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# LED NEON FLEX SPECIFICATION

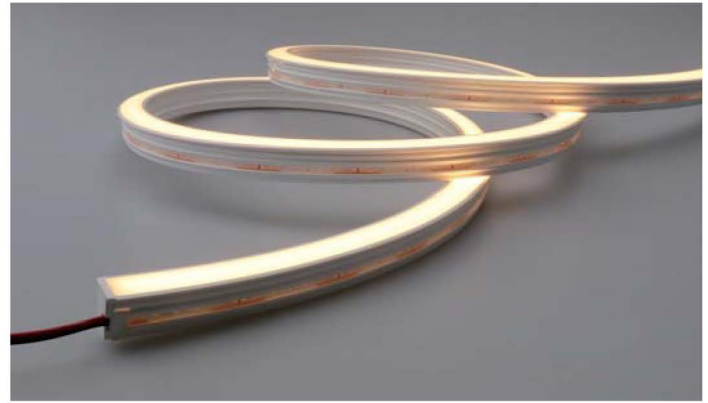
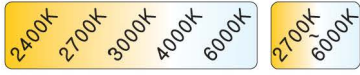
IP44 NEON S1220T 24V SIDE VIEW



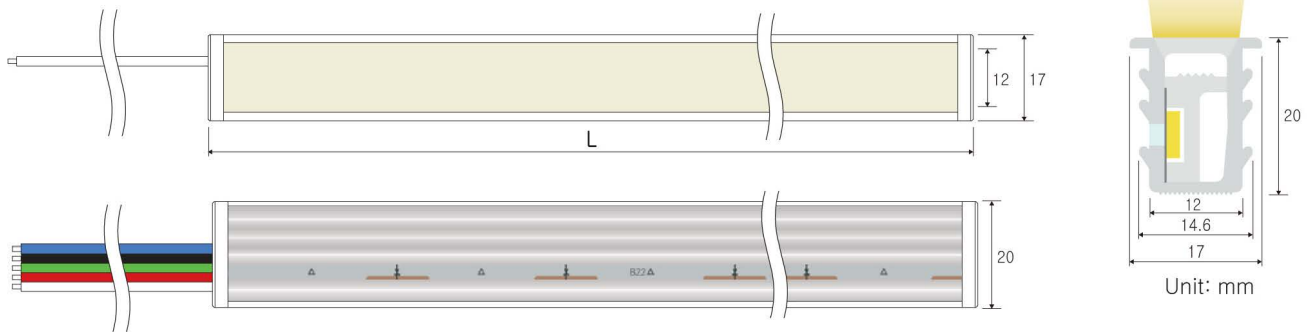
# IP44 NEON S1220T 24V SIDE VIEW



- "wing-designed", no need mounting profiles
- Max length 18 meters with one end power
- Five CCT optional from 2700K to 6000K
- 3 years warranty, working life >30000 hours:

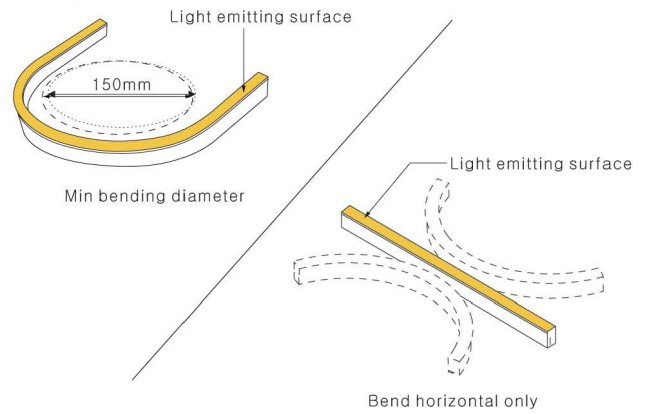


## Dimension structure



## Product specification

Voltage	DC24 V	
CRI/Ra	>90	
Ambient temperature	-25°C~45°C	
Length Range(m)	Final Length(mm)	Tolerance (mm)
0m<Length≤5m	L+6	±7
5m<Length≤10m	L+6	±10
10m<Length≤15m	L+6	±13
15m<Length≤20m	L+6	±16



## White color parameters

Part Number	CCT (K)	Power (w/m)	Efficiency (lm/w)	Lumen (lm/m)	Unit Length (mm)	Max Run Length (m)
NS-S1220T-W24	2350-2550K	10	37.4	374	50	17
NS-S1220T-W27	2600-2800K	10	36.5	365	50	17
NS-S1220T-W30	2850-3150K	10	37.0	370	50	17
NS-S1220T-W40	3800-4200K	10	40.7	407	50	17
NS-S1220T-W60	5600-6100K	10	37.8	378	50	17

## Single color parameters

Part Number	Color (nm)	Power (w/m)	Efficiency (lm/w)	Lumen (lm/m)	Unit Length (mm)	Max Run Length (m)
NS-S1220T-R	Red(620-625nm)	10	16.9	169	50	18
NS-S1220T-G	Green(515-525nm)	10	42.7	427	50	17
NS-S1220T-B	Blue(460-465nm)	10	9.8	98	50	17
NS-S1220T-Y	Yellow(585-595nm)	10	12.6	126	50	18
NS-S1220T-O	Orange	10	16.7	167	50	17
NS-S1220T-P	Pink	10	34.6	346	50	17

