



Professional LED Light Manufacturer  
Since 2008

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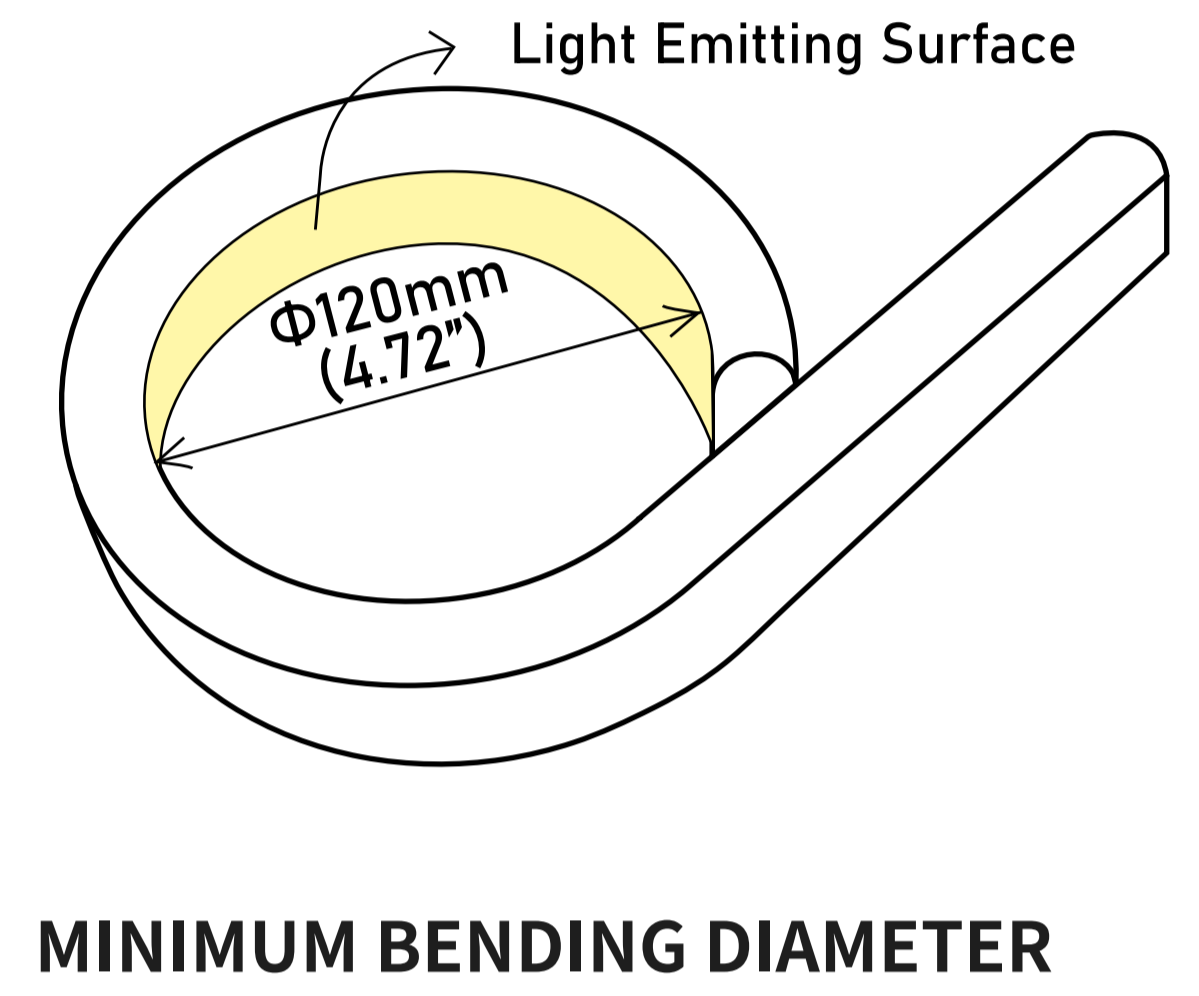
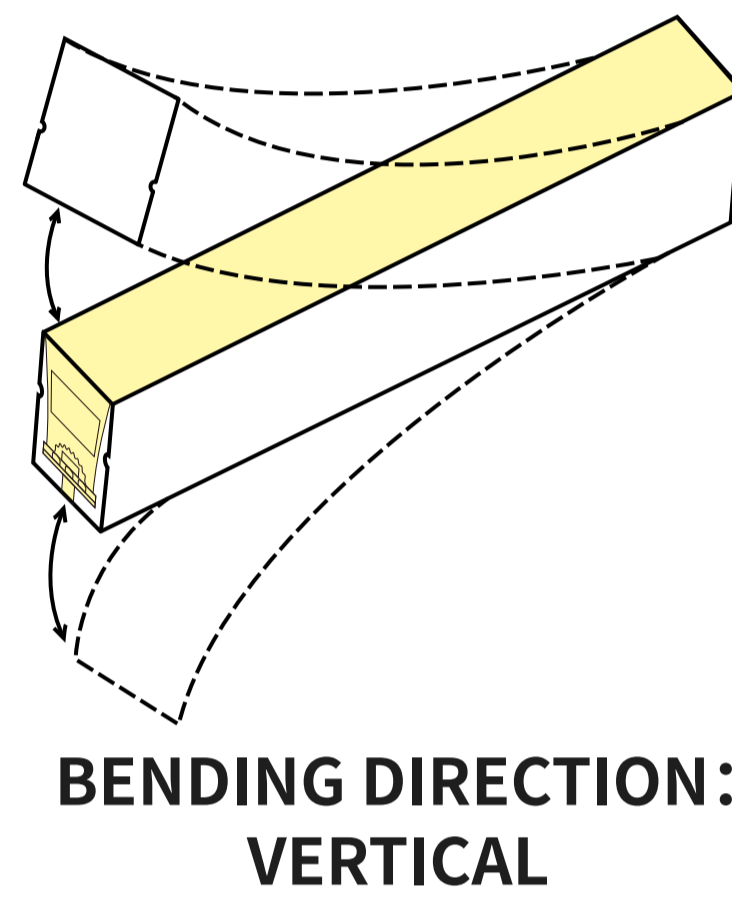
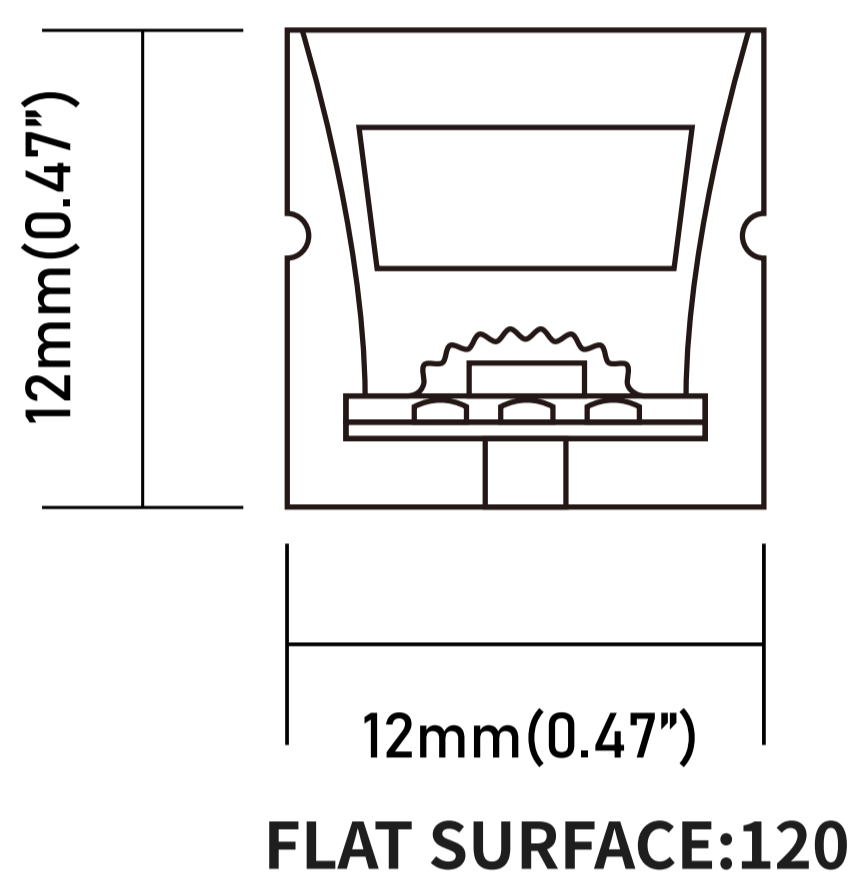
# 12x12mm FLAT

