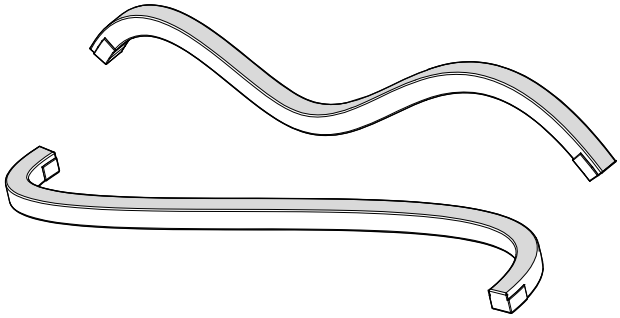
SAFETY INFORMATION



PLEASE ENSURE ALL OF THE FOLLOWING INSTRUCTIONS ARE READ PRIOR TO THE INSTALLATION OF THE PRODUCT.

- Inspect all the components for damage prior to installation.
- Do not use if there is any damage to the unit or to the wiring/insulation. Inspect periodically.
- Recommended load for power supplies is 80% of listed power supply capacity.
- To avoid voltage drop, ensure proper gauge wires are installed between Power Supplies, Controls & LED product.
- Consult "Low Voltage Wire Gauge chart" below for recommended wire gauges.

WARNINGS:

- Note: all connectors must be assembled correctly to achieve there IP rating.
- Fixture's rated voltage must match that of the power supply.
- Power supply must be constant voltage.
- Do not power the light for over 30 minutes in coil packaging.
- Do not bend past the minimum diameter (Fig. 1) or twist this fixture (Fig. 3, 5). Doing so will damage the internal circuit board.
- Do not bend the fixture in the opposite direction of its specified bending direction (Fig. 2, 4). Doing so will damage the internal circuit board.
- Do not put undue stress or pull excessively on the cables or injection connectors. This can cause the connectors to detach or fail. (see Fig. 5)
- To extend the life of your fixtures, do not operate lights in daylight temperatures exceeding 140°F (60°C). Doing so will decrease the lifespan of LEDs.
- Warning: Operating all channels of color changing fixtures at full capacity simultaneously at full extended time will reduce fixture rated life.
- Warning: Expansion and Contraction of fixtures up to 0.5% for PVC & 0.05% for Silicone.

A*: MINIMUM BEND RADIUS VARIES ON MODEL

Dome Neon - 2.36"
Mini Square Neon - 1.95"
Square Neon - 5.90"
Dome Neon DS98 - 0.98"
Square Neon ST63 - 2.36"
Mini Square Neon ST49 - 1.16"
Flexible Wall Washer / Grazer - Top bend: 19.68"
Side bend: 31.49"