## Tunable color parameters

Part Number	CCT (K)	Power (w/m)	Efficiency (lm/w)	Lumen (lm/m)	Unit Length (mm)	Max Run Length (m)
NS-S1220T-TW	2600-2800K	5	45.2	226	71.4	5
NS-S1220T-TW	5700-6200K	5	48.2	241	71.4	5
NS-S1220T-TW	3800-4200K	10	46.2	462	71.4	5

## RGB color parameters

Part Number	Color (nm)	Power (w/m)	Efficiency (lm/w)	Lumen (lm/m)	Unit Length (mm)	Max Run Length (m)
NS-S1220T-RGB	Red(620-625nm)	3.3	13.6	45	83.33	5
NS-S1220T-RGB	Green(515-525nm)	3.3	52.4	173	83.33	5
NS-S1220T-RGB	Blue(460-465nm)	3.3	10.3	34	83.33	5
NS-S1220T-RGB	RGB	10	25.4	254	83.33	5

## RGBW color parameters(RGB+2400K)

Color (nm)	CRI	Power (w/m)	Efficiency (lm/w)	Lumen (lm/m)	Unit Length (mm)	Max Run Length (m)
Red	N/A	2.5	13.6	34.0	83.33	5
Green	NA/	2.5	52.4	131.0	83.33	5
Blue	N/A	2.5	11.6	29.0	83.33	5
2400K	>90	2.5	42.4	106.0	83.33	5
RGB	N/A	7.5	25.7	193.0	83.33	5
RGBW	N/A	10	30.0	300.0	83.33	5

## RGBW color parameters(RGB+2700K)

Color (nm)	CRI	Power (w/m)	Efficiency (lm/w)	Lumen (lm/m)	Unit Length (mm)	Max Run Length (m)
Red	N/A	2.5	14.0	35	83.33	5
Green	NA/	2.5	55.2	138	83.33	5
Blue	N/A	2.5	12.0	30	83.33	5
2700K	>90	2.5	44.4	111	83.33	5
RGB	N/A	7.5	26.9	202	83.33	5
RGBW	N/A	10	31.4	314	83.33	5

## RGBW color parameters(RGB+3000K)

Color (nm)	CRI	Power (w/m)	Efficiency (lm/w)	Lumen (lm/m)	Unit Length (mm)	Max Run Length (m)
Red	N/A	2.5	13.6	34	83.33	5
Green	NA/	2.5	52.8	132	83.33	5
Blue	N/A	2.5	11.6	29	83.33	5
3000K	>90	2.5	42.8	107	83.33	5
RGB	N/A	7.5	26.0	195	83.33	5
RGBW	N/A	10	30.2	302	83.33	5

## RGBW color parameters(RGB+4000K)

Color (nm)	CRI	Power (w/m)	Efficiency (lm/w)	Lumen (lm/m)	Unit Length (mm)	Max Run Length (m)
Red	N/A	2.5	13.6	34	83.33	5
Green	NA/	2.5	53.6	134	83.33	5
Blue	N/A	2.5	11.6	29	83.33	5
4000K	>90	2.5	46.8	117	83.33	5
RGB	N/A	7.5	26.4	198	83.33	5
RGBW	N/A	10	31.6	316	83.33	5

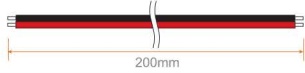


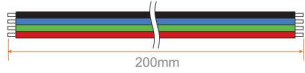


## RGBW color parameters(RGB+6000K)

Color (nm)	CRI	Power (w/m)	Efficiency (lm/w)	Lumen (lm/m)	Unit Length (mm)	Max Run Length (m)
Red	N/A	2.5	12.8	32	83.33	5
Green	NA/	2.5	50.8	127	83.33	5
Blue	N/A	2.5	11.2	28	83.33	5
6000K	>90	2.5	42.4	106	83.33	5
RGB	N/A	7.5	24.9	187	83.33	5
RGBW	N/A	10	29.5	295	83.33	5

## DMX512 RGB / RGBW color parameters

Color (nm)	IC Model	Power (w/m)	Efficiency (lm/w)	Lumen (lm/m)	Pixel (pcs/m)	Unit Length (mm)	Max Run Length (m)
RGB	SM17512	12	25.3	304	8	125	5
RGBW	SM17512	16	30.1	483	8	125	5

## Cable specification

Cable Type	Schematic Diagram	Specification	Core	Electrical Properties
PVC Cable		20AWG Red&Black 2-core Cable	● ●	Red V+, Black V-
		20AWG Brown&White& Yellow 3-core Cable	● ○ ●	Dual-White: Brown V+, White W, Yellow WW
		20AWG Red & Green & Black 3-core Cable	● ● ●	Digital RGB: Red V+, Green DI, Black GND
		20AWG Black&Blue&Red&Green 4-core Cable	● ● ● ●	Black V+, Blue B, Red R, Green G
		20AWG Black&White&Blue&Green &Red 5-core Cable	● ○ ● ● ●	Black V+, White W, Blue B, GreenG, Red R
		20AWG Black&White&Blue&Green &Red 5-core Cable	● ○ ● ● ●	DMX512 Digital RGB: Black GND, White BI/BO, Blue AI/AO, Green PI/PO, Red V+

## Cutting

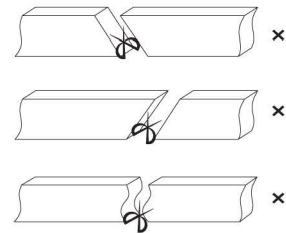


**Remark:**

The bottom of the led strip has transparent window,the black marker is the cutting position



