

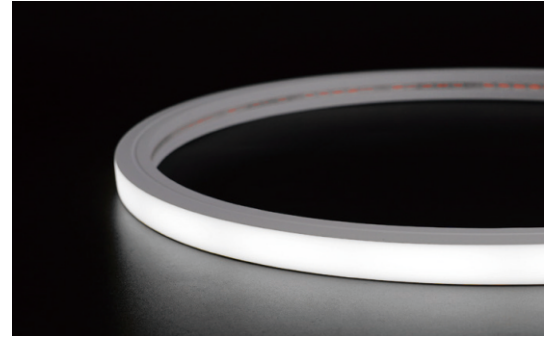
# SPECIFICATION AC12V NEON

NA-T1615 12V IP67

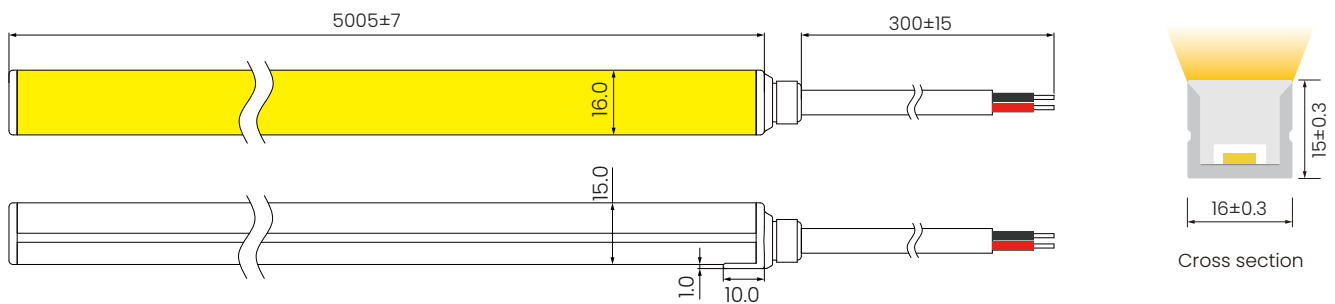


## Features

- It is made of Dow Chemical SILASTIC™ ET-7021 silicone rubber, which provides high transparency and high strength.
- Environmental protection grade silicone material, integrated extrusion molding process.
- Unique optical light distribution structure design, uniform lighting surface and no shadow.
- IP67 protection level, salt solution resistance, acids & alkalis and UV resistance.
- Excellent toughness, simple and stylish appearance, delicate and unique.
- 3-5 years warranty, long-life LED≥50000 hrs.



## Dimensions(Unit:mm)



## General Parameters

|                              |                                |
|------------------------------|--------------------------------|
| Voltage                      | AC12V                          |
| LED Solder-Point Temperature | Max. 65°C                      |
| Storage Temperature          | -25°C~ 60°C                    |
| Ambient Temperature          | Min.-25°C, Max ( Table below ) |
| CRI                          | see parameter tables           |

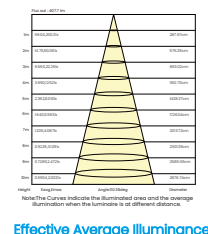
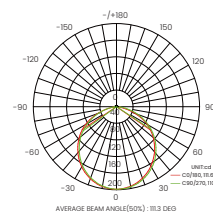
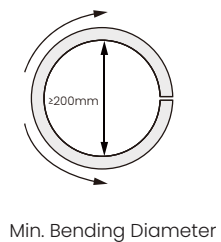
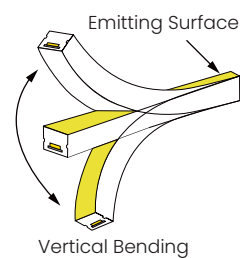
## Power Ratings

|                         |      |
|-------------------------|------|
| Power(w/m)              | 10   |
| Efficacy(lm/w)@4000K    | 54.2 |
| Max Ambient Temperature | 45°C |

Due to the tolerance of the production and electrical components, output value and electrical power can vary up to 10%

## Length Standard

| Length Range (M)    | Final Length(mm) |                     |                  | Tolerance (mm) |
|---------------------|------------------|---------------------|------------------|----------------|
|                     | Integral end cap | Solder free end cap | Silicone end cap |                |
| 0M<Neon Strip(L)≤5M | L+5              | L+32                | L+5.5            | ±7             |