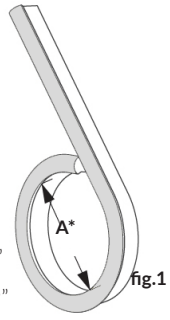


fig.1

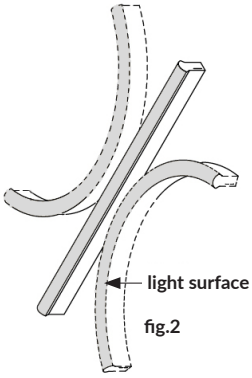


fig.2

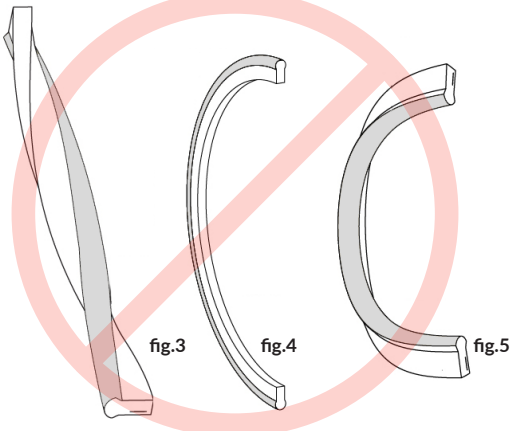


fig.3 fig.4 fig.5

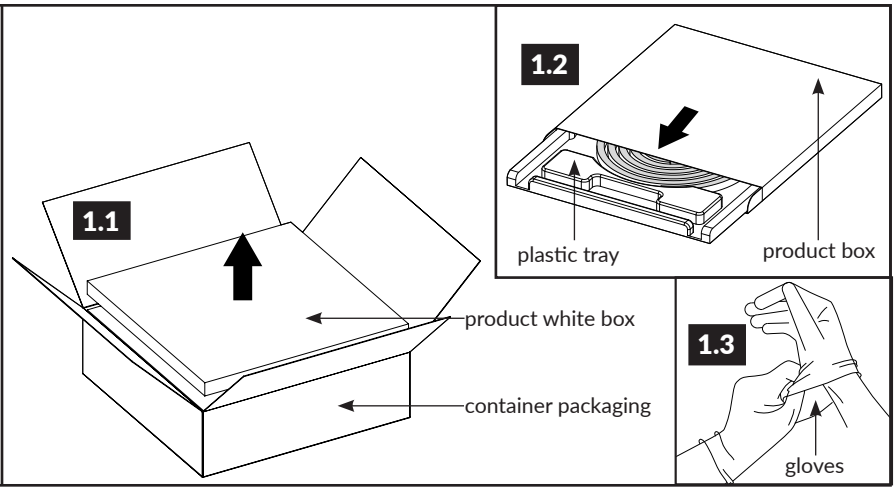
A - Unpacking LED Neon

1

1.1 Carefully remove the white products box from the main container packaging.

1.2 Slide the plastic tray out of the product white box

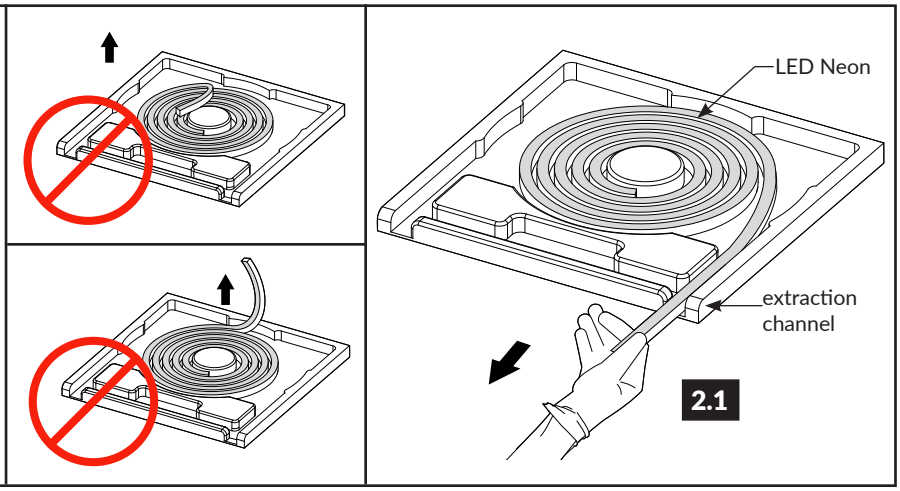
1.3 Put on the provided gloves when handling the LED Neon this will provoke from smudging finger prints onto the neon.



2

2.1 While one person is holding the plastic tray, another person pulls on the LED Neon to slide out through the extraction channel.

INSTALLATION NOTES:
- Do not attempt to remove the LED Neon from the white tray without using the extraction channel.

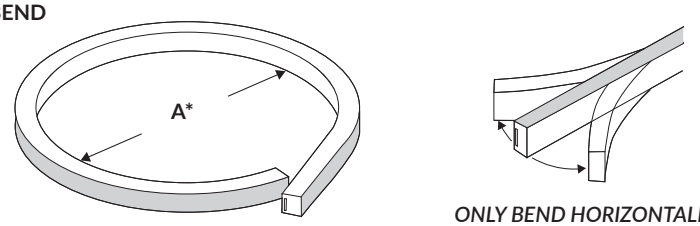


B - Handling the LED Neon

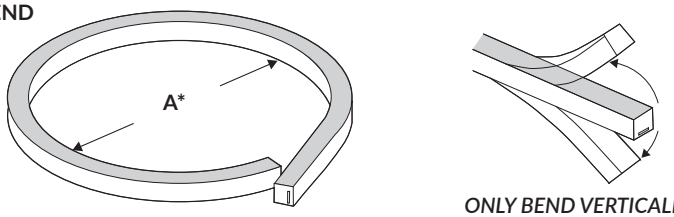
- Operating temperature: -13°F ~ 113°F (-25°C ~ 60°C)
- Installation (bending) temperature: 32°F ~ 140°F (0°C ~ 60°C)
- Top Bend or Side Bend profile (A*), reference chart below for actual bend radius depending on model.
- For full details and specs please refer to the product Spec Sheet

A*: MINIMUM BEND RADIUS VARIES ON MODEL
Dome Neon - 2.36”
Mini Square Neon - 1.95”
Square Neon - 5.90”
Dome Neon DS98 - 0.98”
Square Neon ST63 - 2.36”
Mini Square Neon ST49 - 1.16”
Flexible Wall Washer / Grazer - Top bend: 19.68”
Side bend: 31.49”