# LED NEON FLEX SILICONE DYNAMIC PIXEL RGB COLOR 24V

SKU:WJ-SNF-1212-D-RGB-24V



## Structural Drawing & Bending Direction

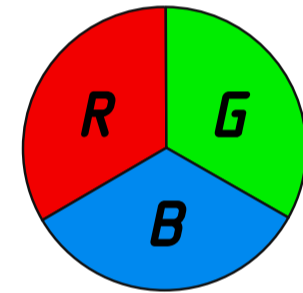


## Certifications



## Technical Data

SPI-RGB



**Color Temp**  
Red: 623.0nm  
Green: 520.1nm  
Blue: 468.2nm  
White: 6500K(Color mixing)

**Watts/m( 24V Flat)**  
Red: 6.91 W  
Green: 7.19 W  
Blue: 6.98 W  
White: 18.26 W(Color mixing)

**Lumen/m ( 24V Flat)**  
Red: 93.92 lm  
Green: 264.50 lm  
Blue: 41.35 lm  
White: 345.89 lm(Color mixing)

**Unit Cut(24V)** 5.56cm

**Max Loading(24V)** 5m

**LED Quantity(m)** 108 LEDs + 18 ICs  
IC code: SM16703P  
(compatible with all ICs and controllers in the WS2811, 1804, and 1809 series)

## Optical Parameter Chart for Integrating Sphere Testing

**Chroma Parameters**  
Chro.Coar.: x=0.2066 y=0.2538 u=0.1467 v=0.2704 duv=0.0339  
CCT: Tc=50000K Dominant Wave.: 484.2nm Purity: 49.5%  
Flux Ratio: R=15.1%,G=73.1%,B=11.9% Peak Wave.: 464.3nm Half Width: 21.6nm

**Bending Index:** Ra= 61.9  
R1 =69.4 R2 =61.4 R3 =56.8 R4 =77.1 R5 =84.8 R6 =57.3 R7 =53.7  
R8 =35.0 R9 =-114.8R10=5.3 R11=70.9 R12=62.1 R13=53.6 R14=72.7  
R15=47.6

**Photo Parameters**  
Flux: 345.06lm Effi.: 18.8lm/W Radiant: 1777.2mW Iv: 0.0mod

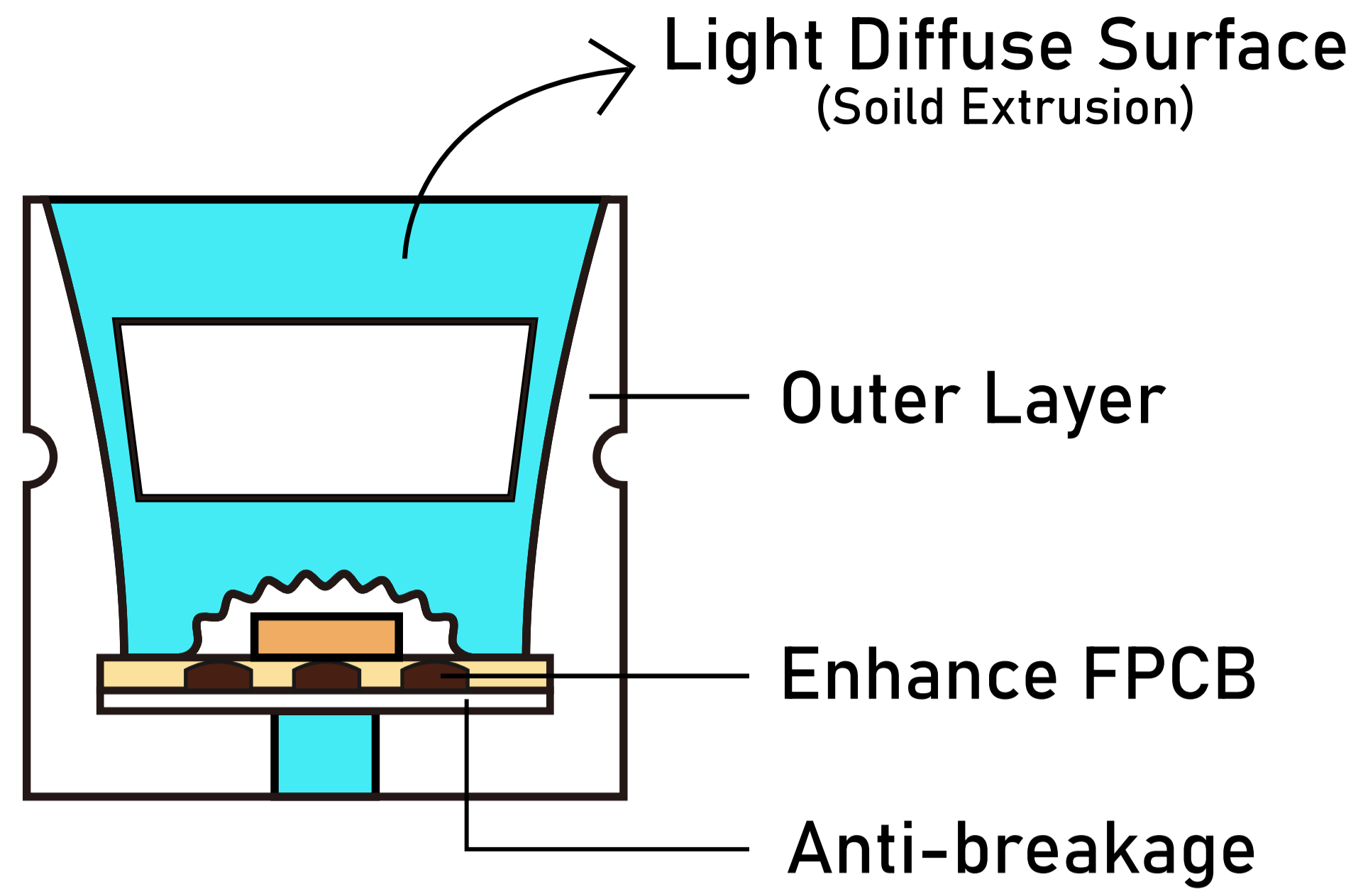
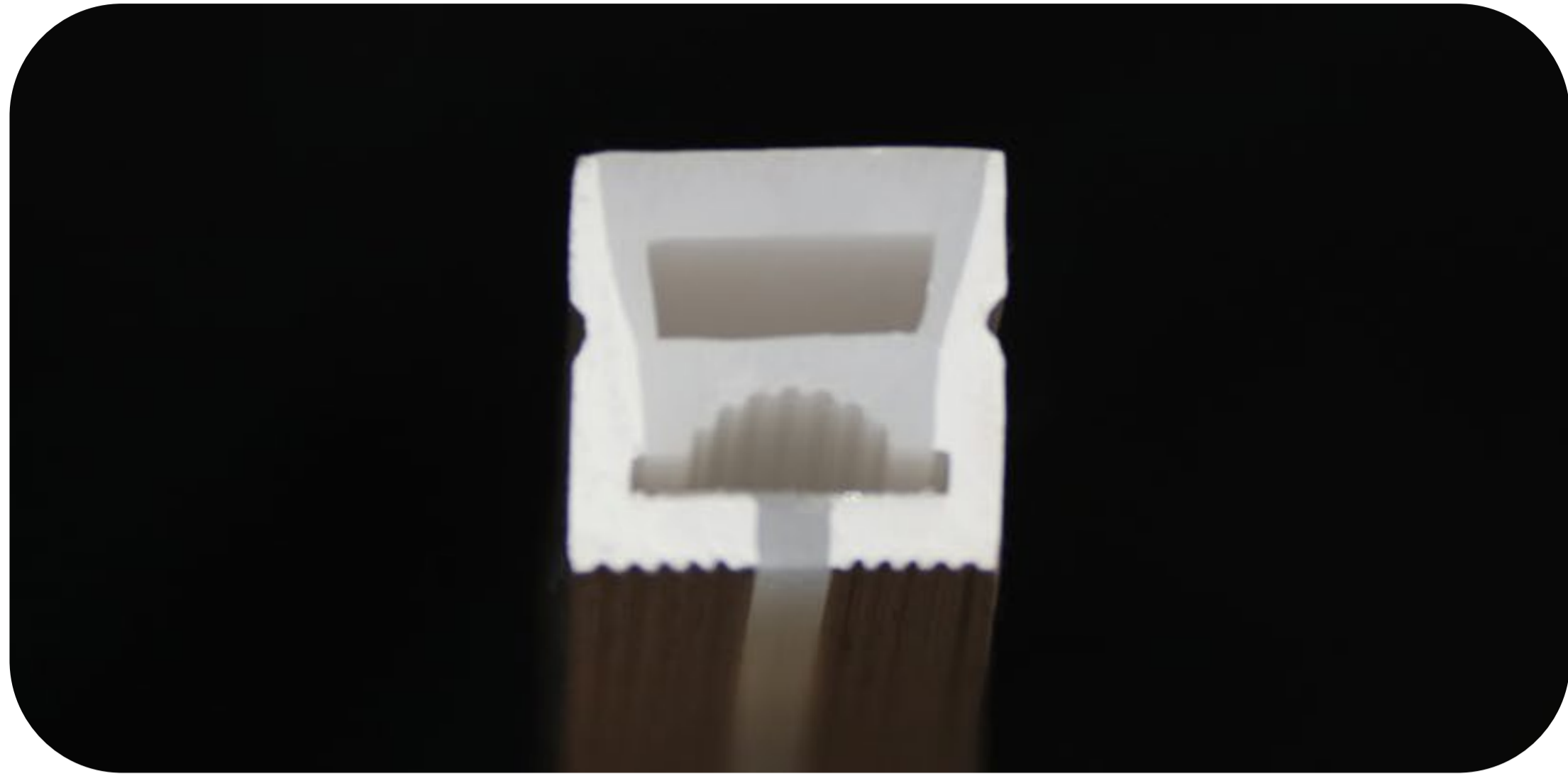
**Ele. Parameters**  
Voltage:U=24.000V Current:I=0.7600A  
Power:P=18.26W Power Factor:PF=1.000