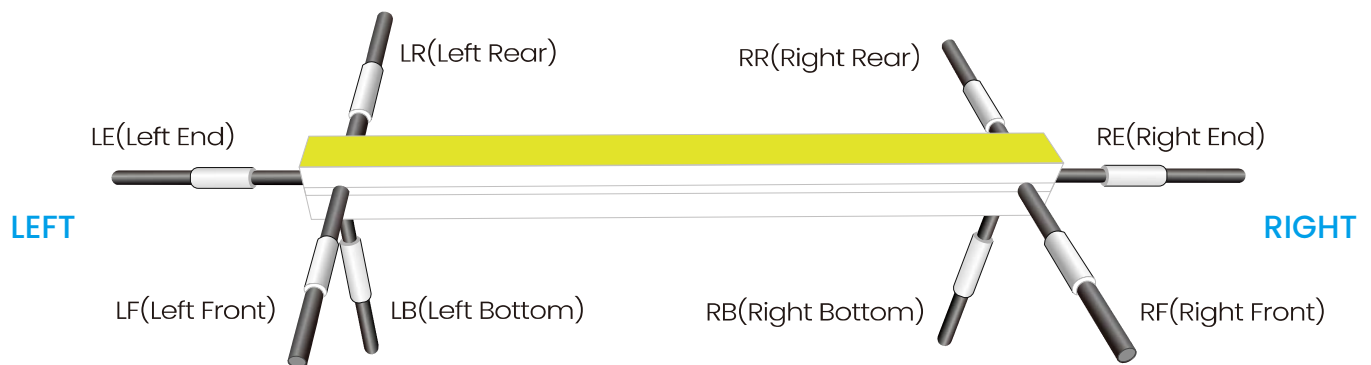
Note: The above data is based on AC12V, 10W/M, single colour with 4000k colour temperature. If you need IES files for other types, please contact our sales department.

## Single color : Model NA-T1615AC12-Cx-A

| CCT(K)                                | CRI | Voltage | Power(W/m) | Lumen (lm/m) | Efficiency (lm/w) | Unit Length (mm) | Max. Run Length (M) |
|---------------------------------------|-----|---------|------------|--------------|-------------------|------------------|---------------------|
| 2700K±150                             | ≥90 | Ac12V   | 10         | 504          | 50.4              | 35.7             | 5                   |
| 3000K±150                             | ≥90 | Ac12V   | 10         | 525          | 52.5              | 35.7             | 5                   |
| 4000K <sup>+400</sup> <sub>-200</sub> | ≥90 | AC12V   | 10         | 542          | 54.2              | 35.7             | 5                   |
| 5000K <sup>+500</sup> <sub>-300</sub> | ≥90 | AC12V   | 10         | 524          | 52.4              | 35.7             | 5                   |
| 6500K±500                             | ≥90 | Ac12V   | 10         | 524          | 52.4              | 35.7             | 5                   |

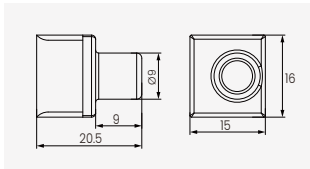
- Maximum run length refers to the maximum length powered from one end using the standard 30 cm cable.
- For the load capacity of the solder free end cap, please refer to <The Maximum Load Capacity of Power Cables>
- The specified color temperature refers to the finished product.
- The values shown are typical. Due to production and component tolerances, light output and electrical power may vary by up to ±10%.
- All products can be dimmed; The dimmer voltage must match the rated voltage of the LED strip.
- The output frequency of the dimmer of the constant-current led light should be **less than 2k Hz** , and the output PWM can control the led light.

## Cable Entry Directions

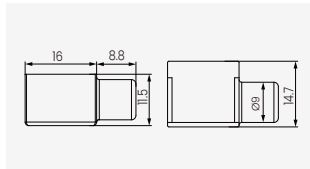


## Cable Entry and End Cap Options (Unit: mm)

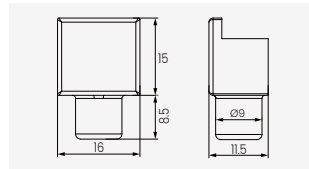
### Integral End Cap (IP67)



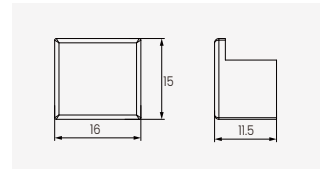
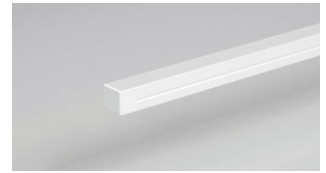
Front Cable Entry



Side Cable Entry

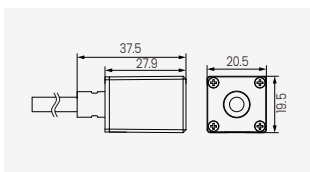


Bottom Cable Entry

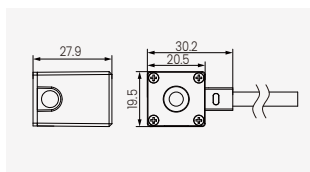


Closed End Cap

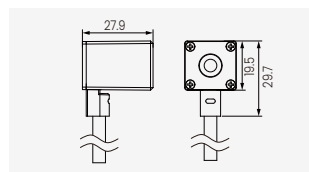
### Solder Free End Cap (IP67)