SIDE BEND

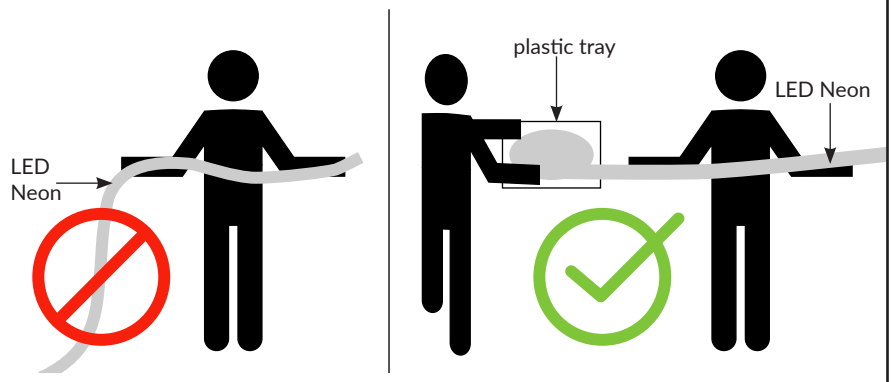


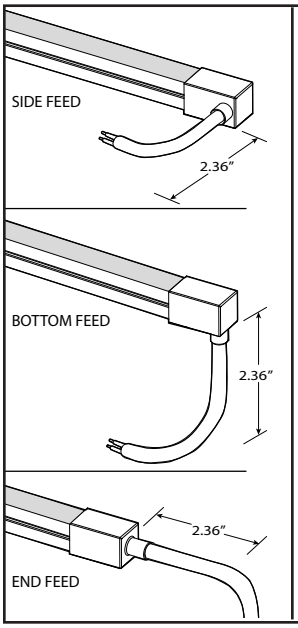
TOP BEND



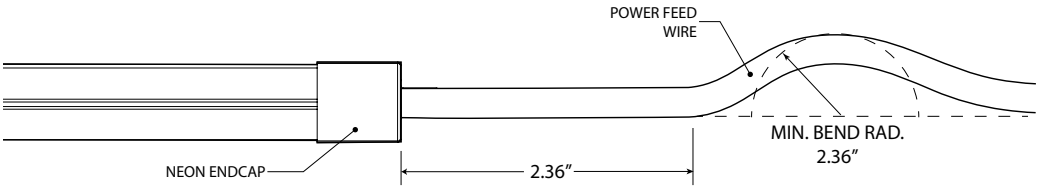
B - Handling the LED Neon

- 2 People recommended when handling this LED Neon.



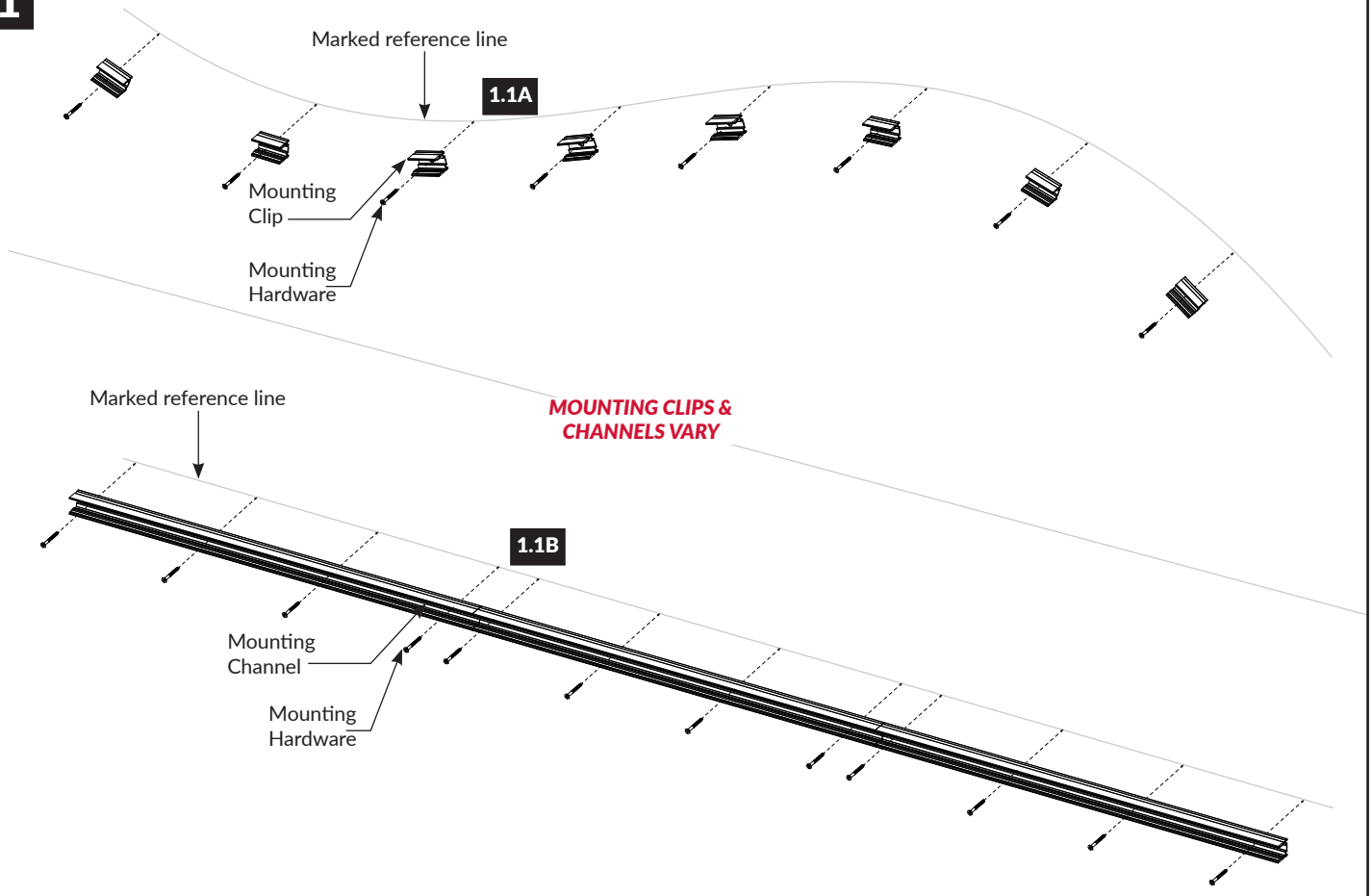


CAUTION: IF BENDING THE POWER FEED WIRE: BEND 2.36" FROM THE END OF THE NEON ENDCAP WITH A MINIMUM RADIUS OF 2.36". USE CAUTION NOT TO OVERSTRESS THE CABLE CONNECTION TO THE NEON IF THIS CONNECTION IS OVERSTRESSED, WARRANTY MAY BE VOIDED.



