


The instructions below are guidelines for installation of Allanson's Skyline Flexible Border Tubing. Installation requirements may vary depending on the application.

 Read the instructions completely and carefully and follow all National Electric Codes and local codes.

WARNING: Only qualified personnel should perform installation.

To avoid electrical shock or component damage, disconnect the power before installation, service, or removal.

Power Supplies Loading

Flexible Border Tube	Power Supply Part Number	Output Watts	Input Voltage	Output Volts DC	Max. Capacity	
24 Volts DC Output						
24V	Standard Colors	CVW243-MV	72W	120-277	24	14' 9" (4.5 m)
	Standard Colors	CV244-120-277	96W	120-277	24	19' 8" (6 m)
12 Volts DC Output						
12V	RGB	CV125-120	60W	120	12	16' 4" (5 m)
	RGB	CV125-120-277	60W	120-277	12	16' 4" (5 m)
	RGB	CVL2125-120-277	120W (60 + 60)	120-277	12	16' 4" (5 m) + 16' 4" (5m)
	RGB	CVL3125-120-277	180W (60 + 60 + 60)	120-277	12	16' 4" (5 m) + 16' 4" (5m) + 16' 4" (5m)
	RGB	CVW125-MV	60W	120-277	12	16' 4" (5 m)

Product Handling

- 1) Do not bend past a diameter of 80mm/3.15" to avoid damage to internal components of the product (Fig.1).
- 2) Do not bend into 90° (Fig. 2)
- 3) Do not bend the product in the direction shown (Fig. 3 and Fig. 4)
- 4) Do not twist the product (Fig. 5)
- 5) Do not pull excessively on the connection wire. This can damage the connections inside the product
- 6) Ensure Allanson Class 2 power supply is being used. Please reference the power supply loading chart above
- 7) To minimize the voltage drop and maintain light consistency, minimize the length of wires between power supply and the product. Minimum 18GA is required.

Distance to Allanson Power Supply	Stranded Copper Wire Gauge	Expected Voltage Drop
13 Feet	16 AWG	5%
20 Feet	14 AWG	5%
30 Feet	12 AWG	5%

Note: All darker shades in images below represent the luminescent surface.