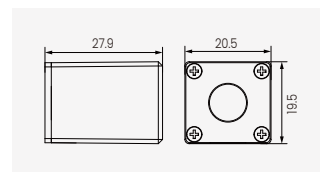
Front Cable Entry



Side Cable Entry

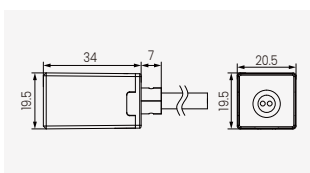
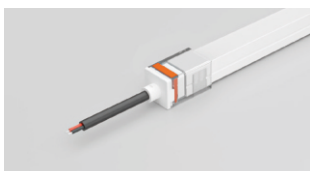


Bottom Cable Entry

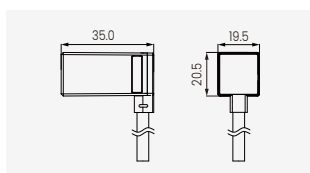


Closed End Cap

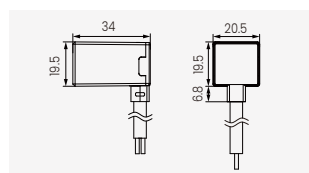
### Solder Free End Cap Without Screws (IP67)



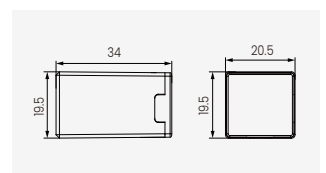
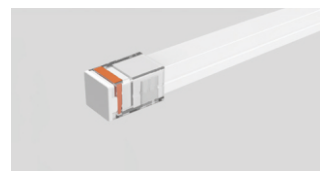
Front Cable Entry



Side Cable Entry

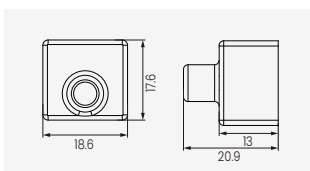
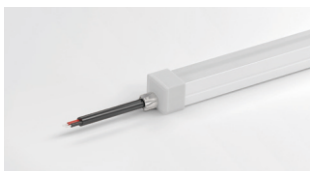


Bottom Cable Entry

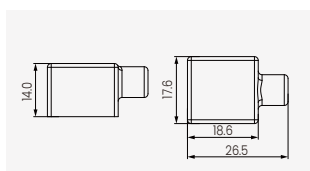
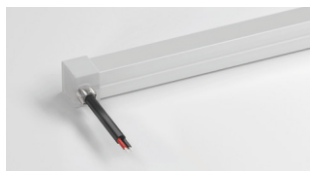


Closed End Cap

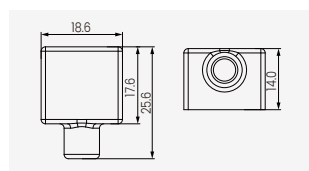
### Silicone End Cap (IP67)



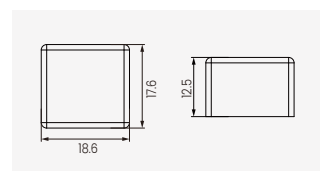
Front Cable Entry



Side Cable Entry

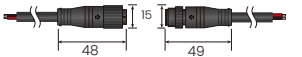
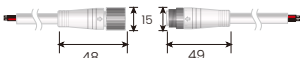


Bottom Cable Entry



Closed End Cap

## Cables and Connectors

| Cable Type                               | Schematic Diagram                                                                 | Specification                                               | Core | Electrical Properties |
|------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------|------|-----------------------|
| PVC Cable                                |  | OD: 5.0 mm / Inner core: 20AWG                              | ● ●  | Red V+/Black V-       |
| Waterproof Connector with PVC Cable      |  | OD: 5.0 mm / Inner core: 20AWG<br>M12 Male/Female Connector | ● ●  | Red V+/Black V-       |
| Silicone Cable                           |  | OD: 6.0 mm / Inner core: 20AWG                              | ● ●  | Red V+/Black V-       |
| Waterproof Connector with Silicone Cable |  | OD: 6.0 mm / Inner core: 20AWG<br>M12 Male/Female Connector | ● ●  | Red V+/Black V-       |

## Cable Maximum Load Capacity

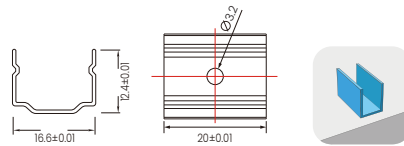
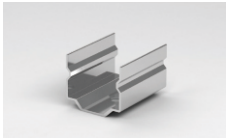
a. For assembled end caps with single-ended power supply, the maximum load is shown below.

| Color        | Maximum load current(A) | AC12V Maximum load Power(W) |
|--------------|-------------------------|-----------------------------|
| Single color | 4.2                     | 50                          |

b. When a single-color LED neon strip is powered from one end and the power exceeds the values listed, use an integral or silicone end cap.