C - Install LED Neon into a Mounting Clip or Mounting Channel

1



INSTALLATION NOTES:

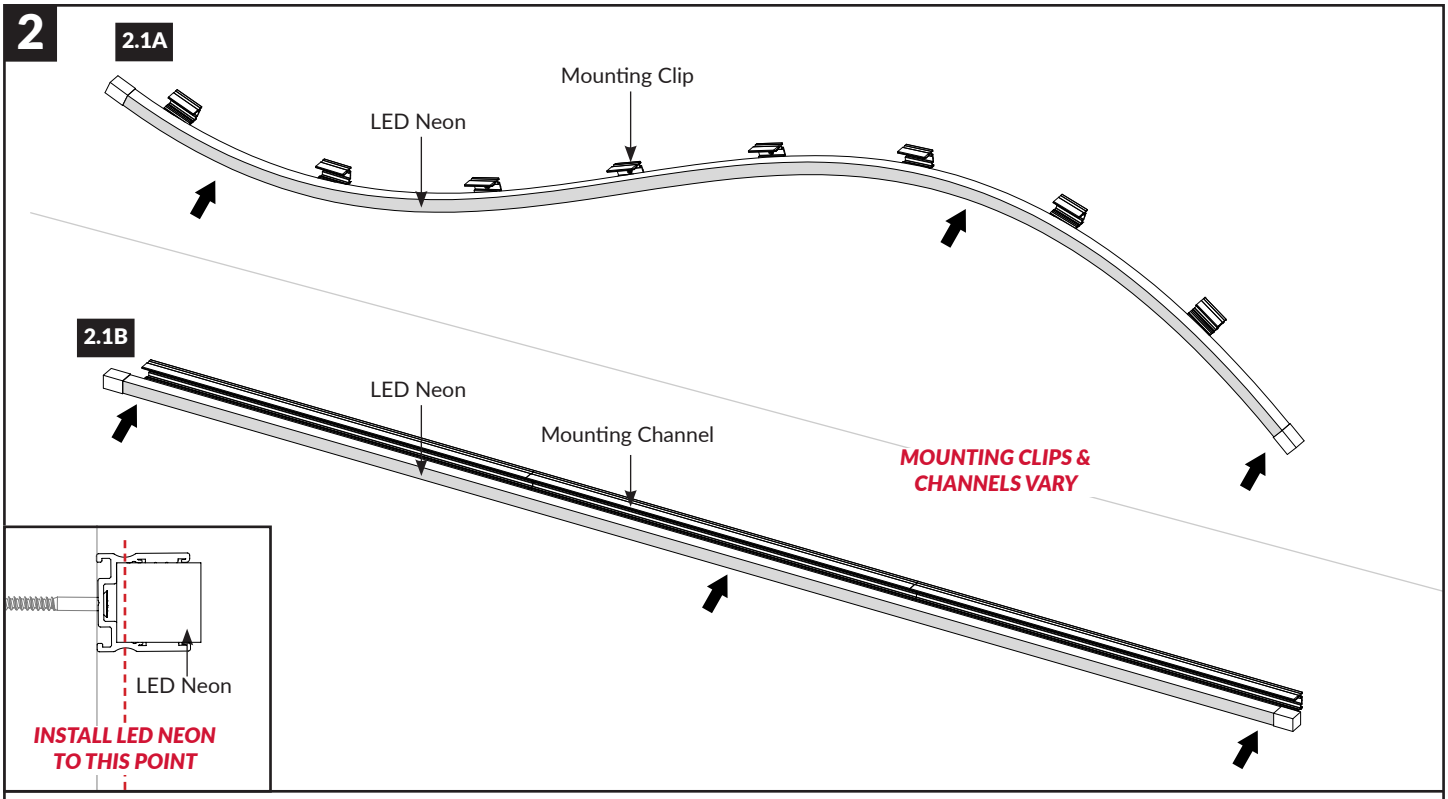
- Review all parts and quantities to confirm if all necessary parts are available.
- Installation methods vary depending on how the LED Neon will get installed. For curved installations (1.A) mounting clips are suggested. Whereas for linear installations (1.B) mounting channels are suggested. Both methods can be used when incorporating both installation methods.
- Dryfit the LED Neon with the channel prior to routing/cutting out the mounting surface.

CAUTION: Use proper safety equipment when making any modification to parts.

1.1 If necessary, Mounting channel can be cut on-site, using the proper equipment that cuts aluminum. Carefully cut to the desired length followed by cleaning off any material left after the cut.

1.2 Once the installation location is determined make the necessary markings all along the path. Secure the mounting clip/channel using the proper hardware (not included) it will vary depending on the surface. Install a mounting clip every 6.0” from each other & the mounting channel must be installed in consecutive order.

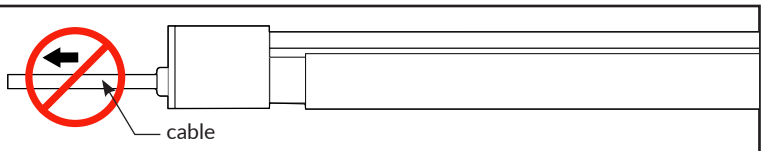
C - Install LED Neon into a Mounting Clip or Mounting Channel



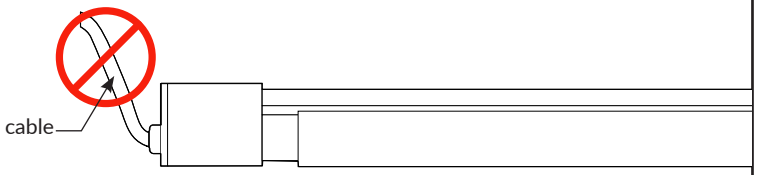
2.1 Align the LED Neon into the mounting clip or channel, followed by carefully inserting the LED Neon. Make sure the LED Neon is inserted completely into the mounting clip or channel. DO NOT TRY TO INSERT THE ENDCAP INTO THE MOUNTING CLIP OR CHANNEL IT WILL NOT FIT & CAUSE DAMAGE TO THE LED NEON.