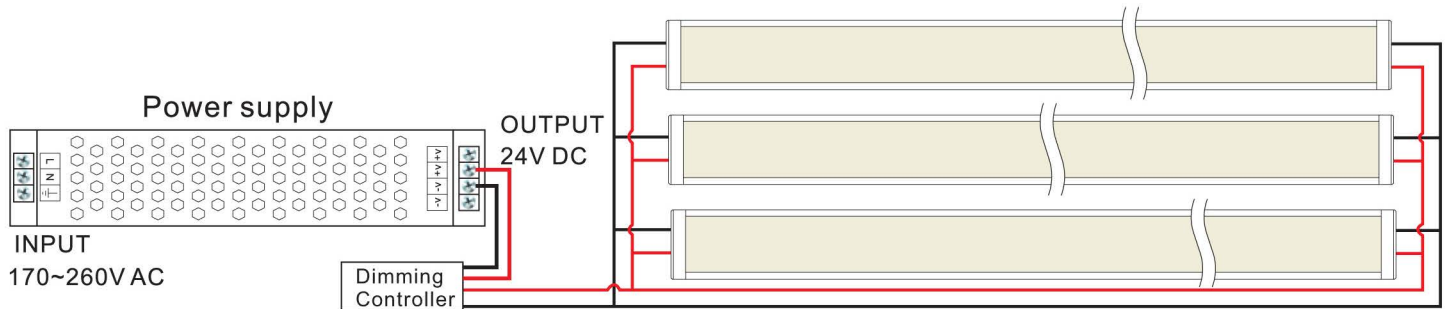
Use professional scissors to cut vertically at the cutting mark



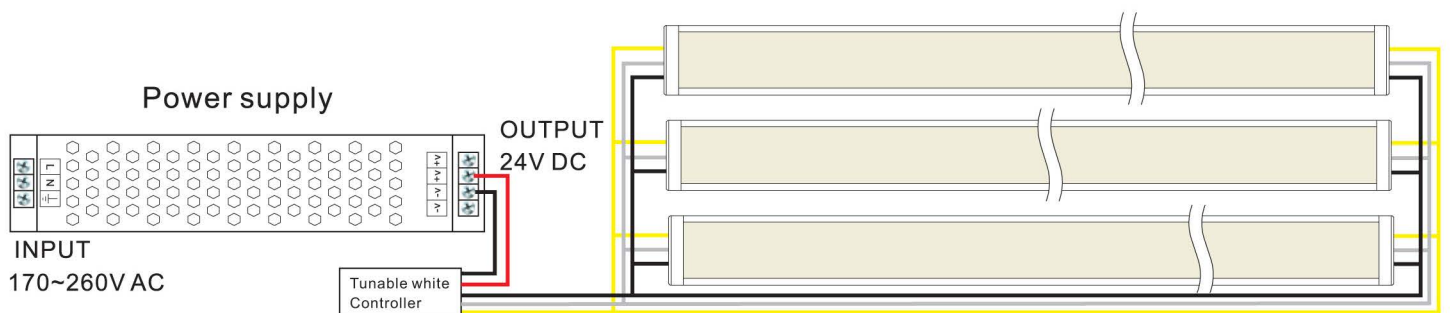
Please don't be feel free to cut and cut into an oblique angle or cambered section.