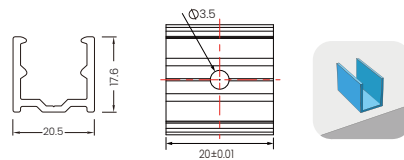
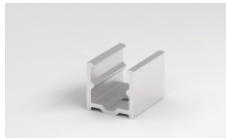
## Installation Accessories

## Mounting Clips



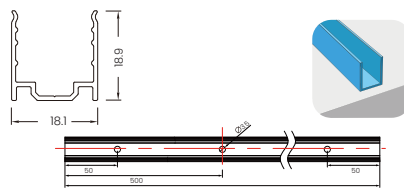
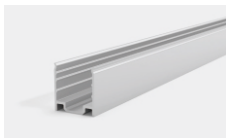
|              |                     |
|--------------|---------------------|
| Name         | Mounting Clips      |
| Dimension:   | 20x16.6x12.4mm      |
| Accessories: | M3 × 16 mm (SUS304) |

## Aluminum Mounting clips



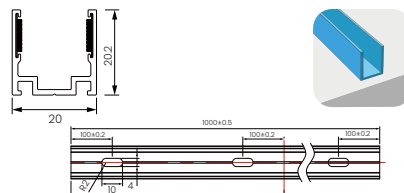
|              |                         |
|--------------|-------------------------|
| Name         | Aluminum Mounting clips |
| Dimension:   | 20x20.5x17.6mm          |
| Accessories: | M3 × 16 mm (SUS304)     |

## Aluminum Profile



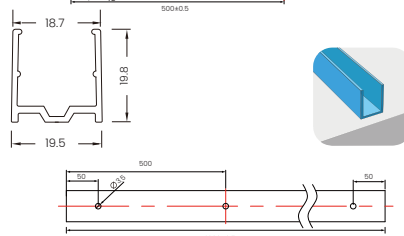
|              |                        |
|--------------|------------------------|
| Name         | Aluminum Profile       |
| Dimension:   | 1000(±0.5)x18.1x18.9mm |
| Accessories: | M3 × 16 mm (SUS304)    |

## Internal Gear Profile



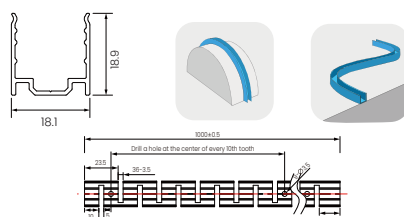
|              |                       |
|--------------|-----------------------|
| Name         | Internal Gear Profile |
| Dimension:   | 1000(±0.5)x20x20.2mm  |
| Accessories: | M3 × 16 mm (SUS304)   |

## PC Profile



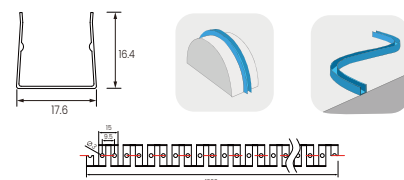
|              |                        |
|--------------|------------------------|
| Name         | PC Profile             |
| Dimension:   | 1000(±0.5)x19.5x19.8mm |
| Accessories: | M3 × 16 mm (SUS304)    |

## Curved Profile



|              |                        |
|--------------|------------------------|
| Name         | Curved Profile         |
| Dimension:   | 1000(±0.5)x18.1x18.9mm |
| Accessories: | M3 × 16 mm (SUS304)    |

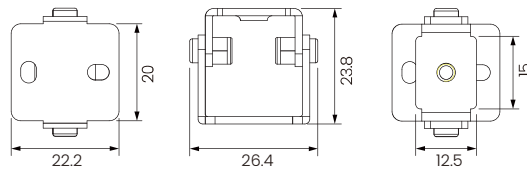
## Curved Profile



|              |                     |
|--------------|---------------------|
| Name         | Curved Profile      |
| Dimension:   | 1000x17.6x16.4mm    |
| Accessories: | M3 × 16 mm (SUS304) |

## Installation Accessories

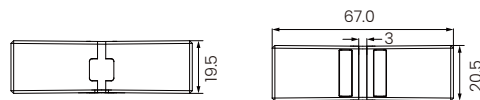
Adjustable Angle Clip  
(use with aluminum clips or profile)



Dimension: 22.2x26.4x23.8mm

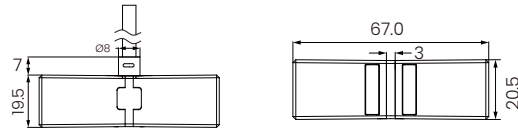
Accessories: Screw M3x25mm(SUS304)/M3.5x8mm(SUS304)