C - Incorrect Installation Method

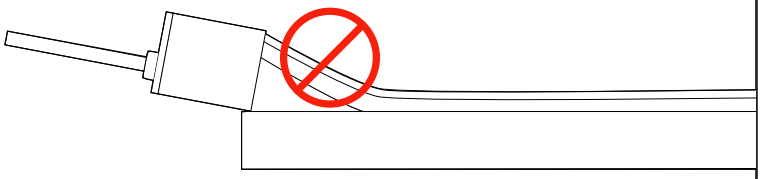
Do Not put excessive stress on the cables or connectors



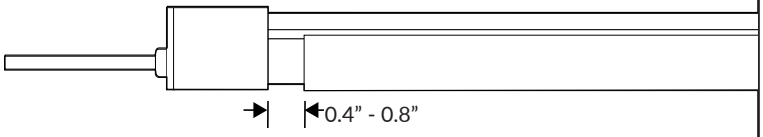
Do Not curl or pull the cable with excessive force.



Do Not bend the fixture at a sharp angle during installation



Leave a space of 0.4 to 0.8in (10 to 20mm) between the end of the channel and the Side or Bottom Exit connector.



D - Installing Neon into raceway channel (only applicable for LED Neon Square models)

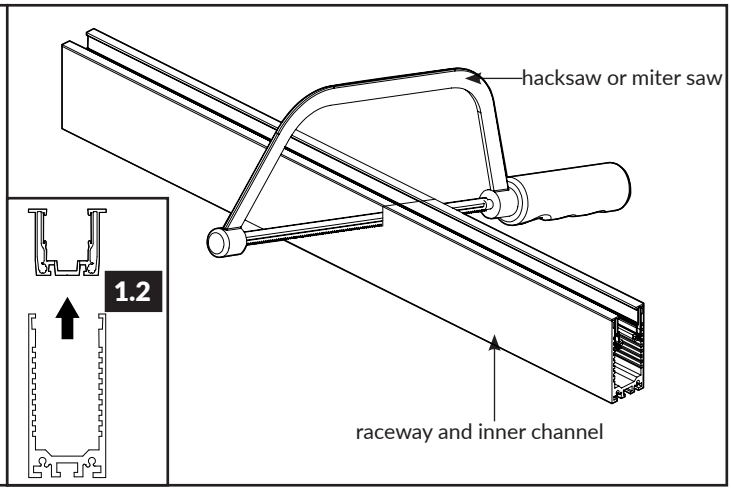
1

INSTALLATION NOTES:
- Review all parts and quantities to confirm if all necessary parts are available.
- Dryfit the Square LED Neon with the channel prior to routing/cutting out the mounting surface.

CAUTION: Use proper safety equipment when making any modification to parts.

1.1 If necessary, channels can be cut on-site, using the proper equipment that cuts aluminum. Carefully cut to the desired length followed by cleaning off any material left after the cut.

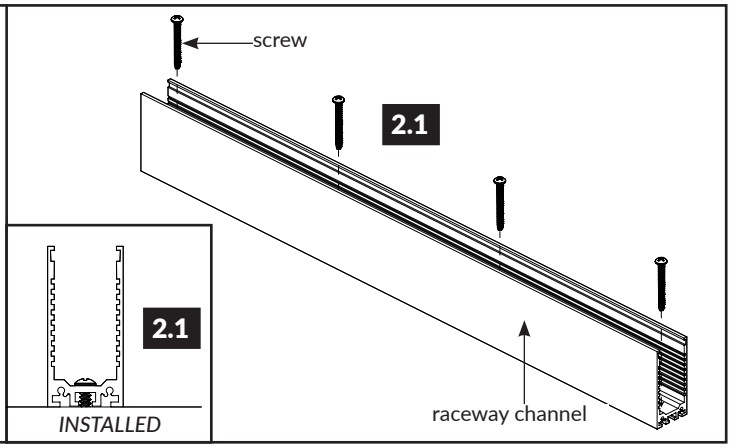
1.2 Remove the inner channel from inside the raceway channel, followed by cleaning the inside of the channel from any debris.



2

INSTALLATION NOTES:
- Raceway channel includes pre-drilled slots, to help ease the installation.
- For longer runs make a centerline throughout the complete run, to use as a guide later during installation.

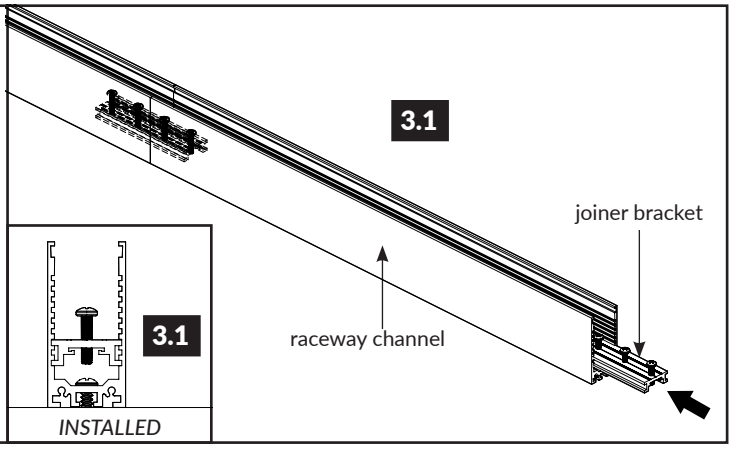
2.1 Align the raceway channel to the installation surface, followed by securing to the surface with the appropriate hardware.