## Reliability test

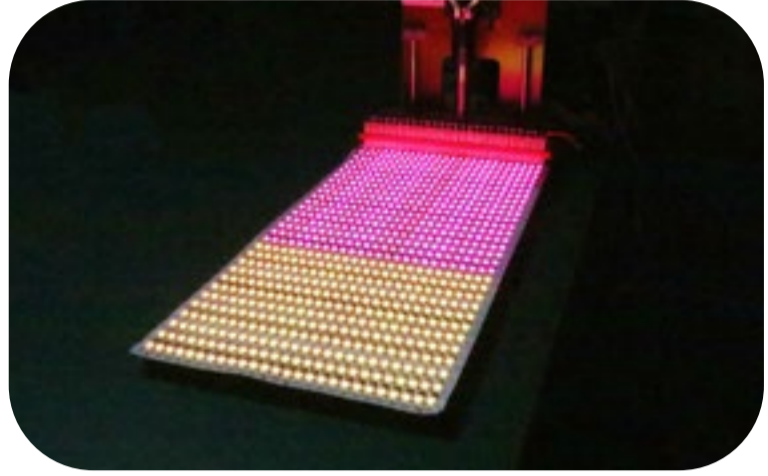
TEST CATEGORY	TEST ITEMS	STANDARD/VALUE
Optical Test	Spectrum Analysis	IES LM 79(CCT, lumen, CRI, SDCM, XY, wavelength)
	Photometric Distribution	IES LM 79(lumen intensity distribution & Lux diagram)
	Lumen Maintenance & Lifetime	IES LM84 & IES TM 28
Temperature Test	Nomal Temperature Test -25°C	UL 1598 & UL2388 & IEC60598-1 & IEC60598-2-21
	Abnormal Operation Test -70°C	UL 1598 & UL2388 & IEC60598-1 & IEC60598-2-21
Physics Test	Bending Test	Manufacturer-defined, 1000 cycles
	Swing Test	UL2388, >750 cycles
	Tensile Test	Manufacturer-defined, >the weight of light in max. running length by double ends feed
	Twist Test	Manufacturer-defined, 200 cycles
	IK08	IEC62262
Weathering Test	Ball Impact	UL 1598 & UL2388 & IEC60598-1 & IEC60598-2-21
	Swimming Pool Water Immersion Test	GB9667, PH6.8-7.6, free chlorine 0.3-0.6mg/L
	Sea Water Immersion Test	IEC 60598-1, Salinity 4%
	Salt Spray Test	IEC68-2-11
Environment Test	Outdoor Exposure	Manufacturer-defined
	Flame Resistant Test	UL94
	UV Exposure Test	ASTMG154, UVA@340nm
	IPX5 IPX6 IPX7 IPX8	IEC60529
	Temperature Shock Test	Manufacturer-defined, -40°C-60°C(typical temperature range)
Constant Temperature Test	Manufacturer-defined, 70°C(typical temperature range)	

Wilgex specializes in engineering LED flexible neon lights and offers both standard and customized services. If you have specific requirements, please contact our sales department.

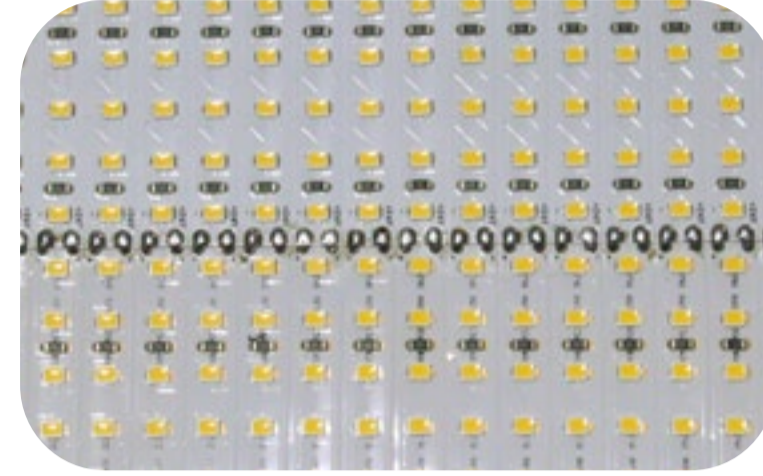
**Four-star quality assurance**



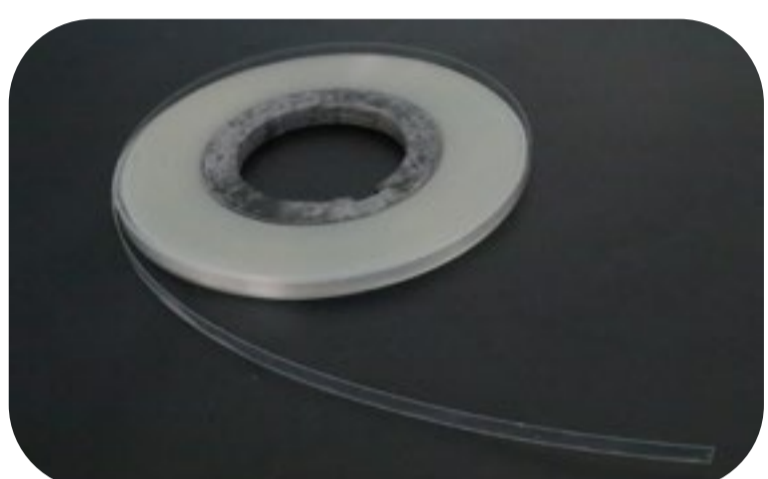
**Unique Design**



★ Enhance thickness FPC design principle



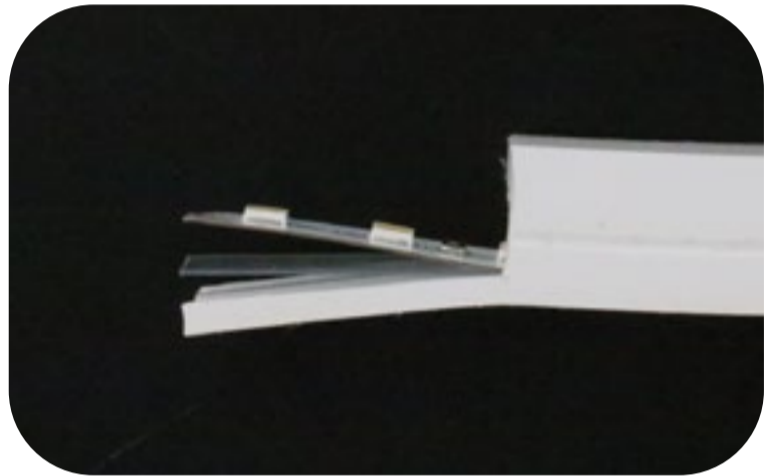
★ LED anti-death design



★ Add a break protection layer



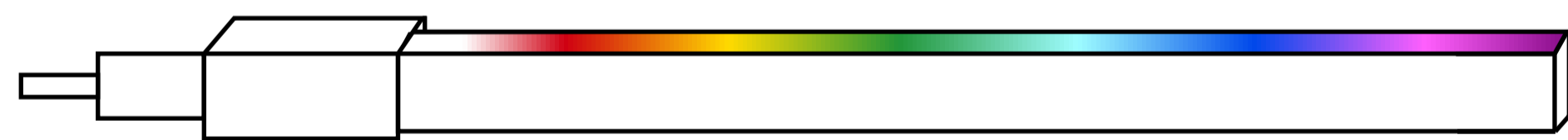
★ Solid extrusion design for exterior



**Features:**

1. Small size: The LED chips have a small size of 12mm x 12mm
2. High-density LED chips: The strips have a high density of LED chips, resulting in a brighter and more uniform light output
3. Flexible and bendable: Can be bent into various shapes and designs
4. Energy-efficient: Uses less power compared to traditional neon lights
5. Long lifespan: Can last up to 50,000 hours
6. Low heat emission: Does not emit as much heat as traditional neon lights
7. Wide color options: Available in a wide range of colors
8. Easy to install: Can be cut and connected to fit any desired length and shape
9. Durable and weather-resistant: Can withstand various weather conditions
10. Safe to use: Low voltage and does not contain hazardous materials like mercury
11. Cost-effective: Offers a cost-effective alternative to traditional neon lights.