IP67 Connector (No Cable Entry)



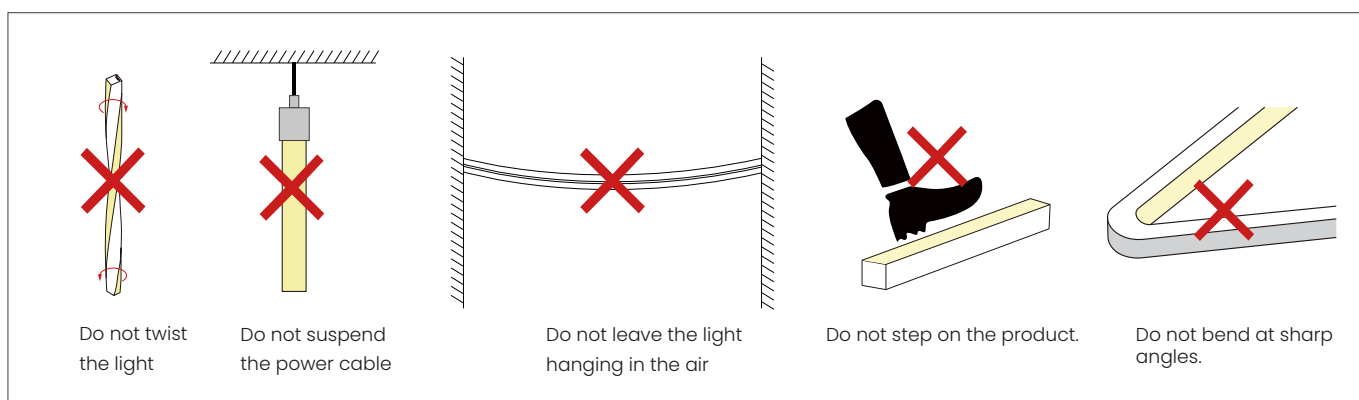
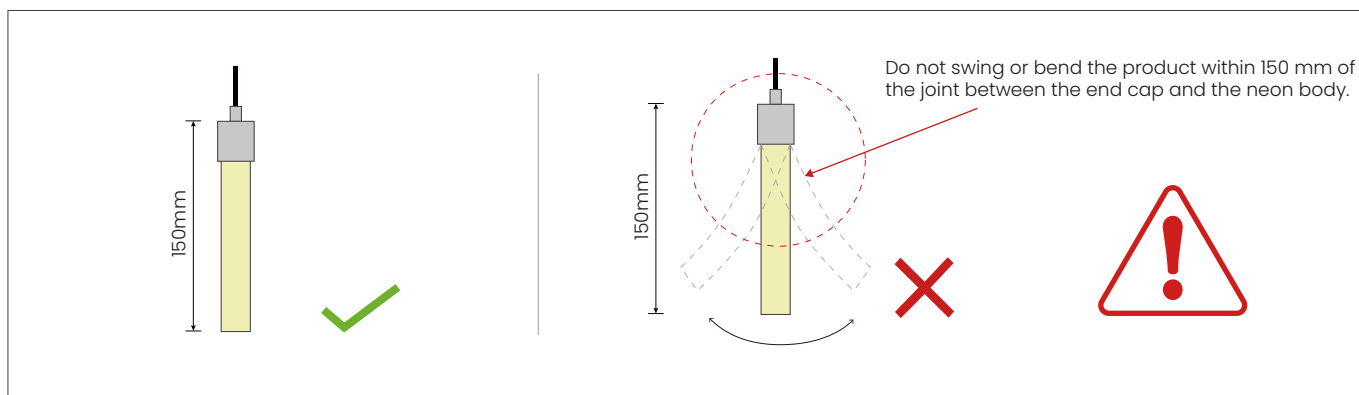
To connect 2pcs of neon after you cut it

IP67 Connector (Cable Entry)