3

INSTALLATION NOTES:
- Multiple raceway channel can be installed next to each other for longer runs.

3.1 Feed the joiner bracket into the raceway channel. Then slide the joiner bracket in between the 2 joining raceway channels. Then tighten the screws on the joiner bracket to secure. Repeat this step if adding additional channel.

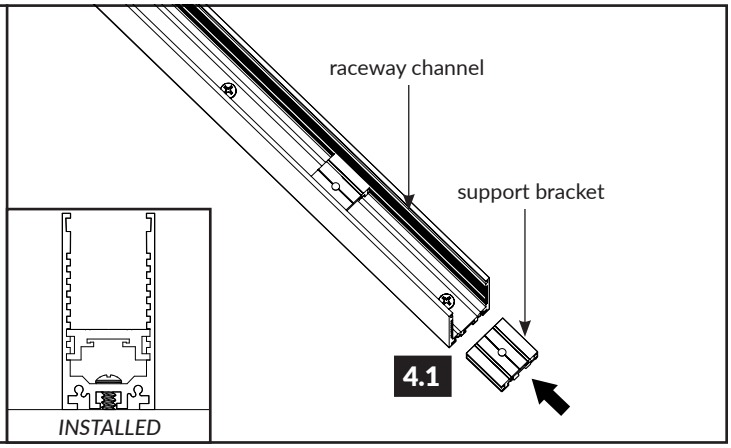


D - Installing Neon into raceway channel (only applicable for LED Neon Square models)

4

INSTALLATION NOTES:
- Lay the inner channel into the raceway channel, then mark the pre-drilled location to use as reference during installation

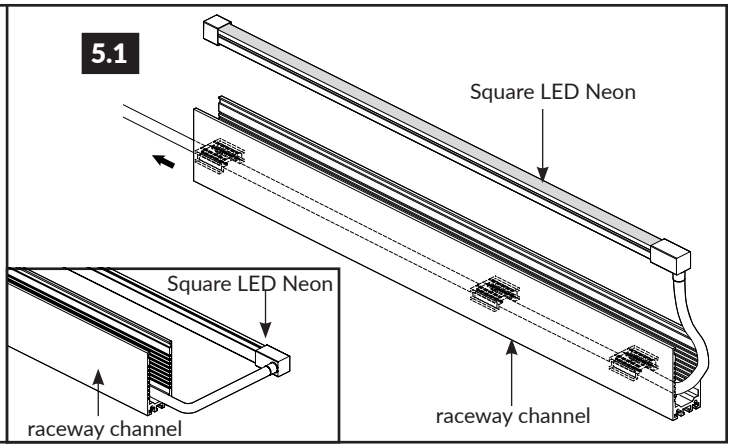
4.1 Feed the support bracket into the raceway channel. Line up the support bracket to the marked locations.



5

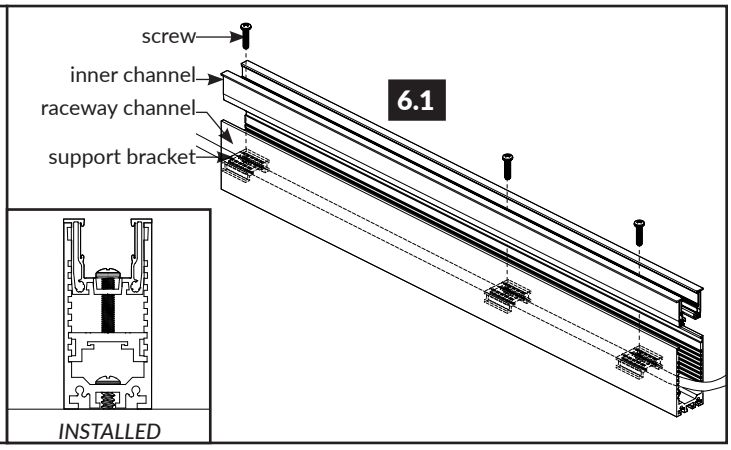
5.1 Run the Square LED Neon powerfeed cables through the raceway channel, under the support brackets, to the 24V DC power supply. For additional information reference the power supply instruction.

5.2 Place the Square LED Neon next to the raceway channel, leaving the cables inside, to continue the installation.



6

6.1 Insert the inner channel into the raceway channel, make sure to align the pre-drilled slots to the support brackets. Followed by securing to each other by securing with the provided screw.

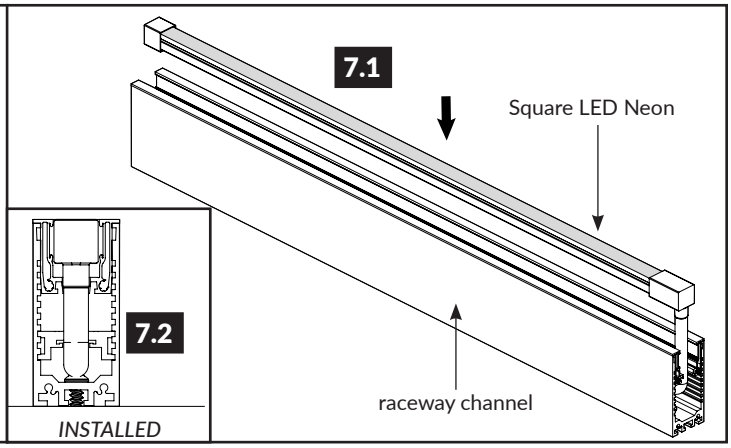


D - Installing Neon into raceway channel (only applicable for LED Neon Square models)