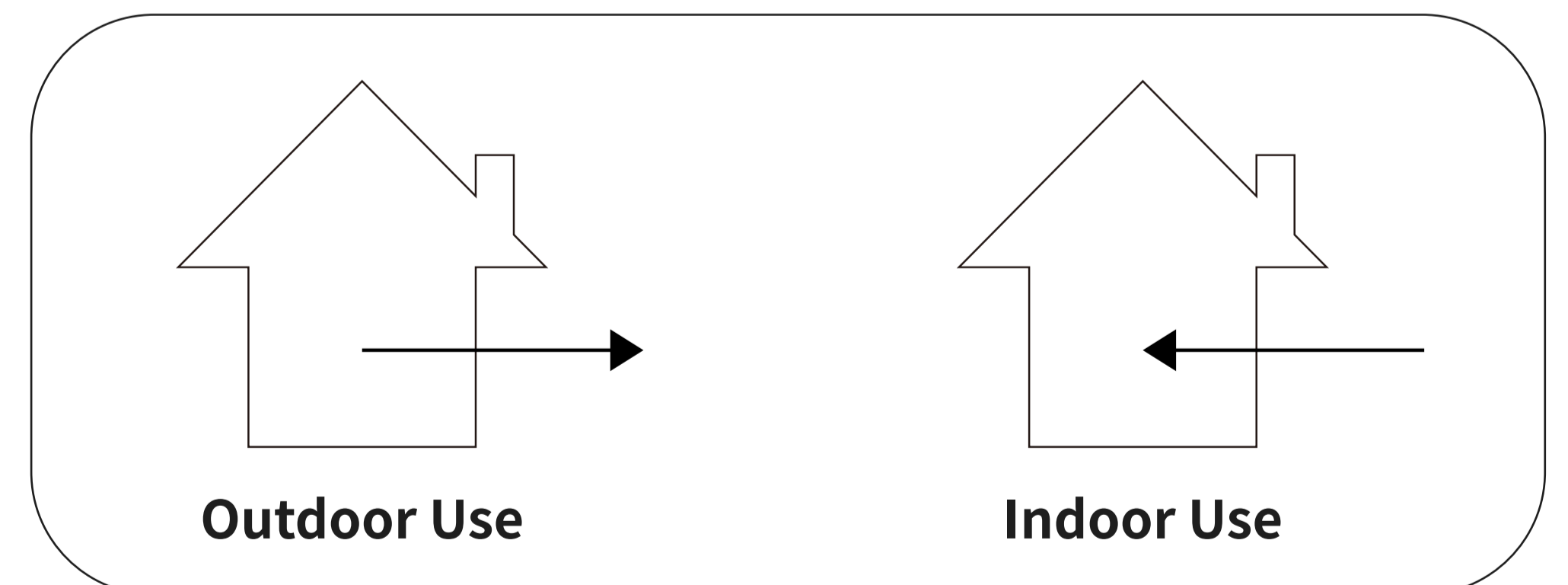
**Wide Color Options**



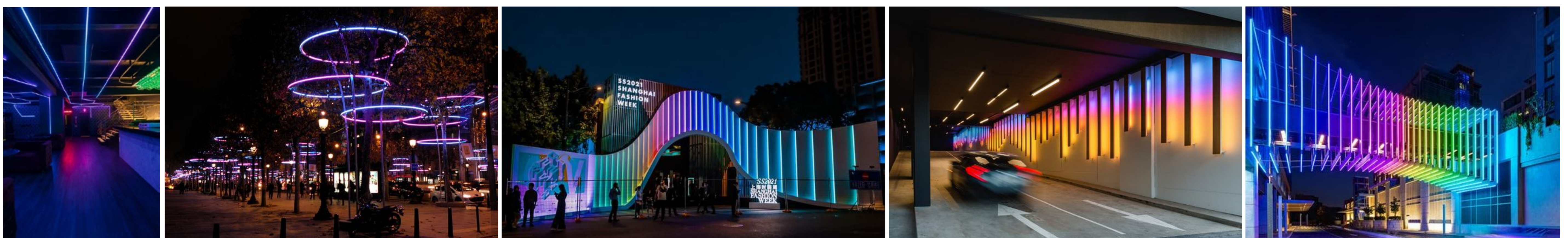
Dynamic Pixel RGB

**Recommended Usage Scenarios :**

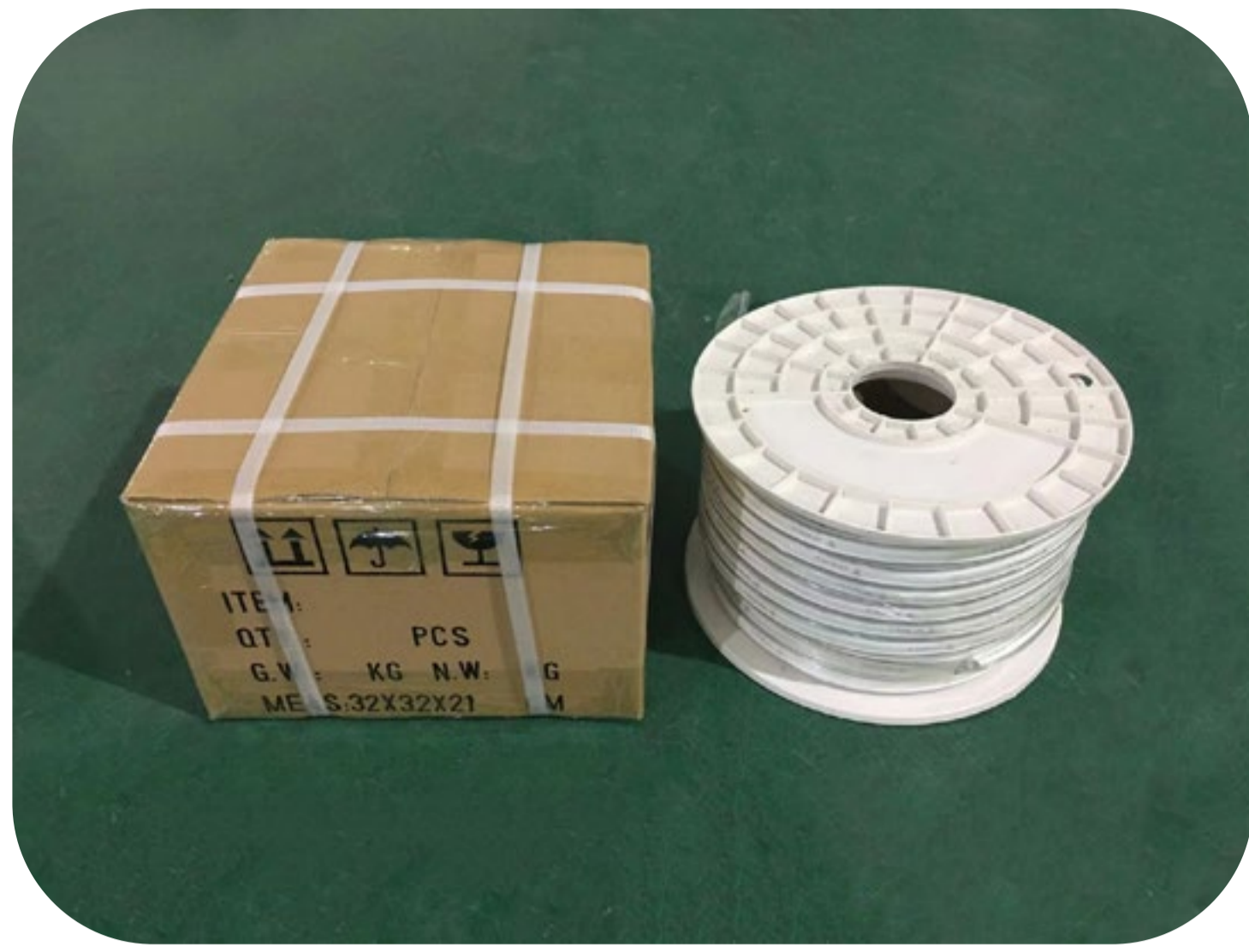
1. Indoor and outdoor architectural lighting decoration
2. Landscape lighting
3. Advertising signage lighting
4. Stage and theater lighting
5. Car and motorcycle lighting
6. Holiday and event lighting decoration
7. Cove lighting
8. Edge-lit lighting
9. Retail and display lighting
10. Restaurant and bar lighting



