

# Tetra<sup>®</sup> Contour

## LED ARCHITECTURAL SERIES

### Product Codes

75481, 75482, 75483, 75484, 75485, 75486, 75487, 75488, 75489, 75490, 75493

#### LED System Features

- Certified to UL 2108
- Low Voltage Luminaire (24 VDC)
- IP66: Dry, damp or wet location rated
- Compatible with 74917, 74915 or 74916 LED Drivers

#### For use in the following applications

- Neon replacement
- Border lighting
- Interior art
- Cove
- Accent lighting
- Surface Mount
- Under Cabinet/Shelf

Conforms to the following



### BEFORE YOU BEGIN

Read these instructions completely and carefully.

#### ⚠ WARNING / AVERTISSEMENT

**Risk of electrical shock.** Disconnect power before servicing or installing product.

**Risque de choc électrique.** Couper l'alimentation avant le dépannage ou avant l'installation du produit.

#### Save These Instructions

Use only in the manner intended by the manufacturer. If you have any questions, contact the manufacturer.

#### Prepare Electrical Wiring

##### Electrical Requirements



- The grounding and bonding of the LED Driver shall be done in accordance with National Electric Code (NEC) Article 600.
- Follow all National Electric Codes (NEC) and local codes.



imagination at work

Plan the layout by measuring the design layout and dividing by 8 ft. (2.44m) to determine the required quantity of Tetra Contour. Refer to the Cutting Resolution Chart to the right when cutting any Tetra Contour section. Only cut light engines on "Cut Here" markings.

For seamless designs, accessories are available for straight runs and 90 degree corners. See the Tetra Contour Component Guide for a complete list of accessories.

**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.

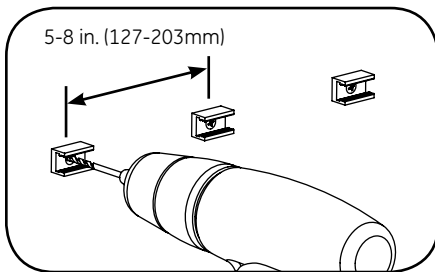
### Cutting Resolution Chart

Light Engine Color	Cutting Resolution
Red	2.67 in. (68mm)
Red-Orange	2.67 in. (68mm)
Amber	2.67 in. (68mm)
Green	2.00 in. (51mm)
Blue	2.00 in. (51mm)
White	2.00 in. (51mm)
Warm White	2.00 in. (51mm)

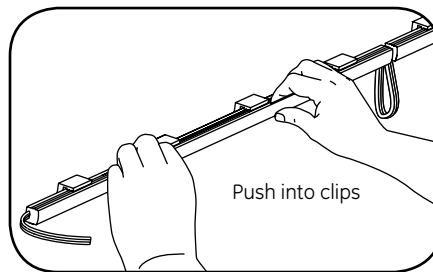
## METHOD A - without light guides

**NOTE:** Installation methods shown are for straight runs. For custom shapes, install mounting clips at regular intervals throughout the shape to provide adequate support for the light engine.

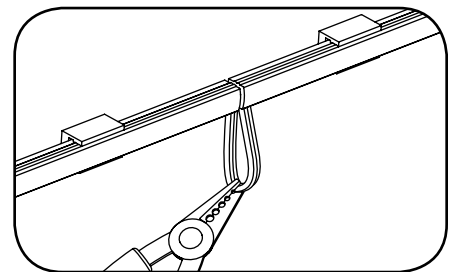
**NOTE:** DO NOT bend the light engine to an inside radius that is tighter than 5/8 in. (16mm). The light engine is not intended for excessive or repetitive bending.



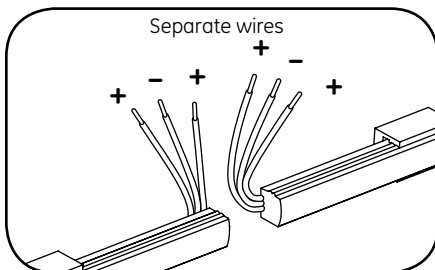
**1** Install a light engine mounting clip, using #6 (M2) counter sink screws, every 5-8 inches (127-203mm) on center until the end of the run is reached.



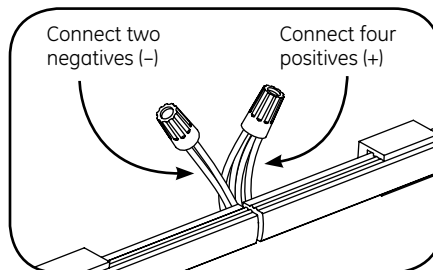
**2** Push each 16 in. (406mm) light engine segment into the clips. Fold loose wires into the channel of the light engine mounting clips.



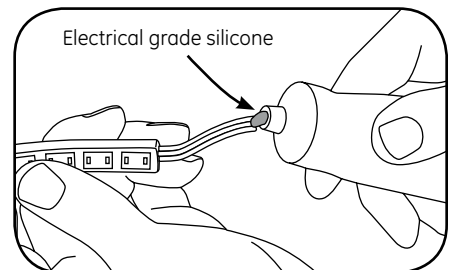
**3** If required, cut wire loops between sections or through light engine in the appropriate area (refer to the Cutting Resolution table above).