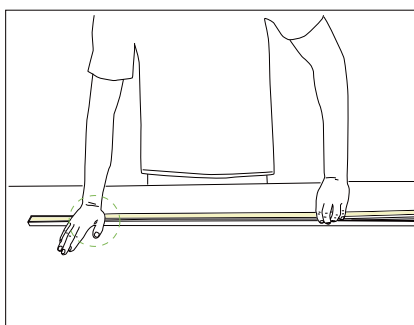


To connect 2pcs of neon after you cut it

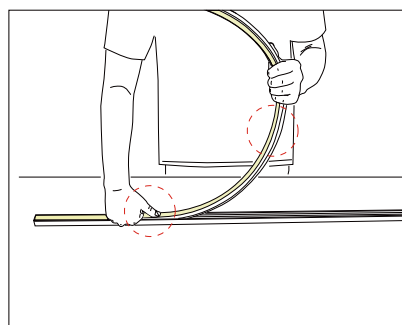
## Installation Precautions



## Insert into the Profile

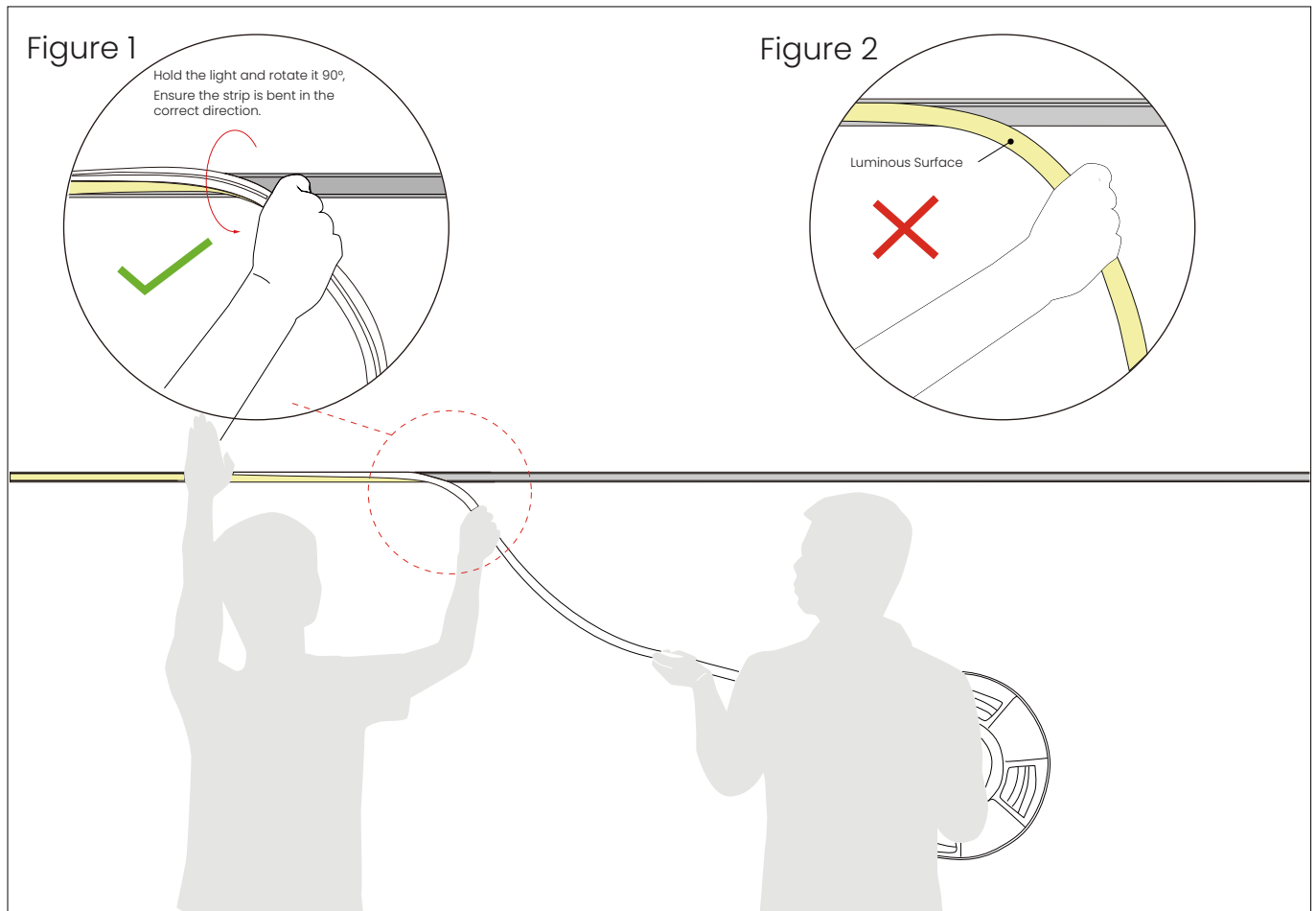


- Use your palm to slowly press the LED strip into the channel, then gently straighten it along the channel.
- Try to keep the led strip in a flat state during the installation process.



- Do not press the LED strip with one finger; this may damage internal components.
- The bent arc of the led strip should not be too large during installation.