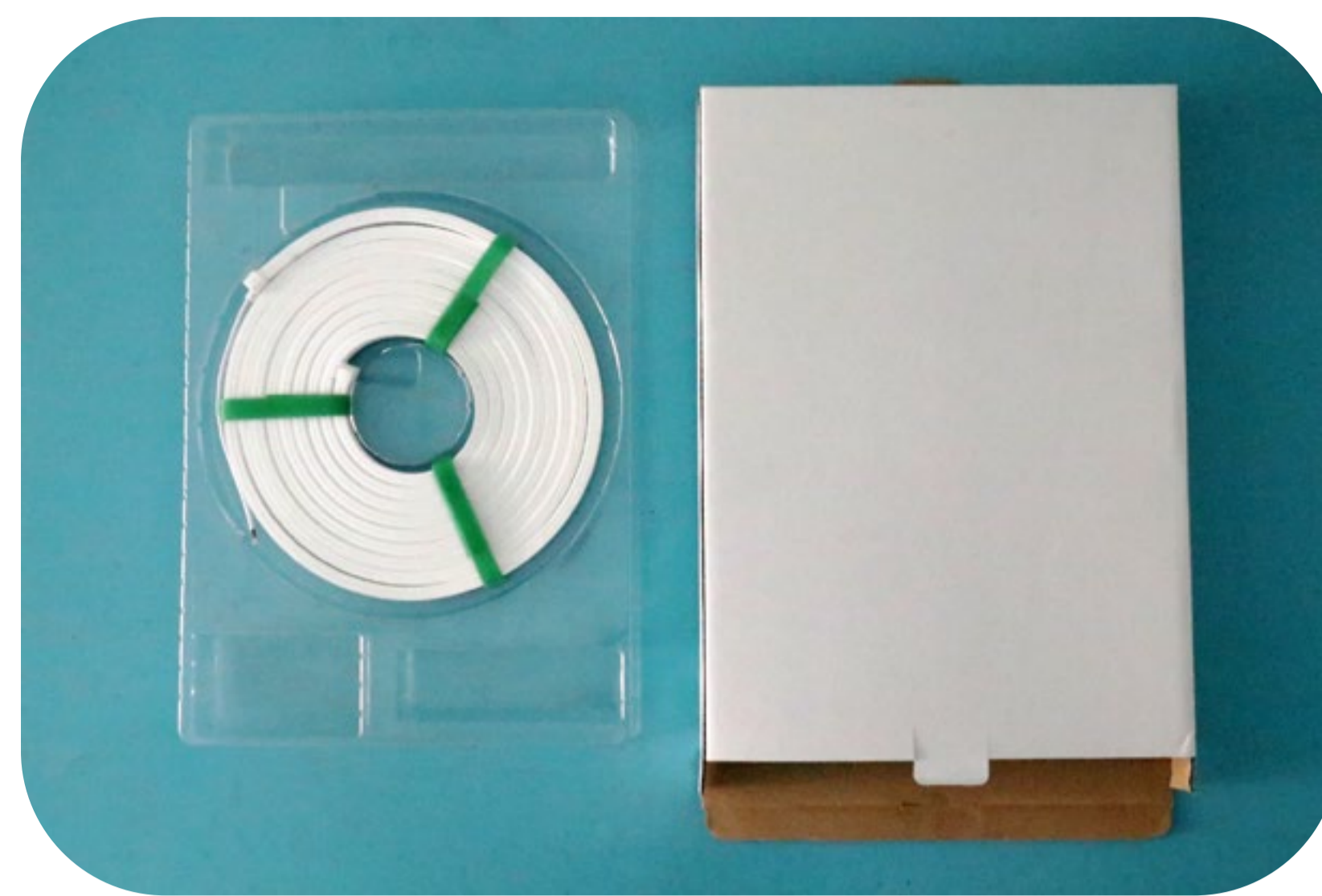
Please note that these are only recommended usage scenarios and it is important to consult the product specifications and guidelines before using flexible LED neon light strips in any application.



**Package**



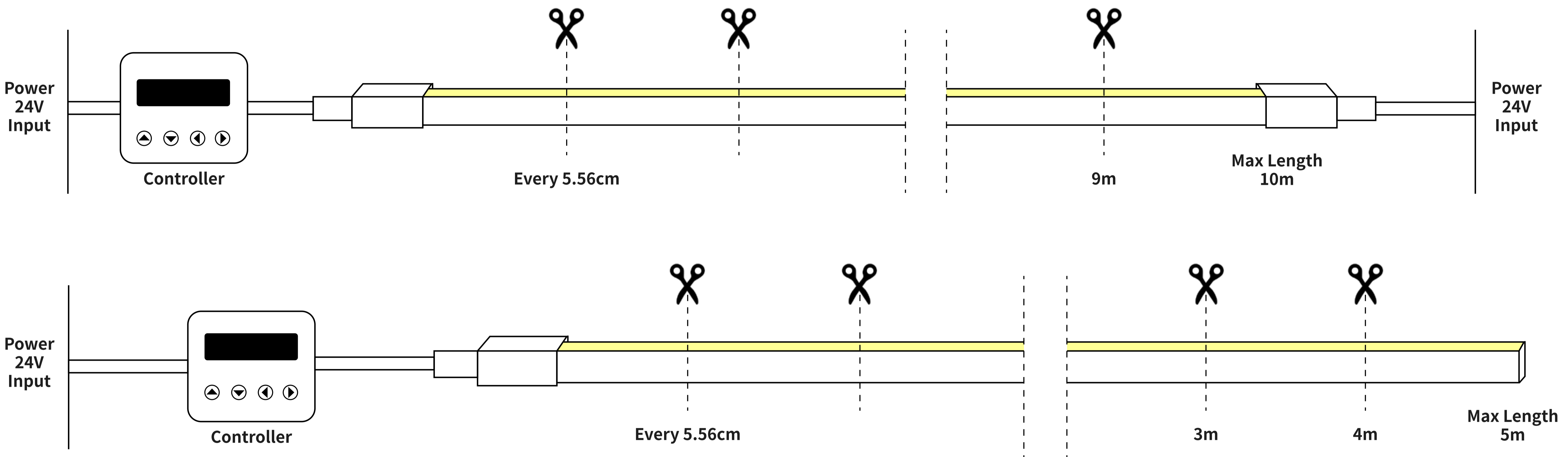
Packing Method : Reel + boardcards  
 Quantity / Box : 50 meters / reel  
 Gross Weight : 16.33Kg (36 LB)  
 Size of outer box : 32 x 32 x 21cm  
 CBM : 0.022 m<sup>3</sup> / box



Packing Method : Blister + White box  
 Quantity / Box : 5 meters / reel  
 Gross Weight : 1.63Kg (3.59LB)  
 Size of outer box : 46.2 x 33 x 4cm  
 CBM : 0.006 m<sup>3</sup> / box