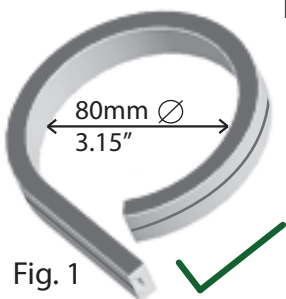


Fig. 1

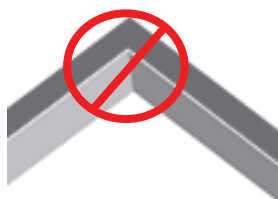


Fig. 2



Fig. 3

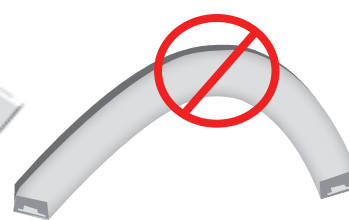


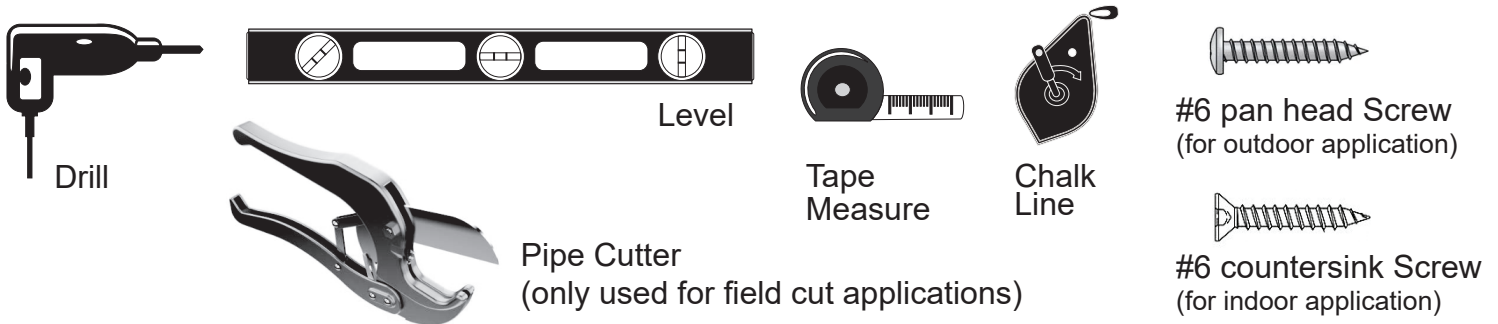
Fig. 4



Fig. 5

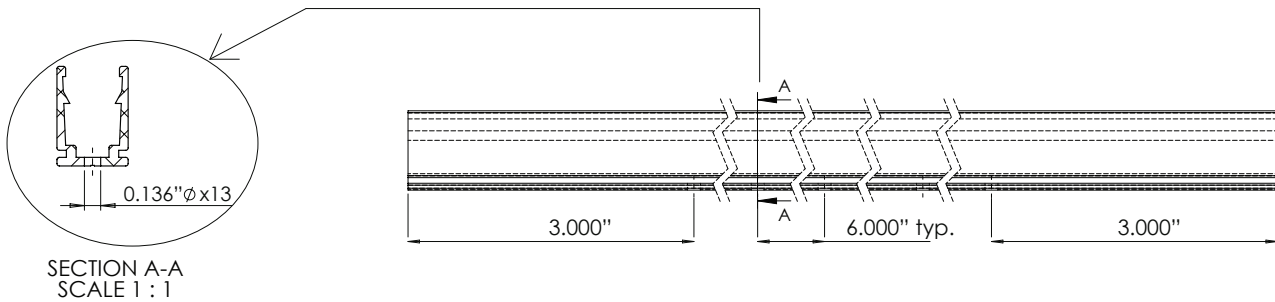
Tools and Mounting Hardware

Installation tools and mounting hardware required are subject to applications. Tools might include the following:

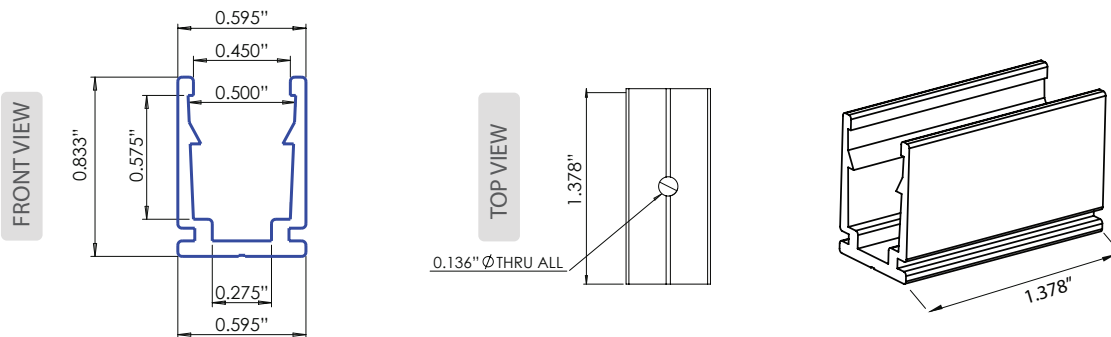


Mounting Accessory Options:

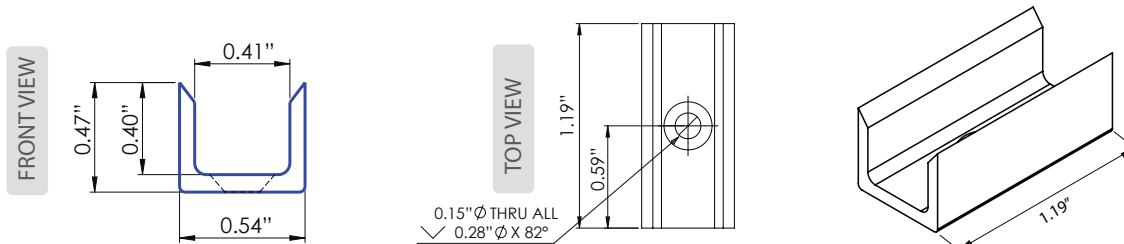
Self-locking aluminum extrusion (6' 6" length) (part number 07-967):



Self-locking aluminum mounting clip for outdoor application (part number 07-968):



Plastic mounting clip for indoor application (part number 07-969):



Field Cut Instructions for Standard Colors Only (RGB is NOT Field Cuttable):

1. Allanson Standard Color Flexible Border Tubes can be cut to shorter lengths in the field
2. Conditions must be dry and clean before cutting sections
3. Securely hold the flexible border tube product
4. Cut all sections directly aligned on the cut mark indicated on the product using a PVC pipe cutter (Fig. 6) (do not cut between cut mark lines as this will result in damage to the circuiting of the product)
5. Use dry cloth to wipe clean the cut end of the flexible border tube
6. Ensure cut end is clean and dry before moving onto the next step
7. Apply clear RTV (silicone) to the cut end of the flexible border tube and to the inside of the translucent end cap (fill end cap 1/3 with silicone). Avoid air pockets inside the end cap.
8. Push the end cap over the flexible border tube, forcing any air bubbled out (Fig. 7)
9. Make sure that the edge of the cap is sealed all around (Fig. 8)
10. Allow to set prior to installation
11. Using a damp cloth clean the flexible border tube before final installation

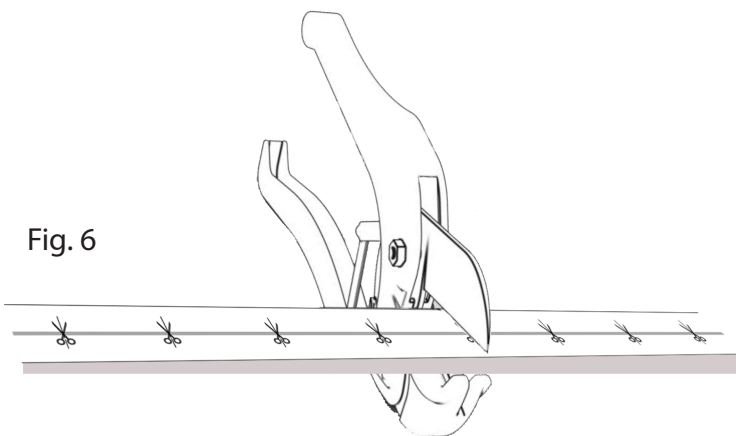


Fig. 6

Note: align PVC pipe cutter vertically to the cut mark before cutting to allow a precise cut.