**4** Separate wires and identify outer conductors as positive (+) and middle conductors as negative (-). Strip ends back 0.5 in. (13mm).



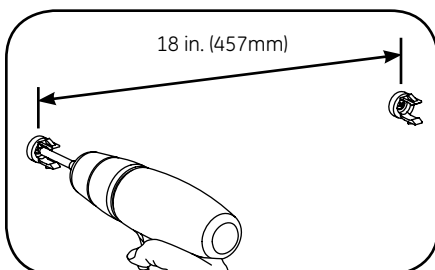
**5** Use twist-on wire connectors to join cut wires together. Fold wires behind light engines.



**6 CAUTION:** Anytime light engine or supply wire is cut and wire is exposed, electrical grade silicone must be applied (see list on the next page for recommendations).

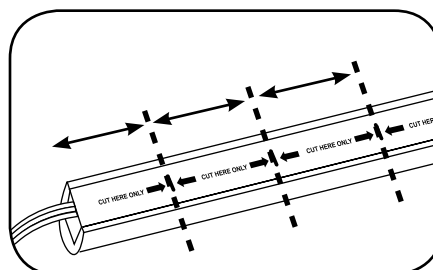
## METHOD B - with light guides

**NOTE:** Installation methods shown are for straight runs. For custom shapes, refer to the **Tetra Contour Light Guide Forming Instructions**. For a complete list of light guides and accessories refer to the Tetra Contour Component Guide.

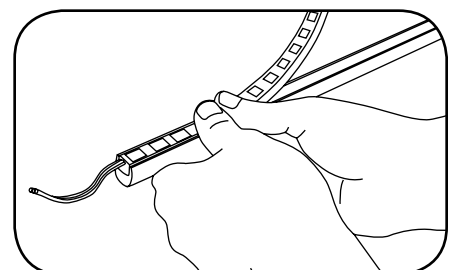


**1** Install a minimum of one light guide mounting clip per 18 in. (457mm) using #10 (M4) screws.

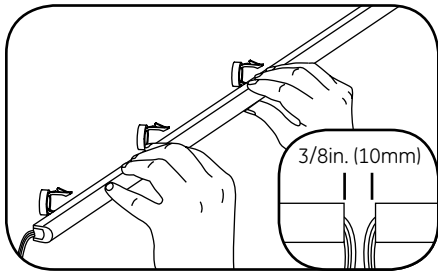
**NOTE:** Standard neon hardware can also be used.



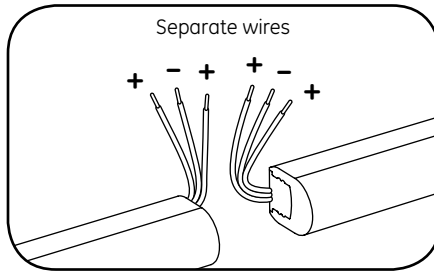
**2** If required, cut wire loops between sections or through light engine (refer to the Cutting Resolution Chart above).



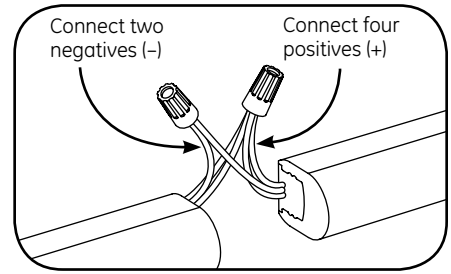
**3** Push the light engine segments down into the light guide.



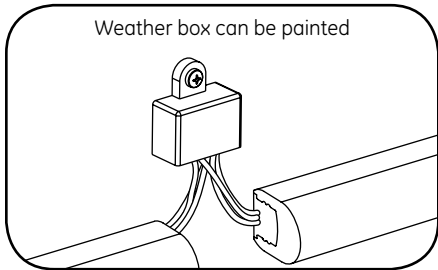
**4** Attach Tetra Contour to the mounting clips, leaving a 3/8 in. (10mm) gap between sections to allow for expansion or contraction. For additional security, twist neon tie-wire around mounting clip and light guide.



**5** Separate wires and identify outer conductors as positive (+) and middle conductors as negative (-). Strip ends back 0.5 in. (13mm).

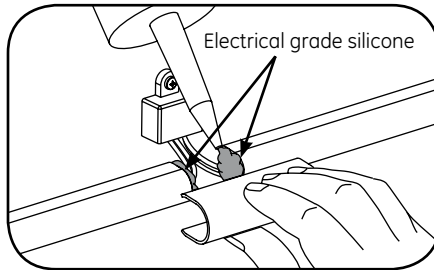


**6** Use twist-on wire connectors to join wires together. Fold wires behind light engines.

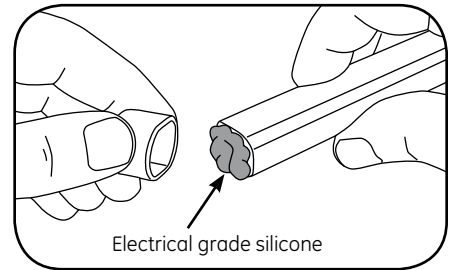


**7** Insert wire connectors into weather box. Fill with electrical grade silicone and close box. Weather box can be mounted using #8 (M3) screws.