**Mini Cutting Length & Connection Length**

**• Voltage (24V)**



**Controller Selection**



**HC100**  
Updated version SPI magic color controller



**LT-200**  
LED Digital Controller



**SP108E LED WIFI Controller**

**IP65 (DIY Connector)**

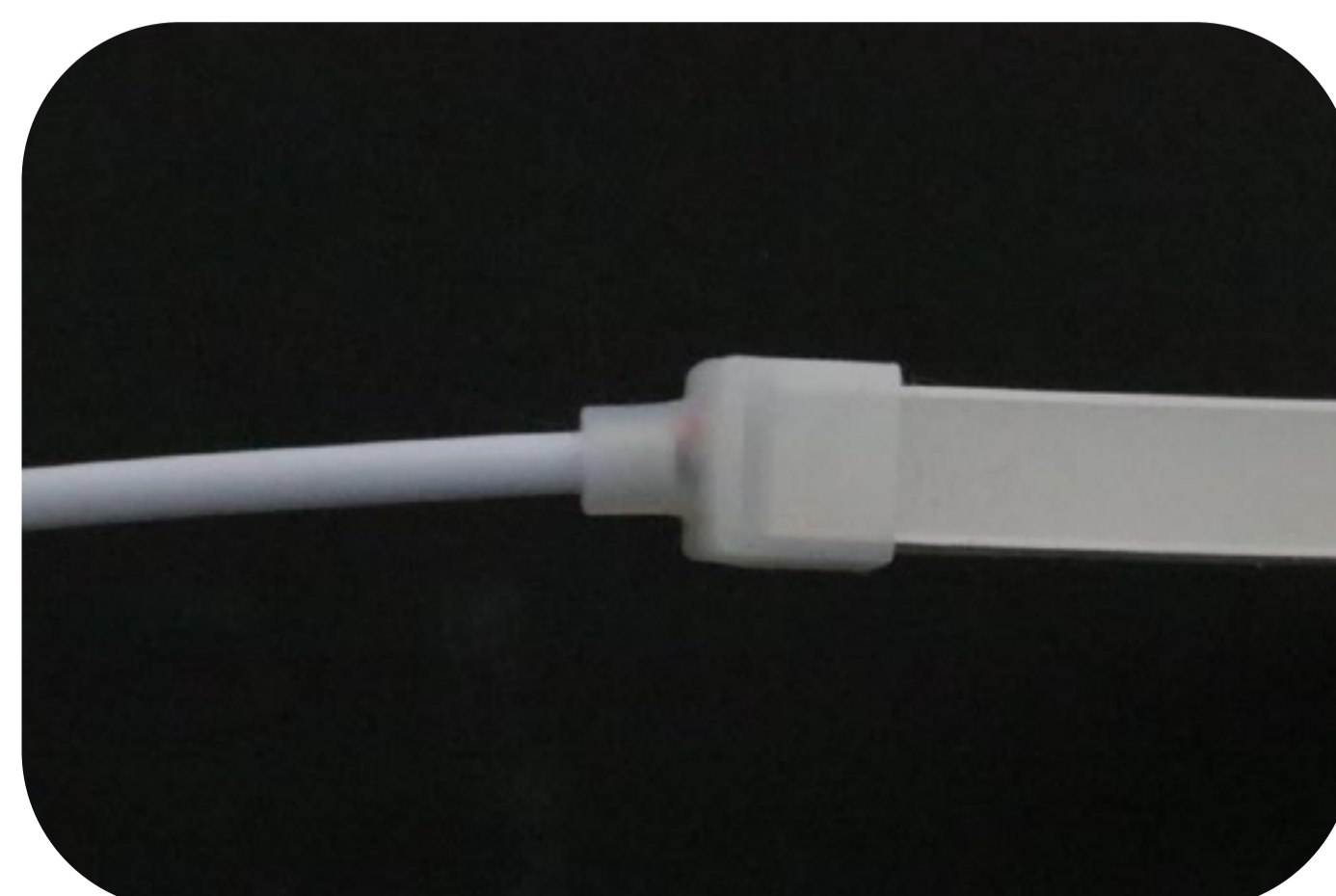