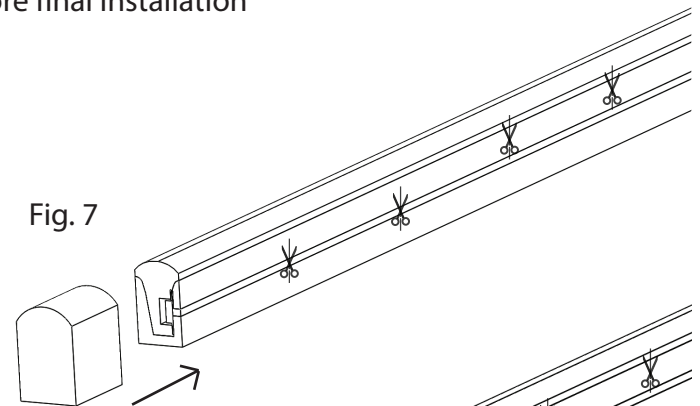


Fig. 7

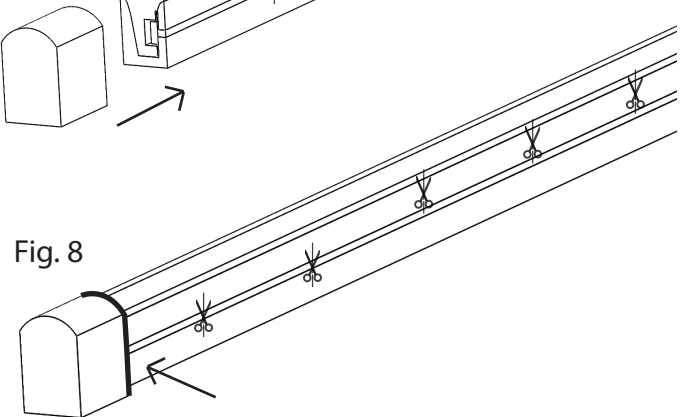
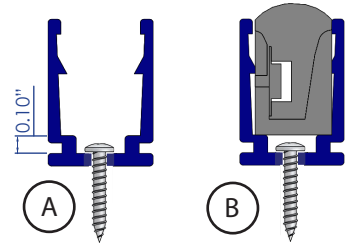


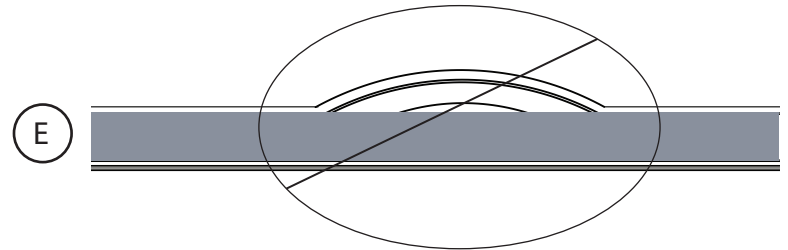
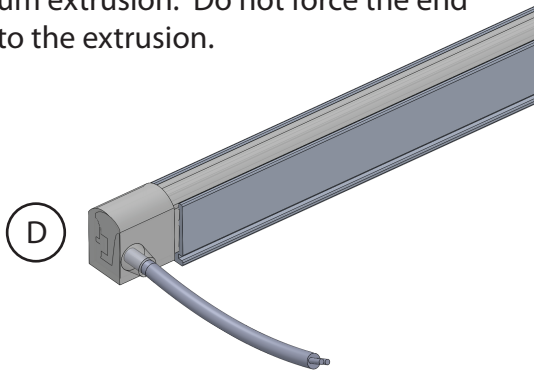
Fig. 8

1. Straight run mounting installation:

- A. Securely mount the self-locking aluminum extrusion with appropriate fasteners
- B. Ensure the fastener head is flush with the lower base of the aluminum extrusion
- C. Confirm measurements before inserting the product into the self-locking aluminum extrusion. Removing the product after insertion will result in damage to the product.
- D. Extend a minimum 1 inch (25.4 mm) of tubing on both ends from the self-locking aluminum extrusion. Do not force the end caps into the extrusion.