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



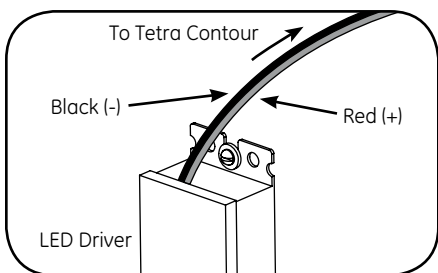
**8** At each gap between Tetra Contour sections, snap on a light guide connector.



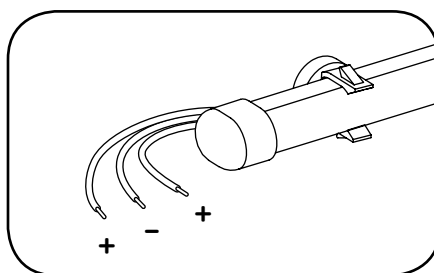
**9** At any open end, apply electrical grade silicone and press fit a light guide end cap to the Tetra Contour.

**Example electrical grade silicones include:** GE RTV 6700 Series Silicone Rubber Adhesive Sealant, GE White Blanc RTV 162 Silicone Rubber Adhesive Sealant-Electrical Grade, Dow Corning 3140 - Non-Corrosive Flowable (clear), Dow Corning 3145 - Non-Corrosive Nonflowable (clear or gray) & Dow Corning RTV 748 Non-Corrosive Sealant-White

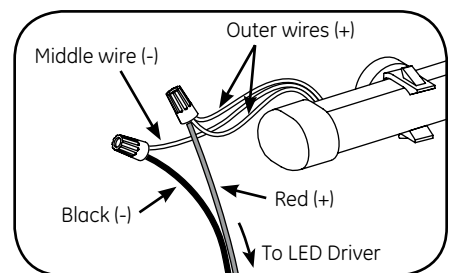
## Electrical Connections



**1** Run supply wire from the LED Driver to a section of Tetra Contour.



**2** Separate wires and identify outer conductors as positive (+) and middle conductor as negative (-). Strip ends back 0.5 in. (13mm).



**3** Connect the two outer wires (+) from the LED strip to the red wire (+) of the LED Driver. Connect the middle wire (-) from the LED strip to the black wire (-) of the LED Driver.

## Loading Chart

LED Driver	Minimum Loading	Maximum Loading
74917 (GE020/G/V24T1-B)	16 in. (0.40m)	6 ft. (1.83m)
74915 (GE080/G/V24T1-A)	16 in. (0.40m)	24 ft. (7.32m)
74916 (GE100/MV/V24T1-A)	16 in. (0.40m)	30 ft. (9.14m)

## Remote Mounting Distance

LED Driver	18 AWG (0.82mm <sup>2</sup> ) Supply Wire	16 AWG (1.31mm <sup>2</sup> ) Supply Wire	14 AWG (2.08mm <sup>2</sup> ) Supply Wire	12 AWG (3.31mm <sup>2</sup> ) Supply Wire
74917 (GE020/G/V24T1-B)	1-120 ft. (0.3-36.6m)	-	-	-
74915 (GE080/G/V24T1-A)	1-30 ft. (0.3-9.14m)	50 ft. (0.3-15.24m)	80 ft. (0.3-24.38m)	120 ft. (0.3-36.58m)
74916 (GE100/MV/V24T1-A)	1-30 ft. (0.3-9.14m)	50 ft. (0.3-15.24m)	80 ft. (0.3-24.38m)	120 ft. (0.3-36.58m)

## Troubleshooting

Symptom	Solution
All LEDs are OFF	<ul style="list-style-type: none"> <li>• Check AC input connection and/or check circuit breaker.</li> <li>• Check wire connection(s) at the Tetra® LED System and LED driver for improper termination(s) or short circuits. Properly terminate or replace the wire connection(s).</li> <li>• Check that connections are the outside wires (+) of the LED strip to the red wire (+) of the LED driver and the middle wire (-) of the LED strip to the black wire (-) of the LED driver.</li> </ul>
Some LEDs appear dim	<ul style="list-style-type: none"> <li>• Ensure the overall length of the Tetra® LED System does not exceed the maximum load.</li> <li>• Ensure the length of supply wire is equal to or below the recommended remote mounting distance.</li> </ul>
Some of the LEDs are not illuminated	<ul style="list-style-type: none"> <li>• Check wire connection(s) at the Tetra® LED System and LED driver for improper termination(s) or short circuits. Properly terminate or replace the wire connection(s).</li> <li>• Check that connections are the outside wires (+) of the LED strip to the red wire (+) of the LED driver and the middle wire (-) of the LED strip to the black wire (-) of the LED driver.</li> </ul>

For additional product and application information,  
Please consult GE's Website: [www.gelighting.com](http://www.gelighting.com)

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