## Connection Diagram

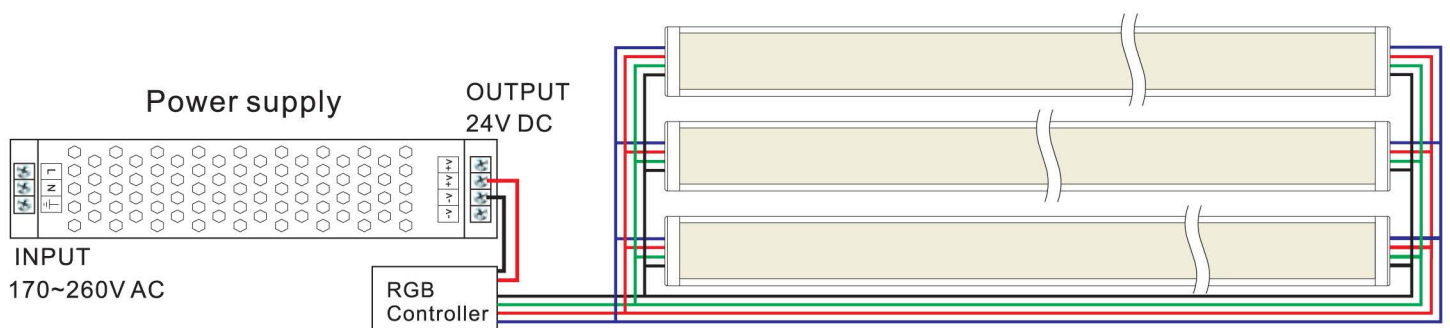
### Single Color NEON



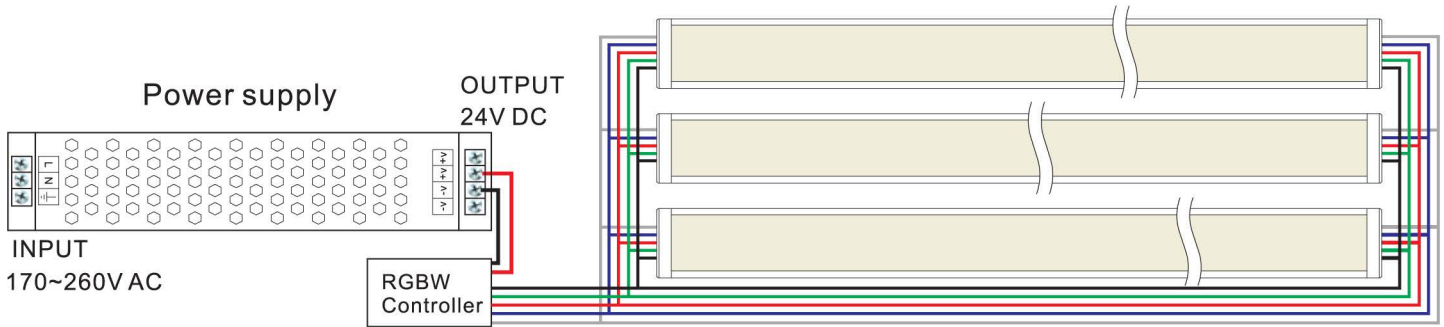
### Tunable Color NEON



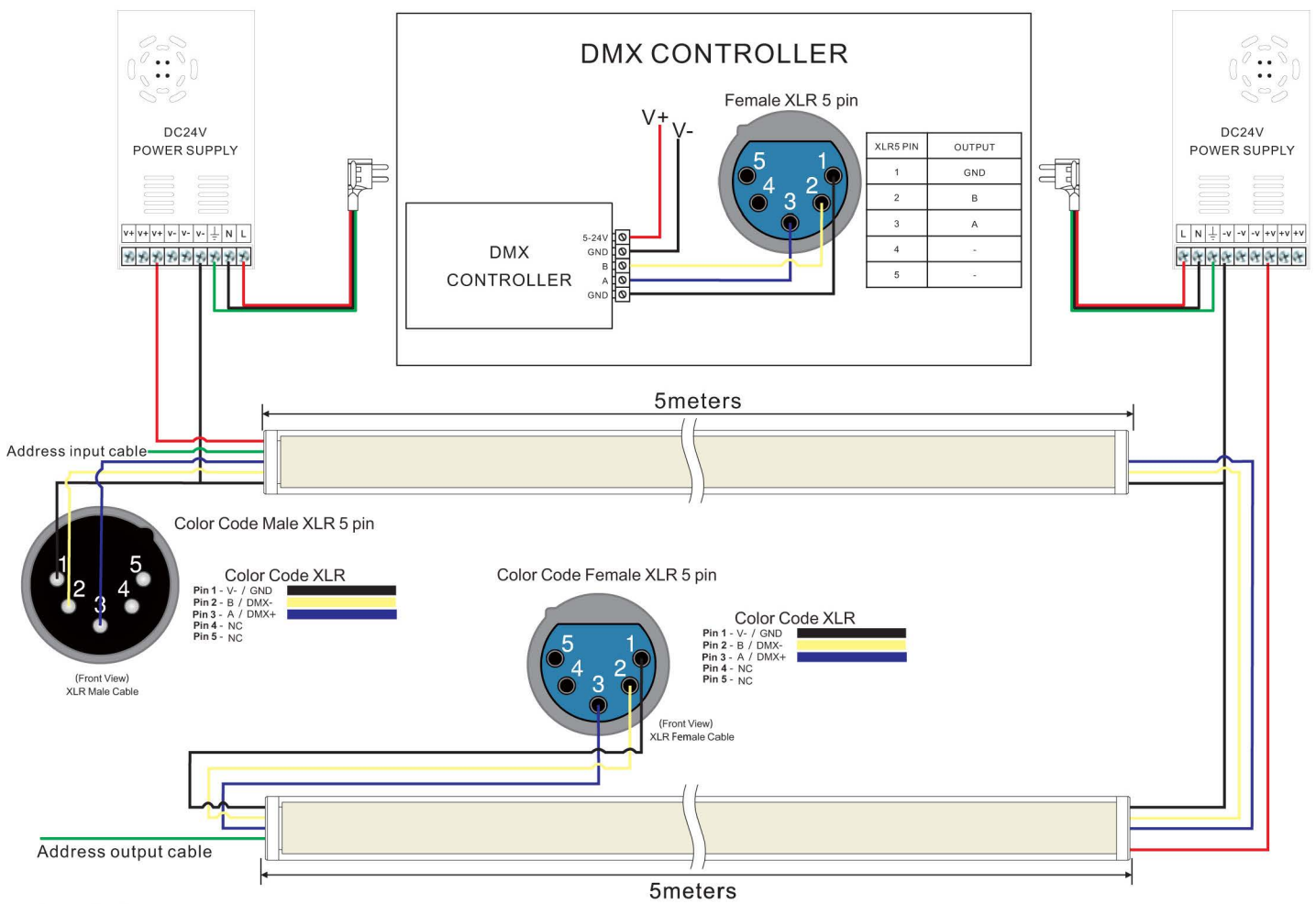
### RGB Color NEON



## RGBW Color NEON



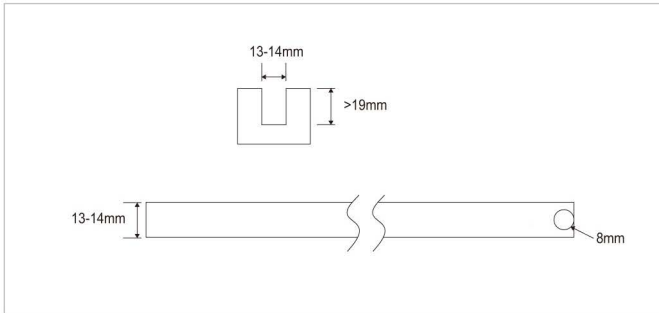
## DMX512 RGB NEON



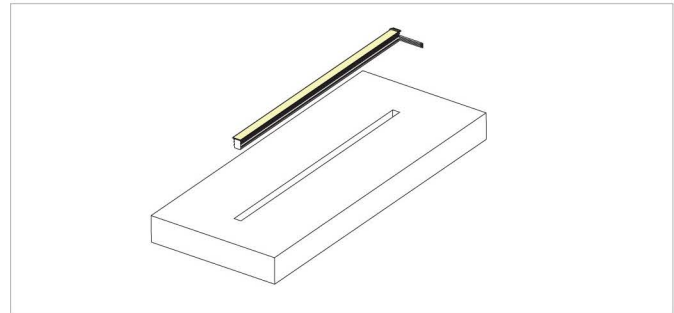
**Important:**

1. Regular DMX512 LED Strip not include the XLR connector, if need XLR connector, extra cost will be added.