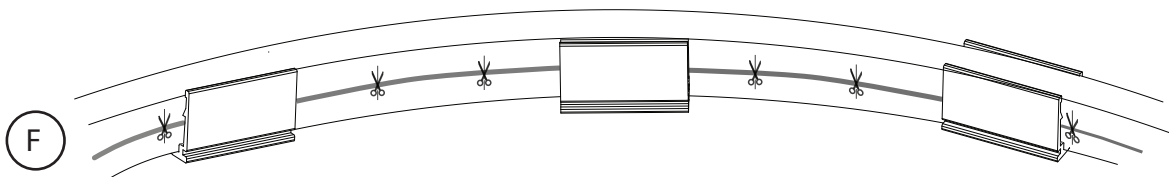
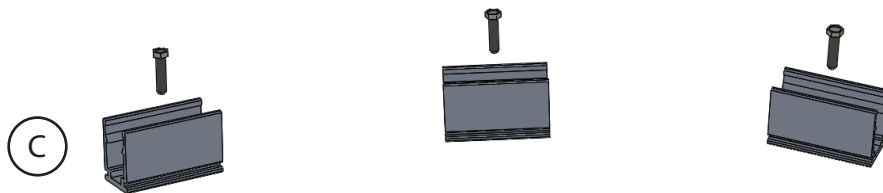
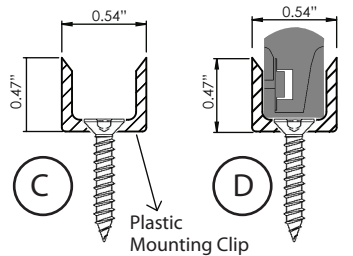
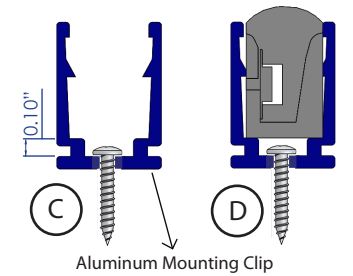


- E. Insert the product starting from one end and continue to the other to avoid buckling in the middle.



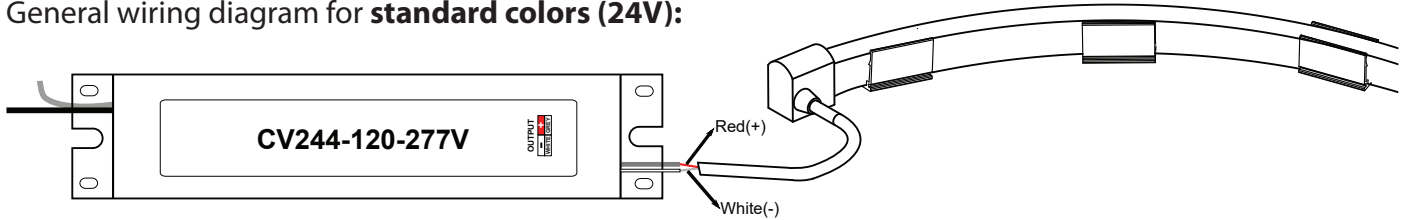
2. Free form shapes and letters mounting installation:

- A. Use self-locking aluminum mounting clips for outdoor application
- B. Use plastic mounting clips for indoor application
- C. Secure mounting clips using appropriate fasteners
- D. Ensure the fastener head is flush with the lower base of the mounting clips
- E. Confirm measurements before inserting the product into the self-locking aluminum mounting clips. Removing the product after insertion will result in damage to the product.
- F. Insert the flexible border tubing into the mounting clips. The number of clips and distance between them will be determined by each specific application.