**• Voltage (24V)**



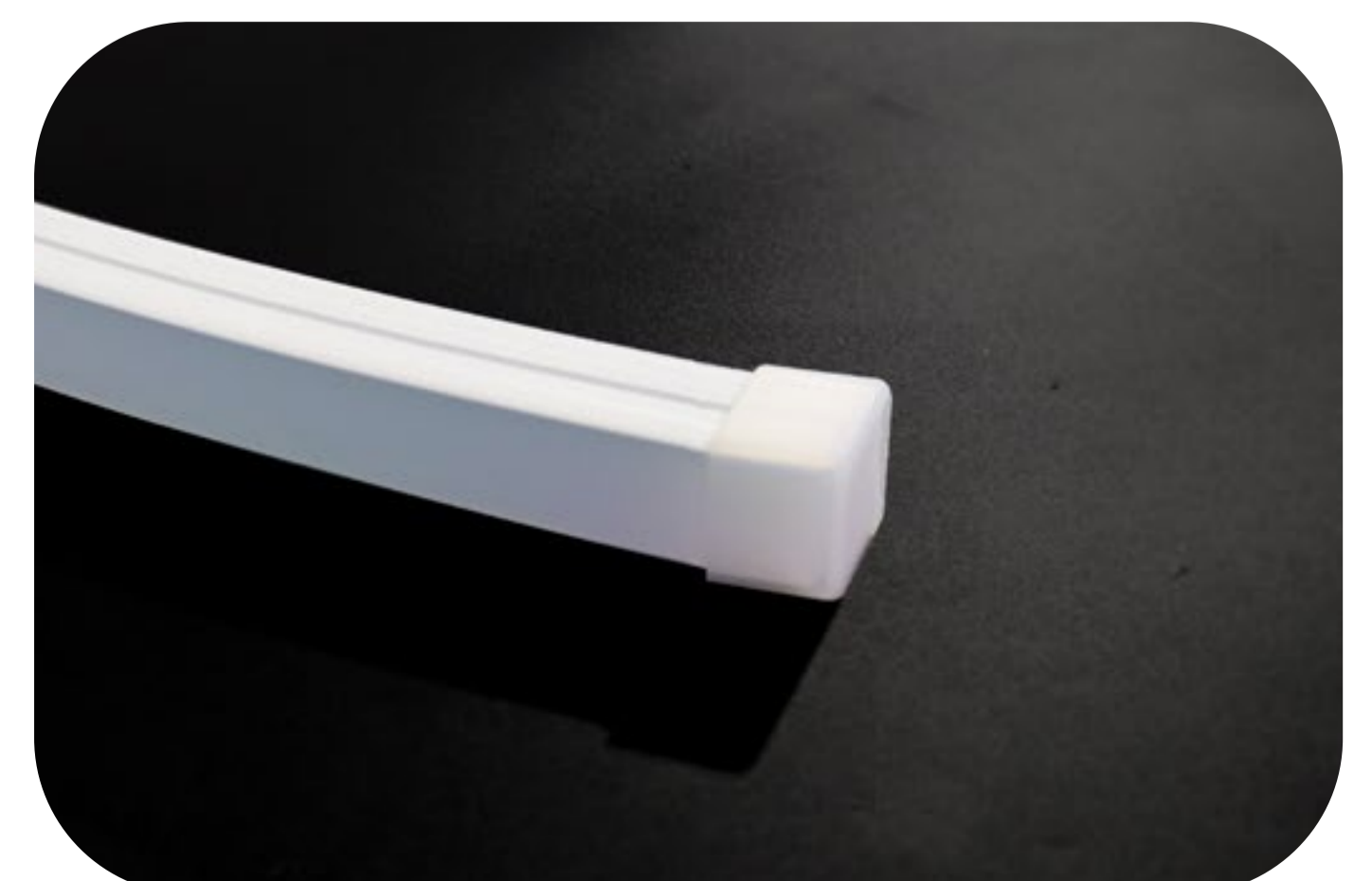
**BOTTOM EXIT**



**SIDE EXIT**

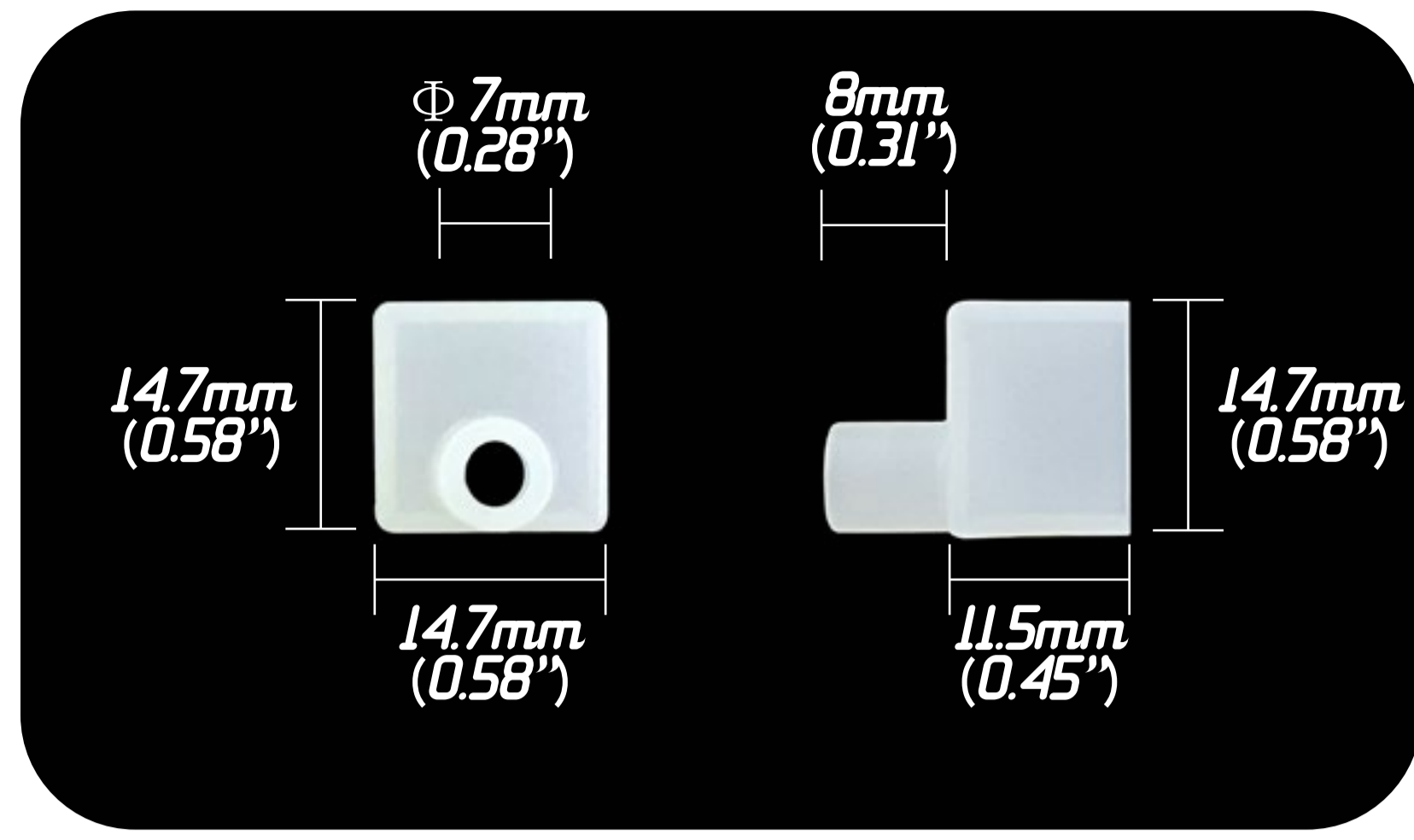


**STRAIGHT EXIT**

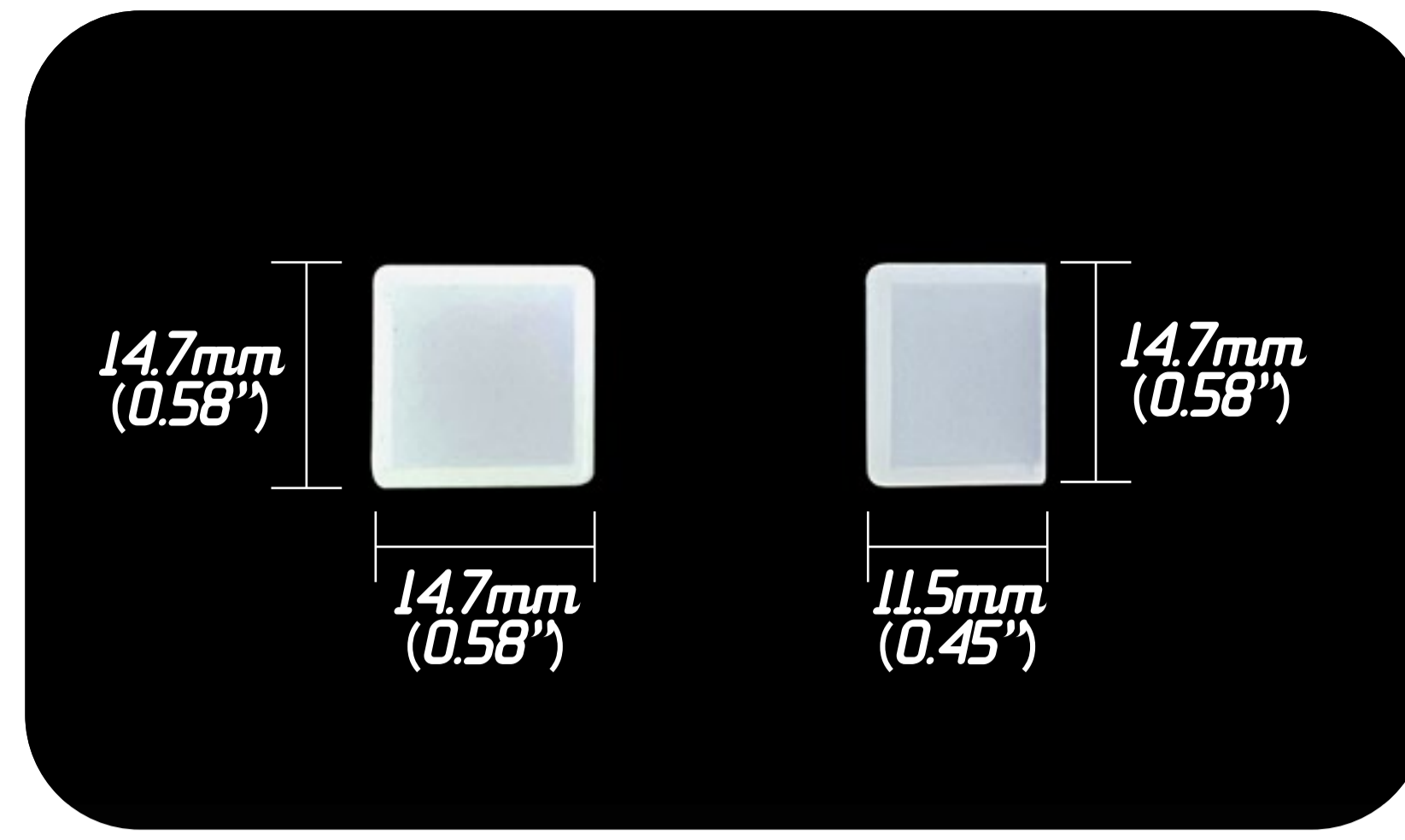