2. If you want to change the starting address, you will need a DMX Address Editor, available on our website.

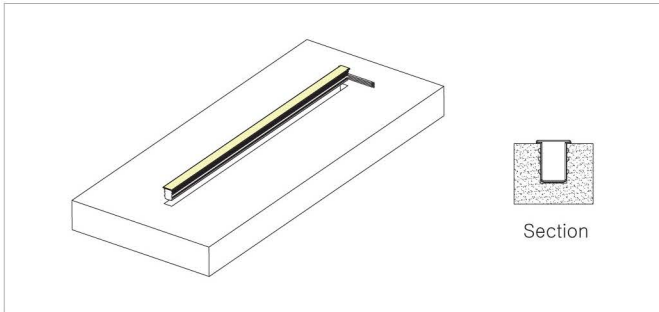
## Installation



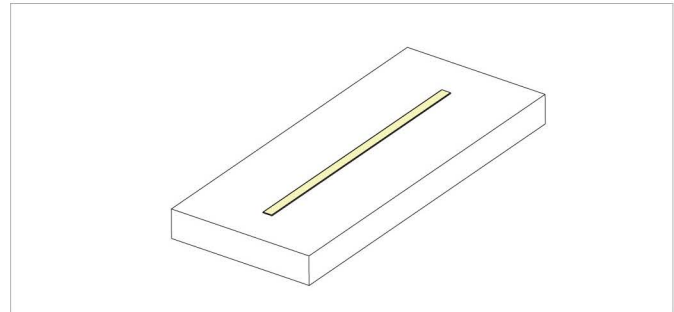
1. Make grooves and outlet holes according to the dimensions shown in the picture.



2. Pass the cable of the light through the reserved hole as shown in the figure.



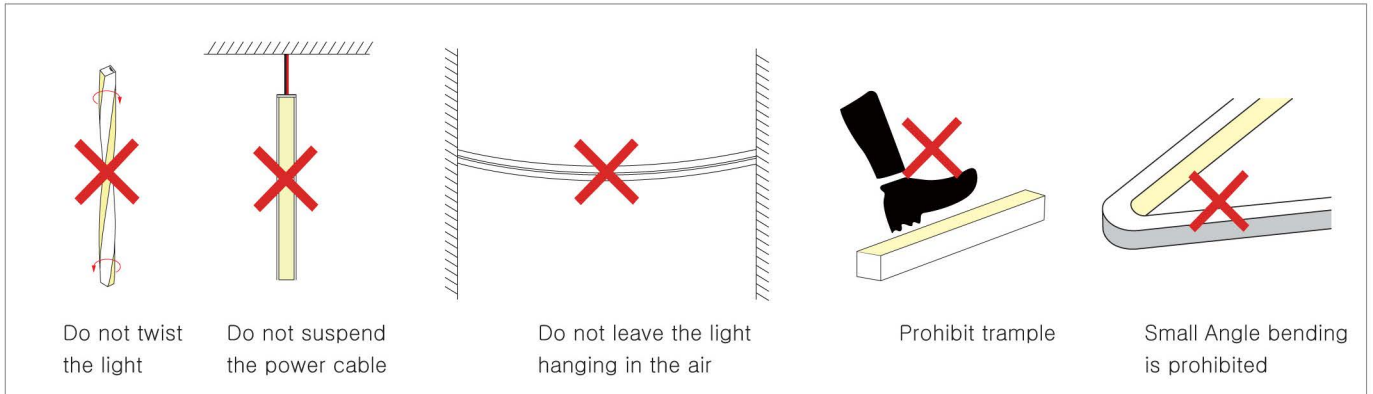
3. Align the light to the groove, press the glowing surface of the light, and fully embed the light into the groove.