7

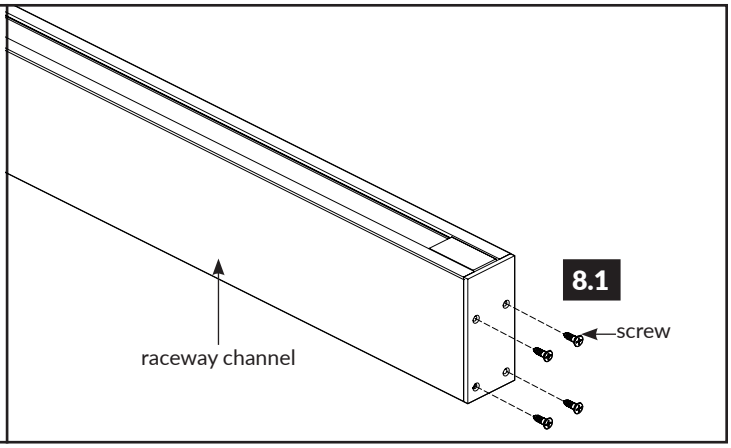
7.1 Align & center the Square LED Neon to the inner channel. Then push the power feed completely inside the raceway to remove any cable slack.

7.2 Push the Square LED Neon completely inside the inner channel to secure into place.



8

8.1 Align the endcaps to the end of the raceway channel followed by securing using the 4 screws.

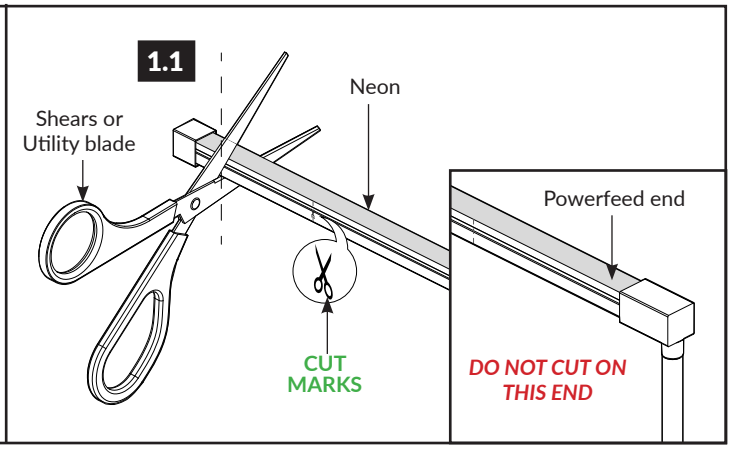


E - Applying Glue-On endcaps & silicon (only applicable for Field Cuttable LED Neon model)

1

1.1 After the Neon's overall length has been determined. Using a sharp set of shears cut the Neon's leftover length along the marked cutting lines noted on the sides of the Neon's body.

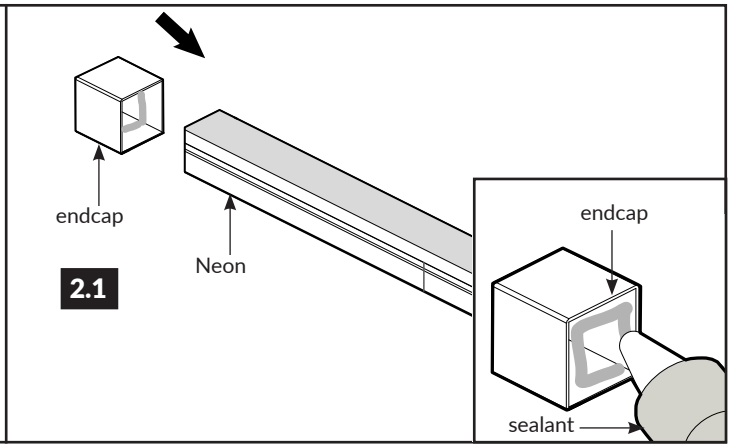
INSTALLATION NOTES:
- LED Neon is only recommended to be cut on the non-power feed end of the Neon. If cut along the powerfeed end, this would void the LLIA Lighting Warranty.



2

2.1 Using the provided endcap & sealant, apply the sealent into the insides of the endcap. Followed by inserting the endcap completely onto the Neons cut end. Gently apply some pressure to the endcap, then let sit until completely dry.

INSTALLATION NOTES:
- The Neon installation can now continue just be careful not to pull off the newly sealed endcap.