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



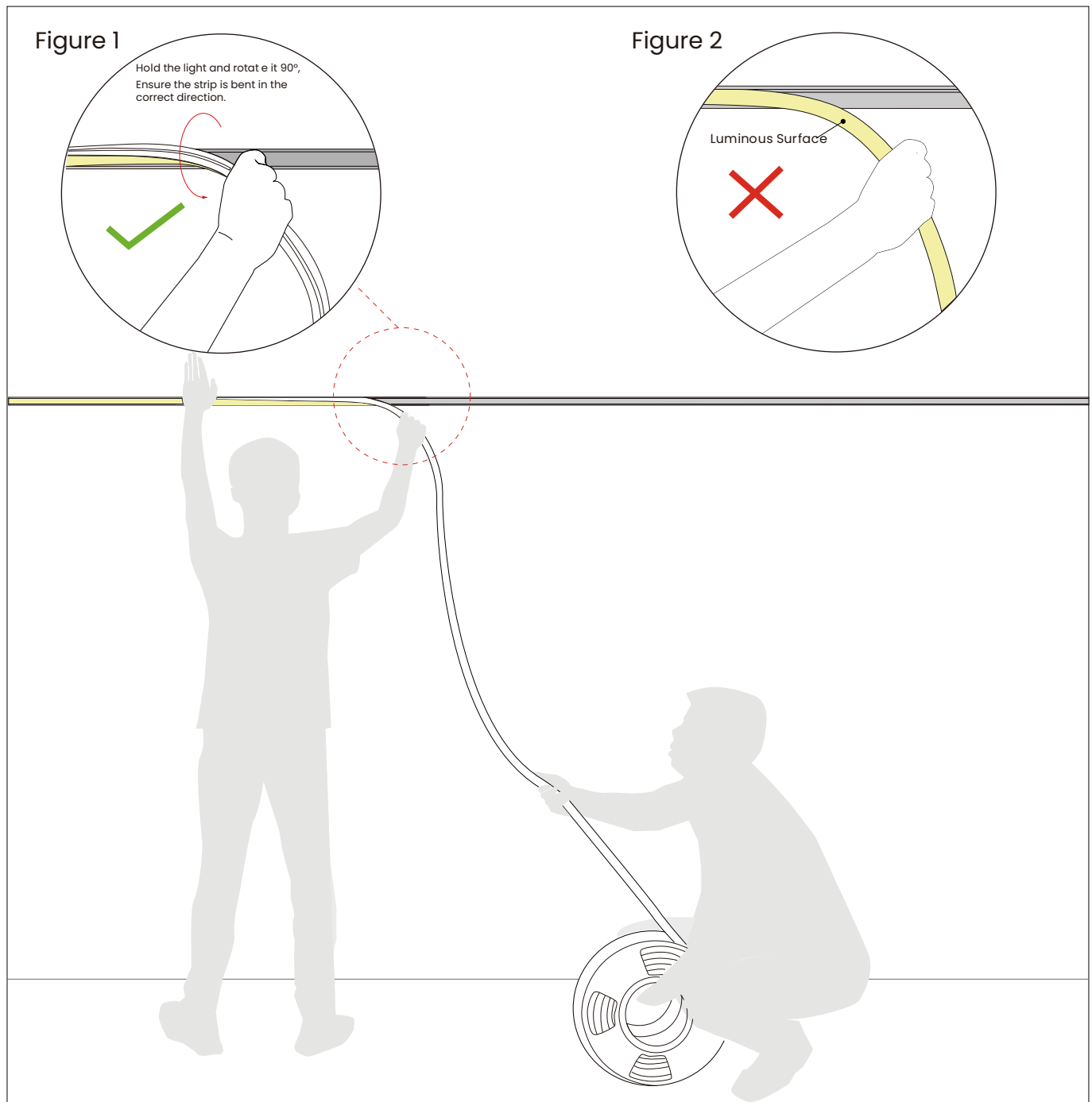
### 1.Installer:

- Press the light with the palm of the left hand to slowly load it into the slot. Use your right hand to guide the strip so it bends downward in the correct direction. See Figure 1.
- Do not bend the luminous surface to the side. See Figure 2.

### 2.Assistant:

- Cooperate with the installer to lift the reel of the light, and then slowly feed the strip to the 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 people must work together to install it.)