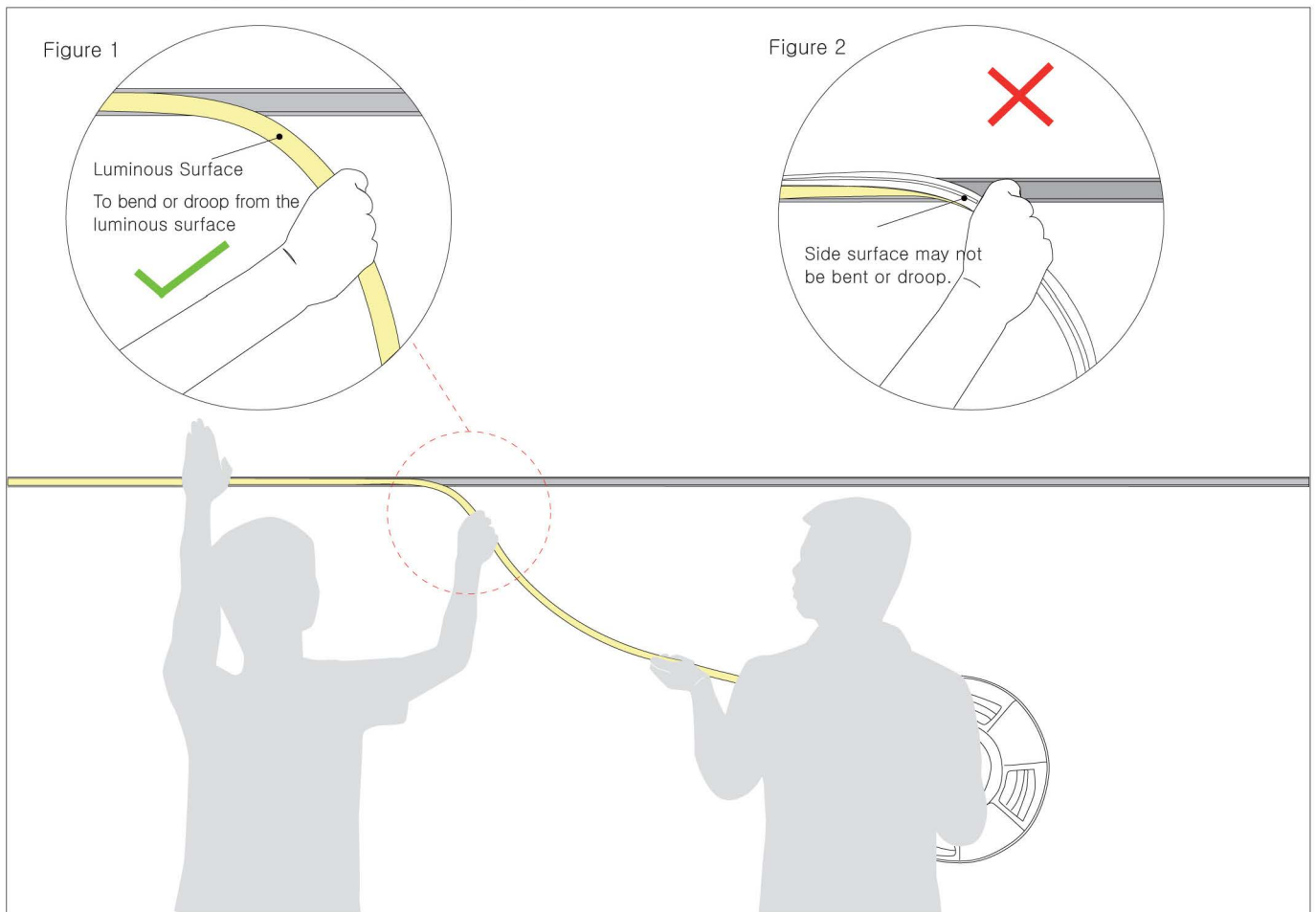
4. Completed.



Cautions



Installation Precautions – Side Mounted ( If the length of the light is more than 2 meters, two persons must work together to install it. )