TROUBLESHOOTING

ENTIRE FIXTURE DOESN'T WORK

- Check that the power supply is plugged in, switched on and receiving power.
- Check all light, dimmer or controller connections, connecting from the power supply to the fixture.
- Check polarity of all wire connections
- Make sure power supply output voltage is 24V DC.
- Make sure your power supply is CV (Constant Voltage)

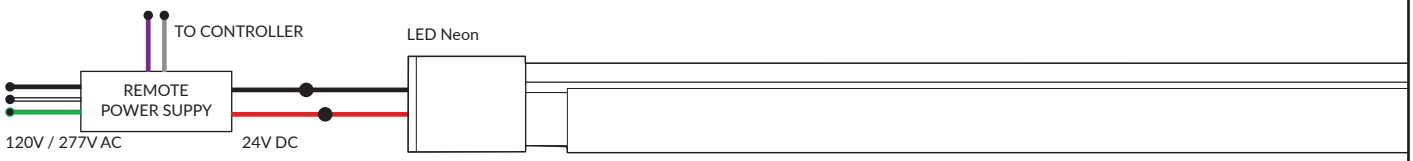
CORRELATED COLOR TEMPERATURE (CCT)

NOMINAL CCT	TARGET CCT AND TOLERANCE (K)
2700K	2725 ± 145
3000K	3045 ± 175
3500K	3465 ± 245
4000K	3985 ± 275
4500K	4503 ± 243
5000K	5028 ± 283
5700K	5665 ± 355
6500K	6530 ± 510

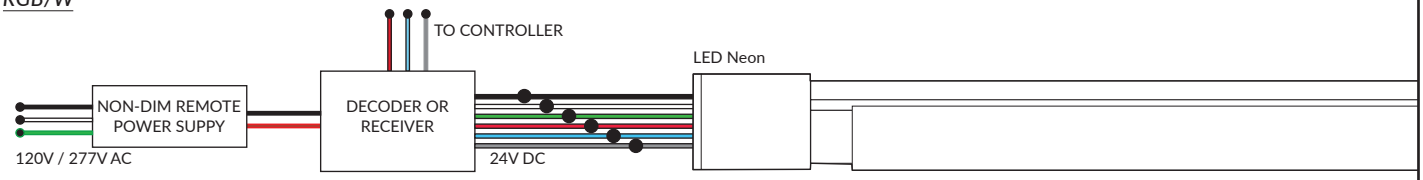
Wiring Diagrams

- This LED Neon Flex Fixture is only compatible with a 24V power supply.
- Always observe proper polarity.
- Recommenced load for power supplies is 80% of listed power supply capacity.
- To minimize the voltage drop and maintain light consistency, do not use excessive lengths of wire between the power supply and light fixture.

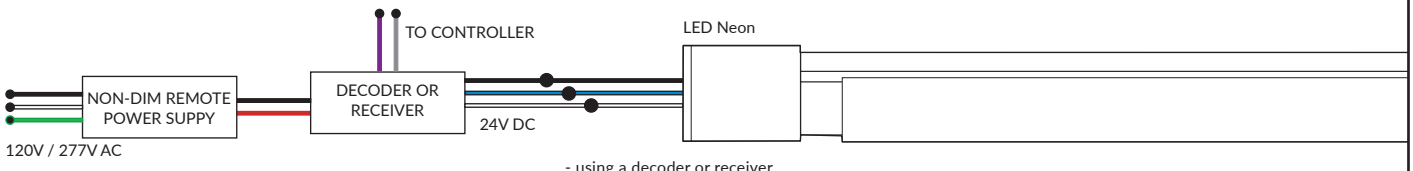
STATIC COLOR / WARM FADE



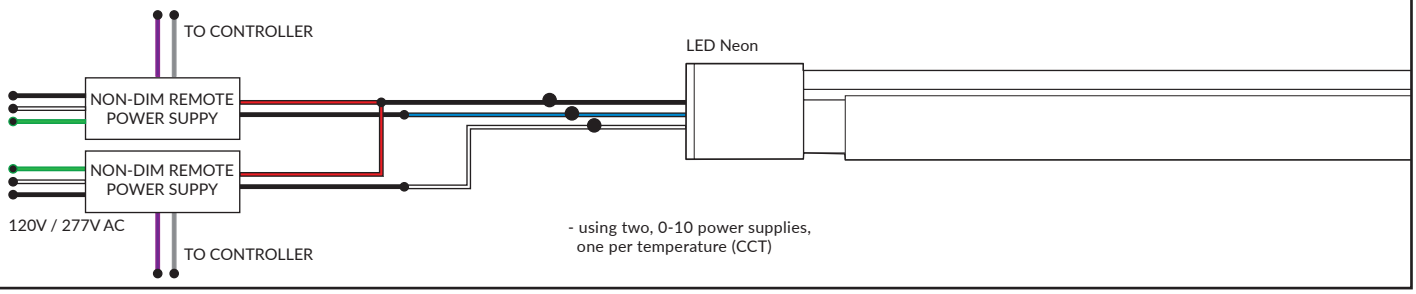
RGB/W



TUNABLE WHITE



- using a decoder or receiver with a non-dim power supply



- using two, 0-10 power supplies, one per temperature (CCT)

Low Voltage Wire Gauge Chart

24V DC VOLTAGE DROP AND WIRE LENGTH (FT.) DISTANCE CHART

POWER (W)		10W	20W	30W	40W	50W	60W	70W	80W	90W	100W	110W	120W
WIRE GAUGE (AWG)	#10	1969’	985’	657’	460’	245’	289’	166’	191’	148’	105’	73’	40’
	#12	1313’	657’	427’	312’	247’	197’	165’	132’	133’	73’	49’	27’
	#14	788’	394’	263’	197’	158’	119’	99’	79’	60’	40’	27”	/
	#16	460’	229’	148’	115’	92’	73’	60’	46’	33’	23’	17’	10’
	#17	394’	197’	125’	92’	73’	60’	46’	37’	24’	20’	14’	9’
	#18	329’	165’	99’	73’	60’	50’	40’	33’	23’	17’	10’	7’
	#20	197’	99’	66’	50’	40’	33’	27’	20’	14’	/	/	/
	#22	119’	60’	40’	27’	20’	17’	/	/	/	/	/	/