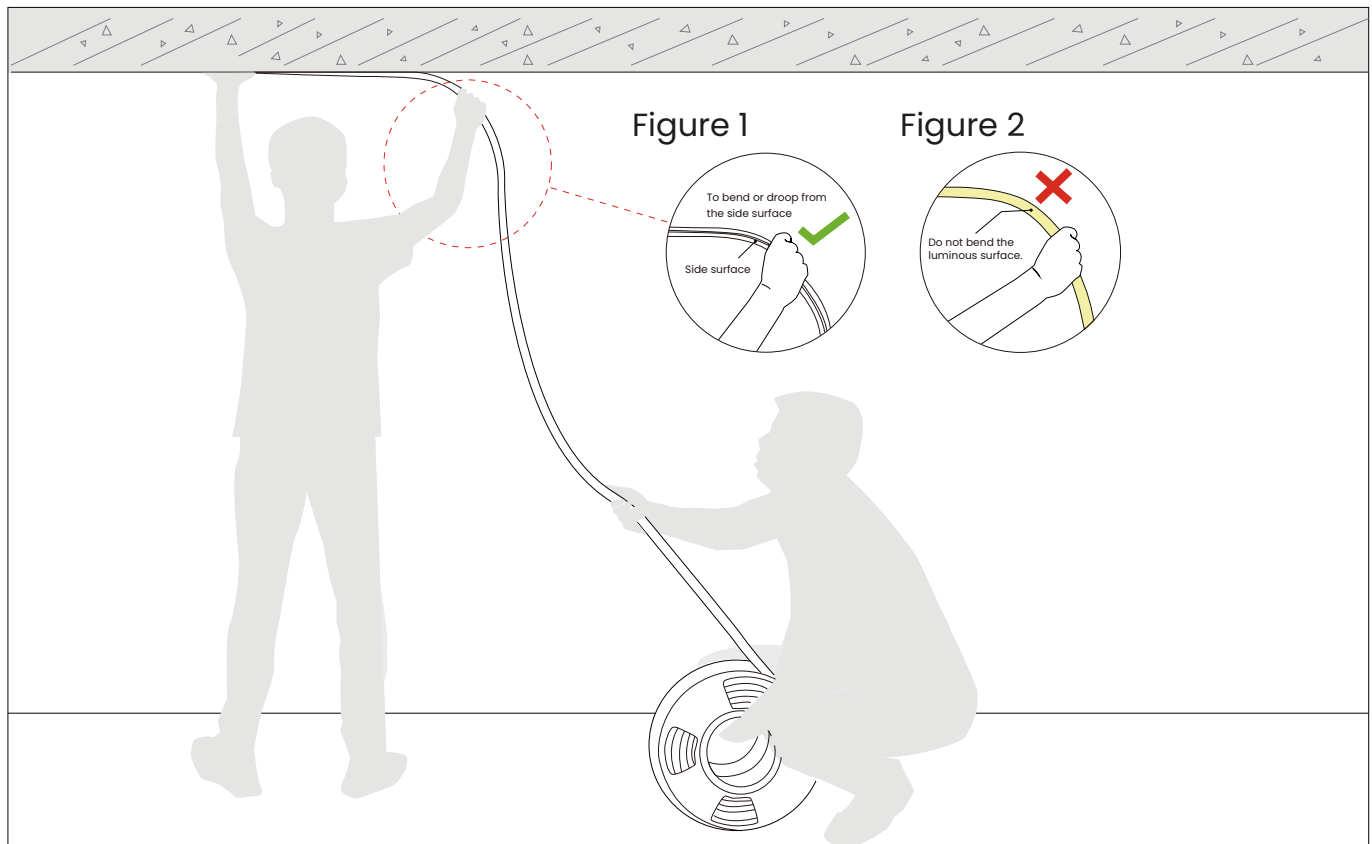
### 1.Installer:

- Press the light with the palm of the left hand to slowly load it into the slot. Use your right hand to guide the strip so it bends downward in the correct direction. See Figure 1.
- Do not bend the luminous surface to the side. See Figure 2.

### 2.Assistant:

- Cooperate with the installer to slowly feed the strip to the 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 people 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 your right hand so that it droop naturally. See Figure 1.

### 2.Assistant:

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

Packaging Information



Standard Packaging: White carton with paper reel inside.

| Model               | Qty/Roll(m) | Rolls/Carton | Carton Size     | Net Weight     | Gross Weight   |
|---------------------|-------------|--------------|-----------------|----------------|----------------|
| NA-T1615 AC12V IP67 | 5m          | 8            | 41 x 41 x 26 cm | 11.8 kg/carton | 13.2 kg/carton |

For reference only. Final packing information shall be subject to actual shipment.

## Notes

Cable size at the power-supply output depends on the total load current and cable length. Select the cable according to the table below.

| Light Current | Cable Specification |       |       |       |       |       |       |       |       |
|---------------|---------------------|-------|-------|-------|-------|-------|-------|-------|-------|
|               | 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.
- ※ Use a AC12V isolated constant-voltage power supply with ripple below 5%. Using other types of power supply may damage the light or cause other safety risks.
- ※ In practical application, Reserve at least 20% power-supply headroom.
- ※ 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 reverse polarity, 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 may cause overload, overheating, 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.
- ※ Installation, disassembly, and maintenance must be performed by qualified personnel only.
- ※ Do not use any acidic or alkaline adhesive to fix the light (including but not limited to glass glue, etc.)
- ※ IP67 products are not suitable for long-term immersion in water; IP68 versions are factory-customized only. User cutting or processing may compromise IP68 protection.
- ※ Because of the difference in structure, even if the same color temperature value, products of different sizes may appear slightly different in color.

Tests showed that formaldehyde and benzene compounds can cause yellowing of silicone. In newly decorated interiors, epoxy floor paint, wall paint, wallpaper adhesive, decoration materials, and new furniture may release formaldehyde and benzene compounds. It is recommended to remove these substances first, or ventilate the area for a period before installing the silicone neon light, to avoid affecting the silicone body.