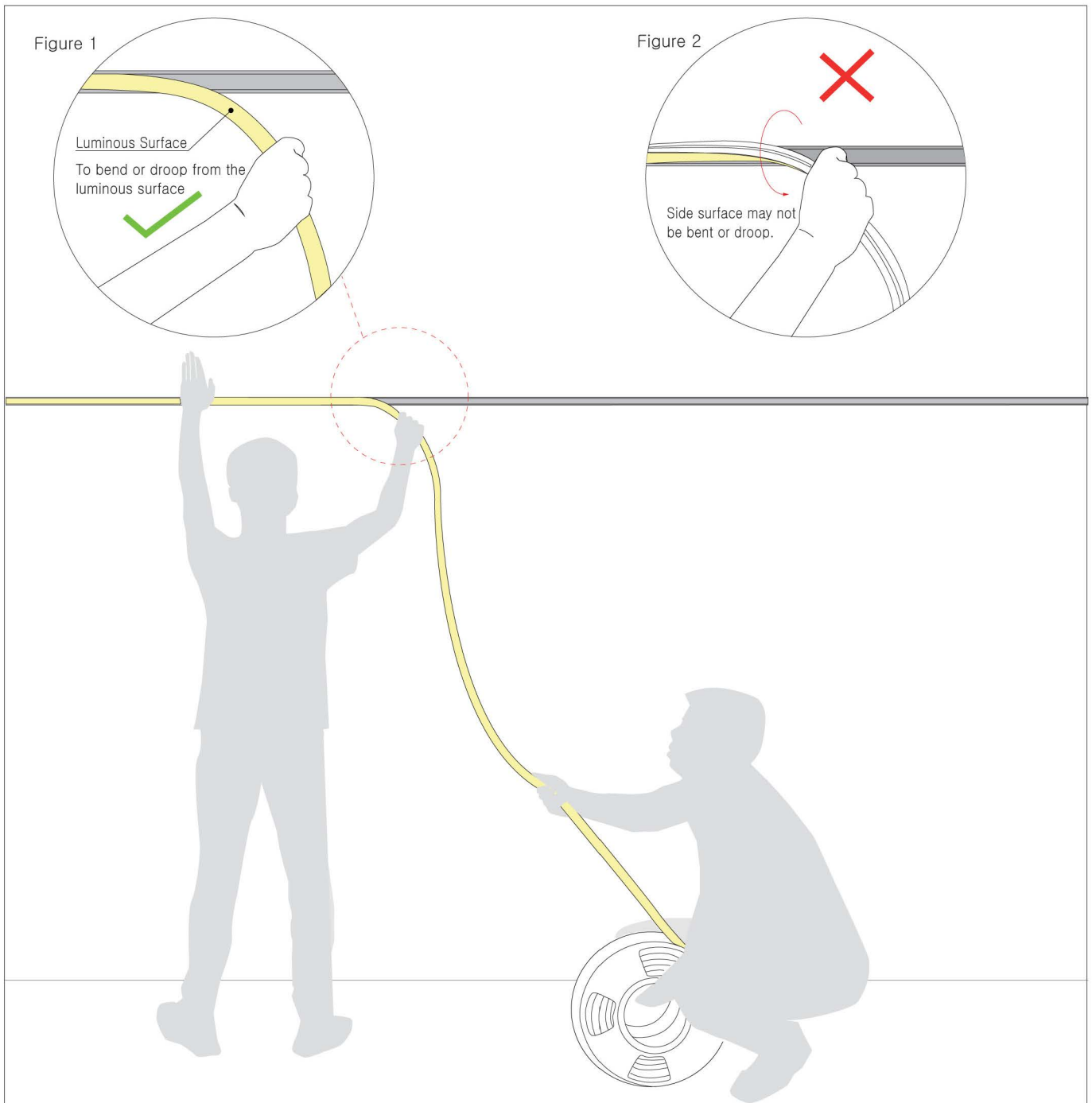
1. Installer:

- Press the light with the palm of the left hand to slowly load it into the slot. Straighten the light with right hand so that it droop in the direction of your hand. See Figure 1.
- Side surface may not be bent or droop. See Figure 2.

2. Assistant:

- Cooperate with the installer to lift the reel of the light, and then slowly deliver the light to installer. Do not pull or twist the light during the installation.

**Installation Precautions – Side Mounted** (If the length of the light is more than 5 meters, two persons must work together to install it.)



