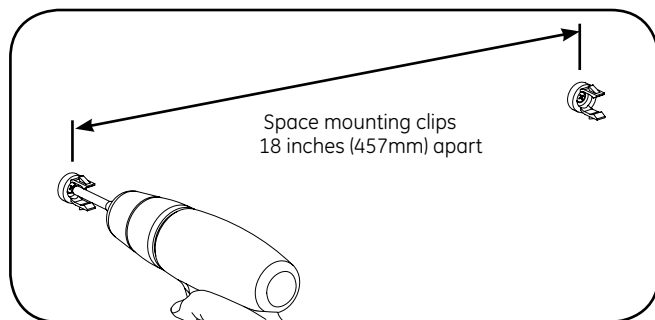
**❶** Install one mounting clip at each end and then a minimum of one mounting clip every 18 inches (457mm).

*NOTE:* Standard neon mounting hardware can also be used.



**❷** Starting from one end, attach the Tetra Contour LS to the mounting clips. Secure light guide by twisting tie-wire around the mounting clip and light guide.

*NOTE:* Wires can be concealed by tucking wires between mounting clips and Tetra Contour LS system.
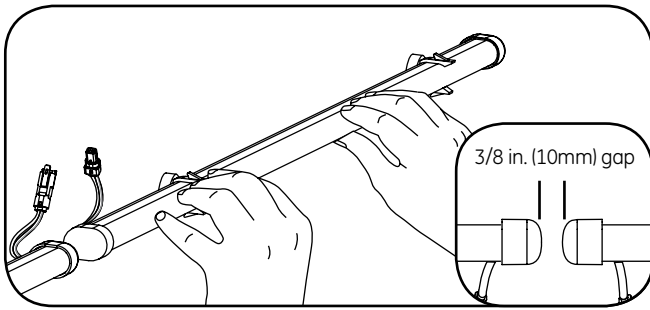
**3** Continue attaching all the sections to the remaining mounting clips, leaving a 3/8 inch (10mm) gap between sections to allow for expansion or contraction.

3/8 in. (10mm) gap
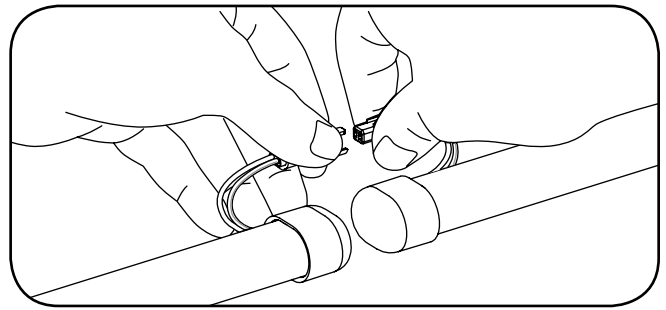


**4** Plug together all adjacent Tetra Contour LS sections and tuck wires behind Tetra Contour LS sections or behind accessory pieces.

## Electrical Connections

Must be used with Tetra 24 Volt Power Supplies. Refer to the **Power Supply Installation Instructions** for more information on the power supply.
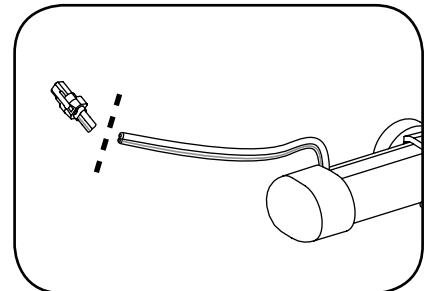
⚠ **WARNING**

**Risk of electrical shock.** Turn power OFF before inspection, installation or removal.
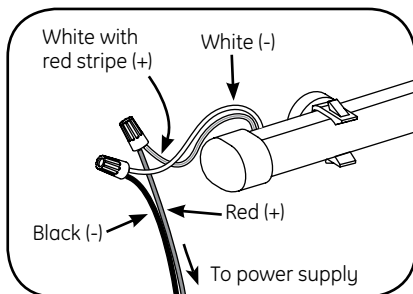


To Tetra Contour LS

Red (+)

Black (-)
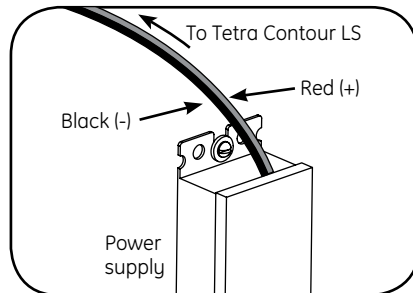
Power supply

**1** Run a wire from the power supply to a section of Tetra Contour LS.

*NOTE:* Power supply connection must be contained in an acceptable UL/NEMA enclosure.



**2** Cut off the quick connector on the Tetra Contour LS that you are connecting to the power supply.



White with red stripe (+)

White (-)

Black (-)

Red (+)

To power supply

**3** Using twist-on wire connectors, connect the white wire with red stripe (+) from the LED strip to the red wire (+) of the power supply. Connect the white wire (-) from the LED strip to the black wire (-) of the power supply.