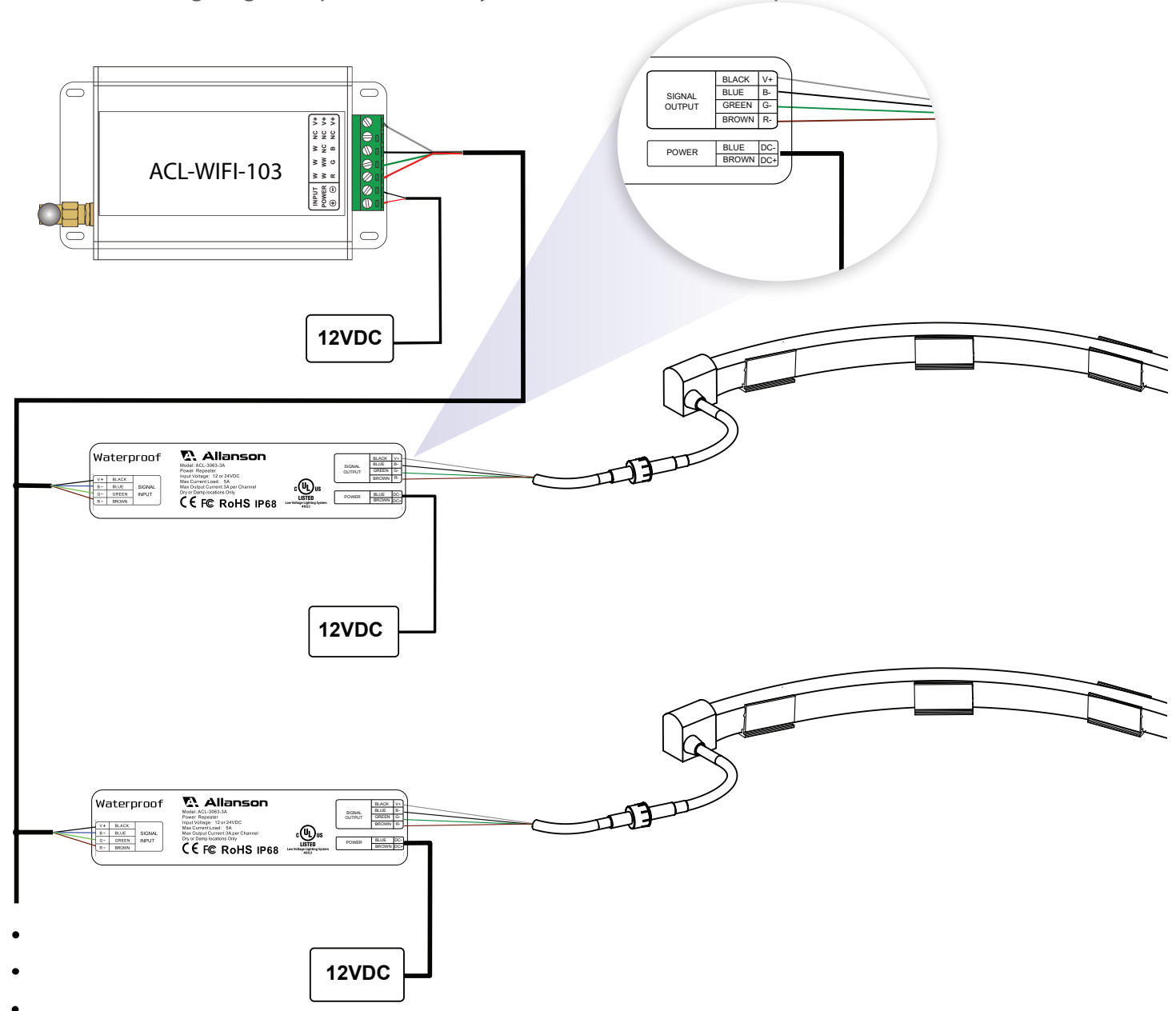
Wiring:

General wiring diagram for **standard colors (24V)**:



General wiring example for **RGB color changing options (12V)**:

(For custom wiring diagrams, please contact your local Allanson Sales Representative).



Troubleshooting:

1. Entire flexible border tubing does not light up
 - a. Ensure power switch is turned on
 - b. Confirm that Allanson Class 2 power supply is being used
 - c. Check polarity and all wiring connections (positive to positive and negative to negative)

2. Sections of flexible border tubing does not light up
 - a. Ensure product has not been bent incorrectly
 - b. Ensure product has not been cut between the cut mark lines

3. Product seems to be too hot and too bright
 - a. Make sure the proper voltage of power supply is being used (24VDC for standard color options and 12VDC for RGB color changing options)

4. Product seems to be too dim
 - a. Make sure the proper voltage of power supply is being used (24VDC for standard color options and 12VDC for RGB color changing options)
 - b. Make sure loading does not exceed max. capacity (refer to power supply loading chart on p.1)
 - c. Increase wire guage for long distance