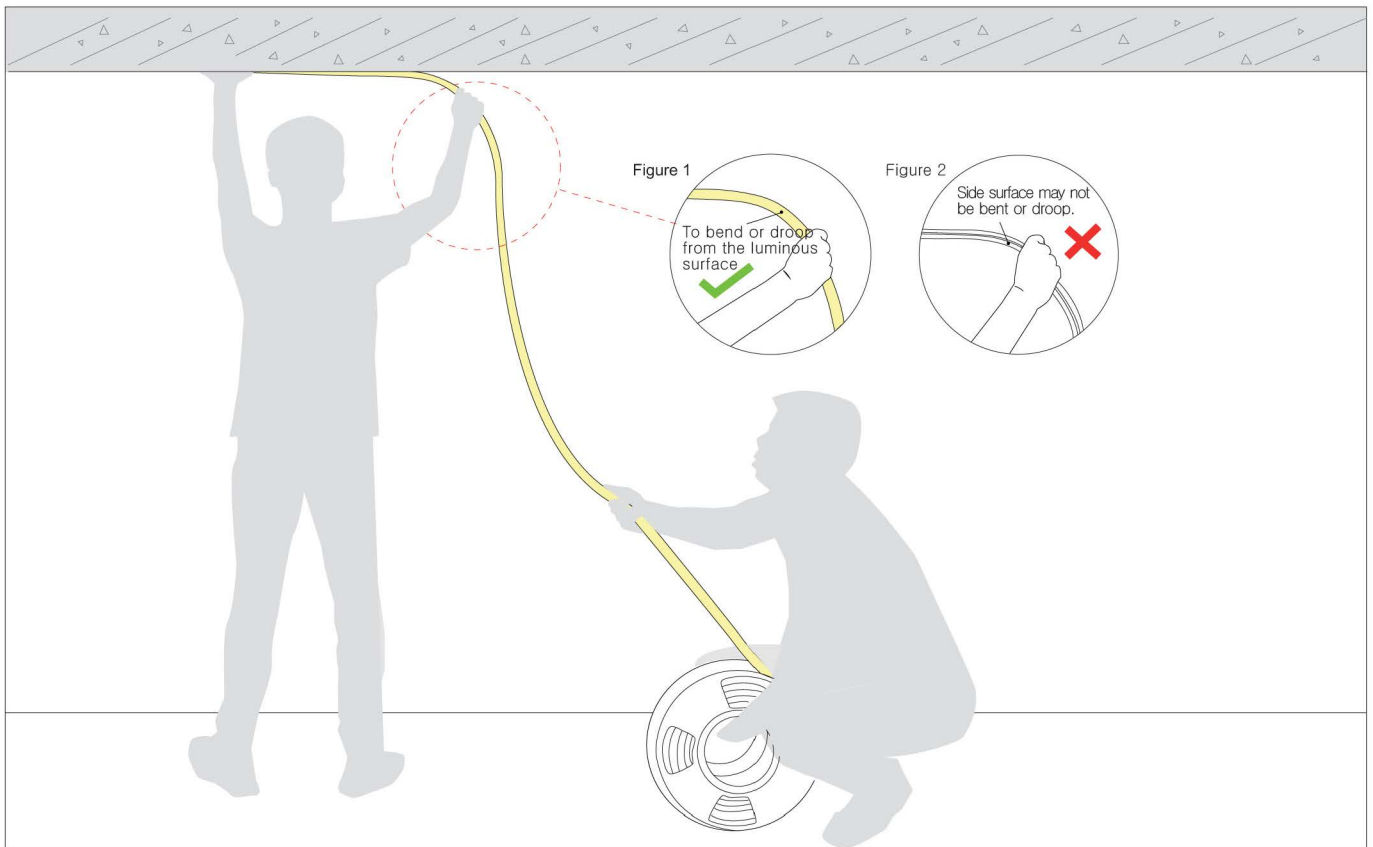
**1. Installer:**

- Press the light with the palm of the left hand to slowly load it into the slot. Straighten the light with right hand so that it droop in the direction of your hand. See Figure 1.
- Side surface may not be bent or droop , See Figure 2.

**2. Assistant:**

- Cooperate with the installer to slowly deliver the light to installer. Do not pull or twist the light during the installation.

## Installation Precautions – Top Mounted ( If the length of the light is more than 2 meters, two persons must work together to install it.)



### 1. Installer:

- Press the light with the palm of the left hand to slowly load it into the slot. Straighten the light with right hand, hold it and rotate it 90° to droop it in the direction of your hand. See Figure 1.
- Side surface may not be bent or droop, See Figure 2.

### 2. Assistant:

- Cooperate with the installer to slowly deliver the light to installer. Do not pull or twist the light during the installation.

## Notes

Cooperate with the installer to slowly deliver the light to installer. Do not pull or twist the light during the installation.

Current of the light	Specifications of the cable								
	L=1M	L=2M	L=4M	L=6M	L=8M	L=10M	L=12M	L=14M	L=16M
1A	AWG26	AWG23	AWG21	AWG18	AWG18	AWG17	AWG16	AWG15	AWG15
2A	AWG23	AWG21	AWG18	AWG16	AWG15	AWG14	AWG13	AWG12	AWG12
3A	AWG22	AWG18	AWG16	AWG14	AWG13	AWG12	AWG11	AWG11	AWG10
4A	AWG21	AWG18	AWG15	AWG13	AWG12	AWG11	AWG10	AWG9	AWG9
5A	AWG20	AWG17	AWG14	AWG12	AWG11	AWG10	AWG9	AWG9	AWG8
6A	AWG18	AWG16	AWG13	AWG11	AWG10	AWG9	AWG8	AWG8	AWG7
7A	AWG18	AWG15	AWG12	AWG11	AWG9	AWG8	AWG8	AWG7	AWG6
8A	AWG17	AWG15	AWG12	AWG10	AWG9	AWG8	AWG7	AWG7	AWG6
9A	AWG17	AWG14	AWG11	AWG10	AWG8	AWG7	AWG7	AWG6	AWG5
10A	AWG16	AWG14	AWG11	AWG9	AWG8	AWG7	AWG6	AWG6	AWG5

- ※ The unused light should be sealed with the packaging bag to avoid prolonged exposure.
- ※ Please use DC24V isolated constant voltage power supply with ripple voltage less than 5%. Using other types of power supply may damage the light or cause other safety risks.
- ※ In practical application, 20% allowance should be reserved for power supply to ensure the stability of power supply.
- ※ It is recommended that professionals connect the power supply. Do not connect the power supply with live power to avoid electric shock.
- ※ Please confirm whether the voltage of the power supply is consistent with the voltage of the light; Pay attention to the positive and negative poles of the power cord, do not connect wrong, so as not to cause product damage;
- ※ When multiple power supplies are used, ensure that the positive poles of the power supply are not connected in parallel. Otherwise, the power supply system may be unstable or damaged after long-term operation.
- ※ If the actual application length exceeds the specified length, it will lead to overload, heating and uneven brightness of the light.
- ※ During installation, please do not scratch, twist, or bend the light irregularly. Otherwise, the light may be damaged beyond repair.
- ※ To ensure the life and reliability of the light, please do not over bend the light, which will damage the product itself.
- ※ To protect your eyes, please avoid staring at the glowing surface of the light for a long time.
- ※ Non-professionals are forbidden to install, disassemble and maintain the product.
- ※ Do not use any acid or alkaline adhesive to fix the light (including but not limited to glass glue, etc.)
- ※ Because of the difference in structure, even if the same color temperature value, different sizes of light will look slightly different colors. Please confirm it before use.

Tests showed that methanol and benzenes will have yellowing effects on silicone.

In the newly decorated interior environment, epoxy floor paint, wall paint, wallpaper adhesive, various decoration materials or new furniture, they are likely to release of methanol and benzenes.

It is recommended to remove methanol and benzenes first, or ventilate for a period of time in the newly decorated interior environment before install the silicone neon light, to avoid affecting the silicone body.