*NOTE:* Grounding and bonding must be done in accordance with National Electrical Code (Article 600). See power supply instructions.
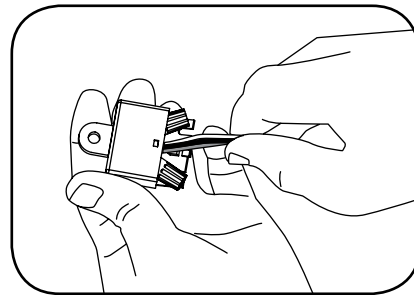


**4** Insert wire connectors into weather box. Fill with electrical grade silicone and close box.
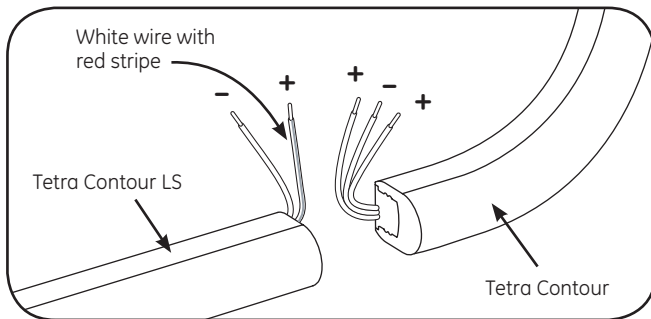*NOTE:* Examples of electrical grade silicone include GE RTV 6700 Series Sealant, GE White Blanc RTV 162, Dow Corning 3145, Dow Corning RTV 748



Weather box can be painted
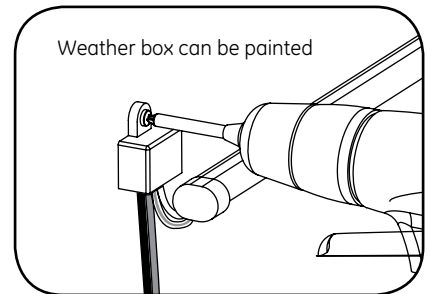
**5** Secure the weather box using a #6 or #8 (M2 or M3) screw.

*NOTE:* When using twist-on connectors, weather box is required for all outdoor electrical connections.

## *Optional*–Attaching Tetra Contour LS to Tetra Contour



White wire with red stripe

Tetra Contour LS

Tetra Contour



White wire with red stripe (+)

Center wire (-)

Outside wires (+)

White wire (-)

Tetra Contour LS

Tetra Contour

**1** When connecting Tetra Contour LS to Tetra Contour, separate wires and identify conductors as positive (+) and negative (–). Strip ends back 0.5 in. (12mm).
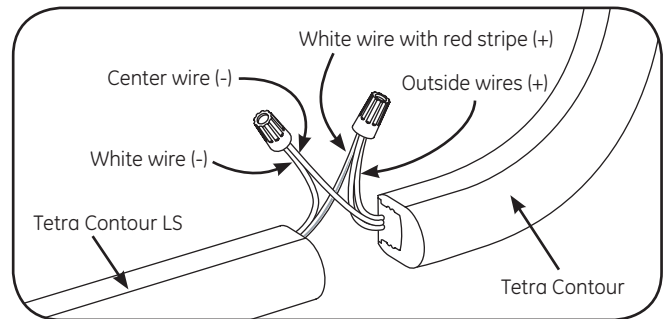
**2** Splice the white wire with red stripe (+) of Tetra Contour LS to the two outside wires (+) of Tetra Contour and splice the white wire (-) of Tetra Contour LS to the center wire (-) of Tetra Contour.

**NOTE:** Weather box is required for all outdoor electrical connections.

## Troubleshooting

| Symptom | Solution |
|---|---|
| All sections are OFF | • Check AC input connection and/or check circuit breaker.<br>• Check wire connection(s) at the Tetra Contour LS section and power supply for improper termination(s) or short circuits. Properly terminate or replace the wire connection(s).<br>• Check that connections are the white wire with red stripe (+) of the LED strip to the red wire (+) of the power supply and the white wire (-) of the LED strip to the black wire (-) of the power supply. |
| Some LEDs appear dim | • Ensure the overall length of the Tetra Contour LS does not exceed the maximum load.<br>• Ensure the length of supply wire from the power supply is equal to or below the recommended remote mounting distance.<br>• Make sure that all LED light engines have the same suffix code (suffix code is located on the box label). |
| Some of the sections are not illuminated | • Check wire connection(s) at the Tetra Contour LS section and power supply for improper termination(s) or short circuits. Properly terminate or replace the wire connection(s).<br>• Check that connections are the white wire with red stripe (+) of the LED strip to the red wire (+) of the power supply and the white wire (-) of the LED strip to the black wire (-) of the power supply. |

## ⚠ WARNING!

**RISK OF ELECTRIC SHOCK:**
• Turn power OFF before inspection, installation or removal.
• Properly ground Tetra Power Supply enclosure.

**RISK OF FIRE:**
• Follow all NEC and local codes.
• Use only UL approved wire for input/output connections. Minimum size 18 AWG (0.82 mm$^2$)

Conforms to the following standards:

c**Ɐ**us    CLASSIFIED **UL**    **CSA**®    C €    ✔    RoHS COMPLIANT 2002/95/EC

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