**END CAP**

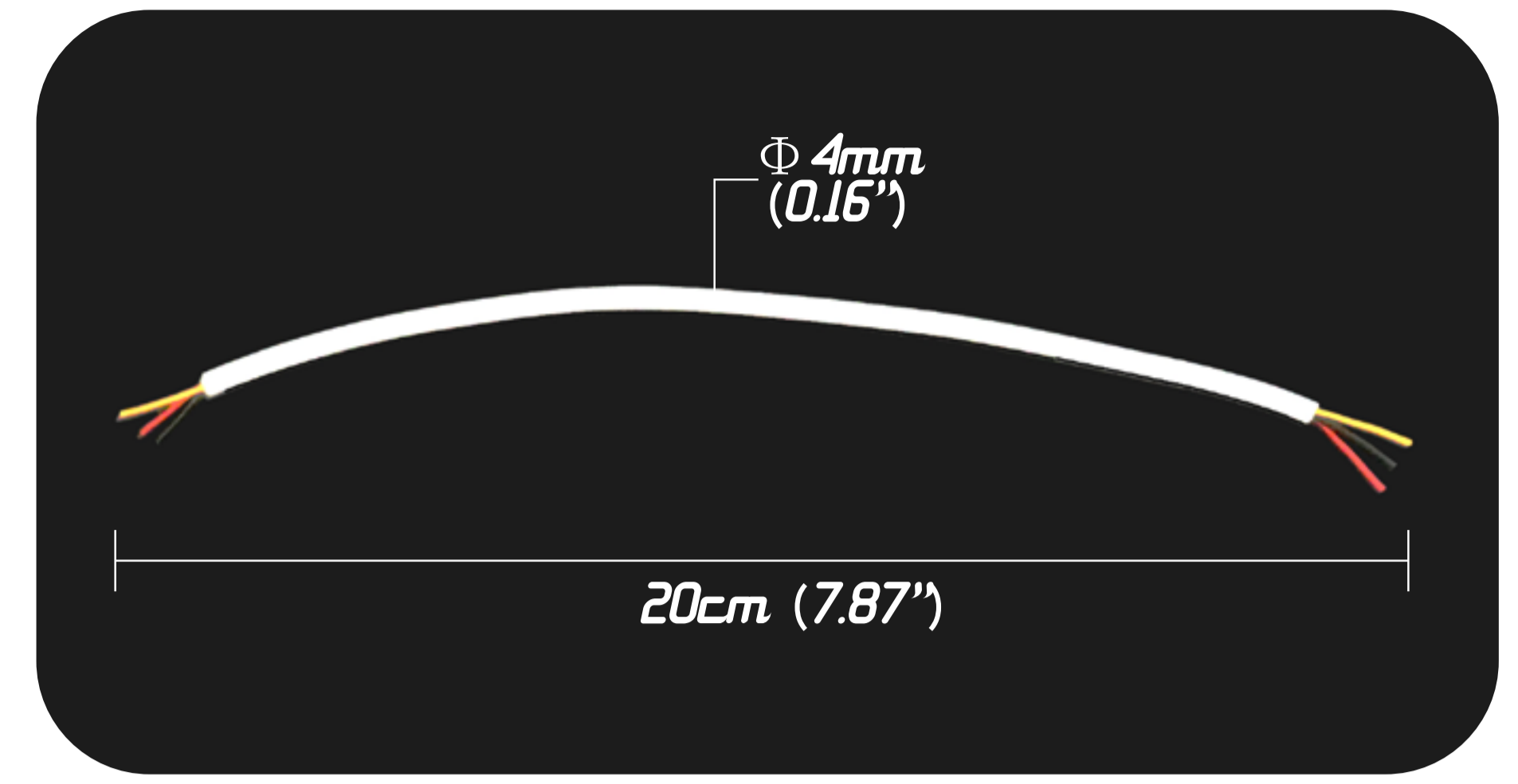
**• Part Details**



**FRONT CONNECTION FITTING**

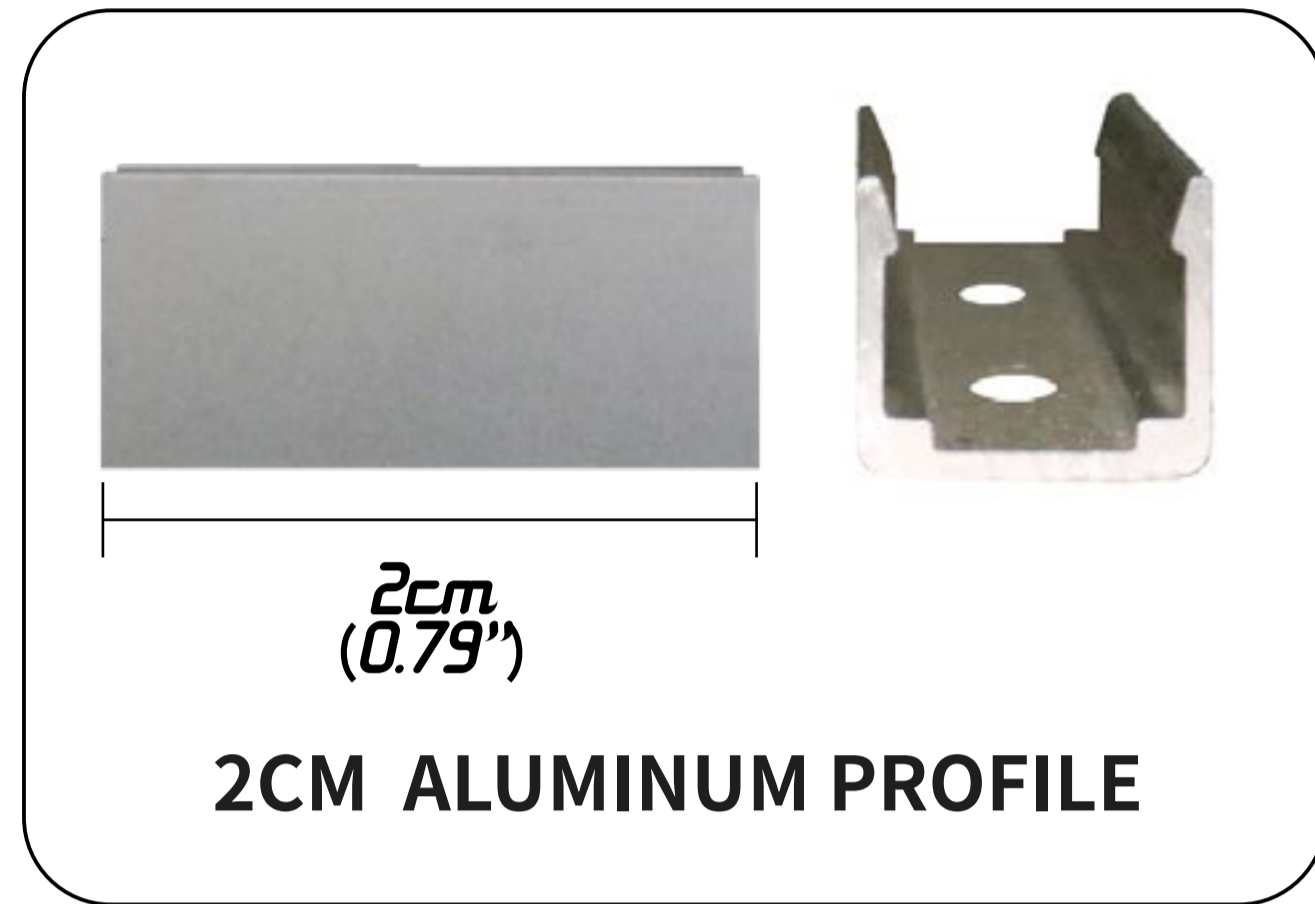


**TAIL FITTING**



**SILICONE POWER WIRE ( 3 CORDS)**

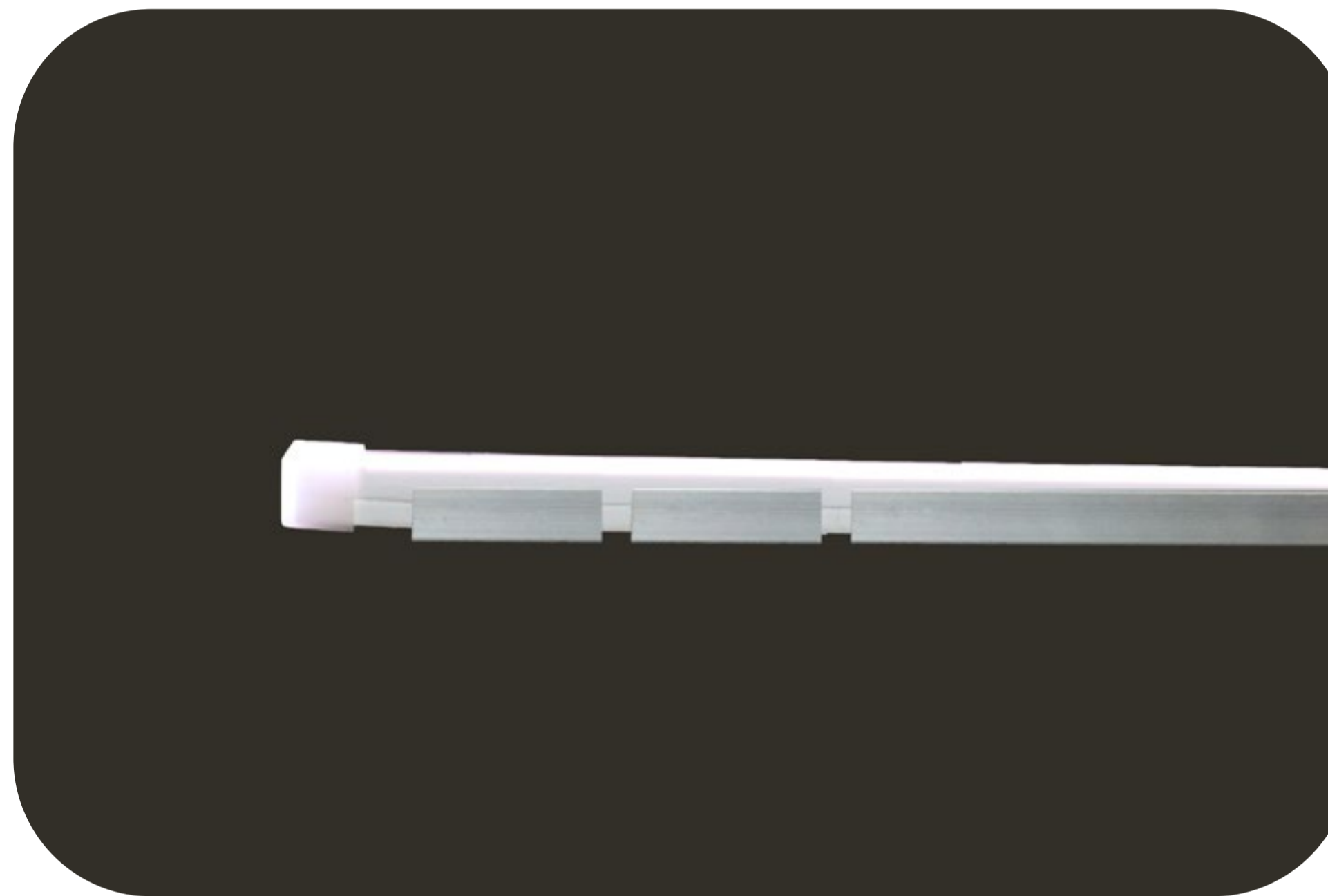
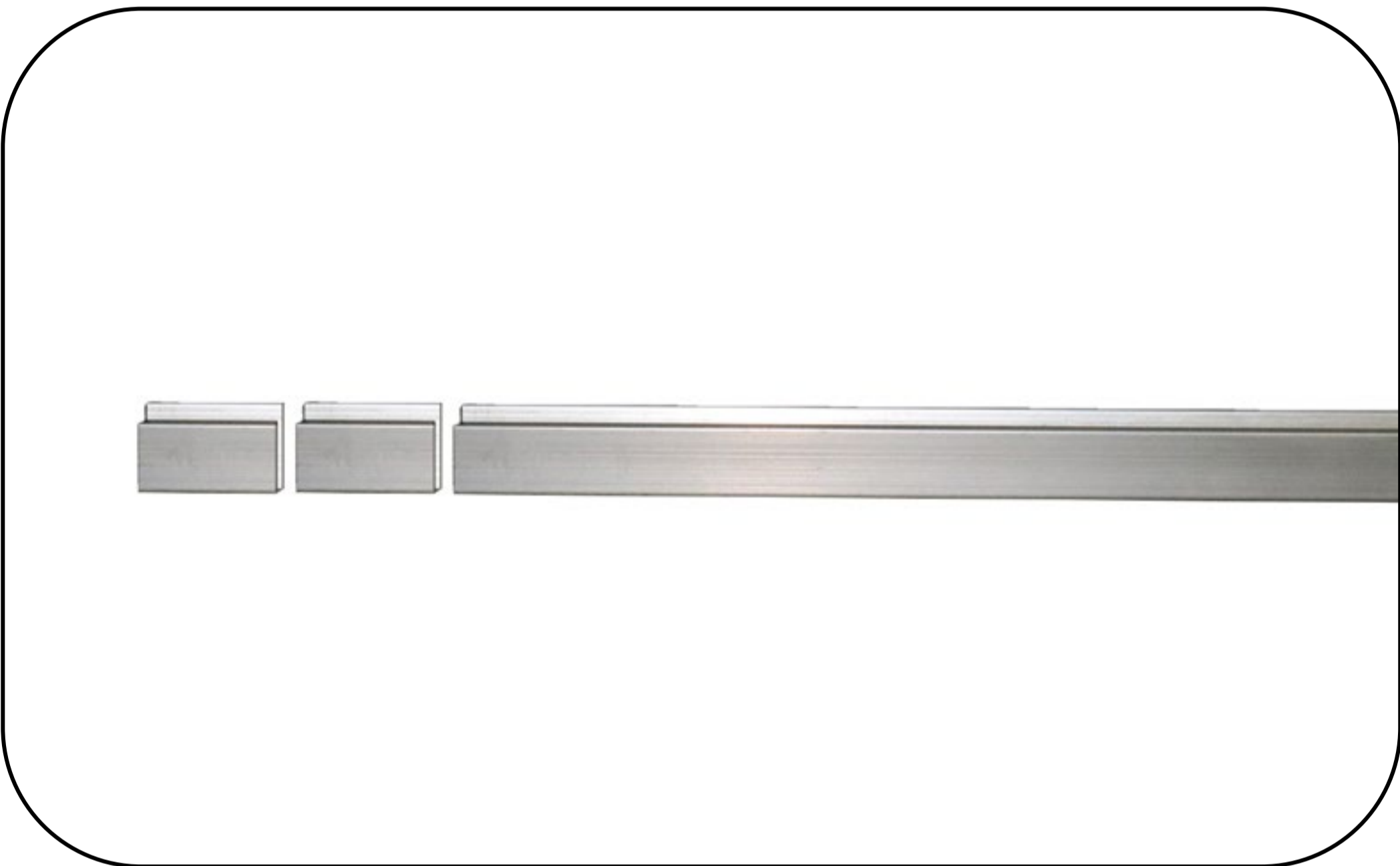
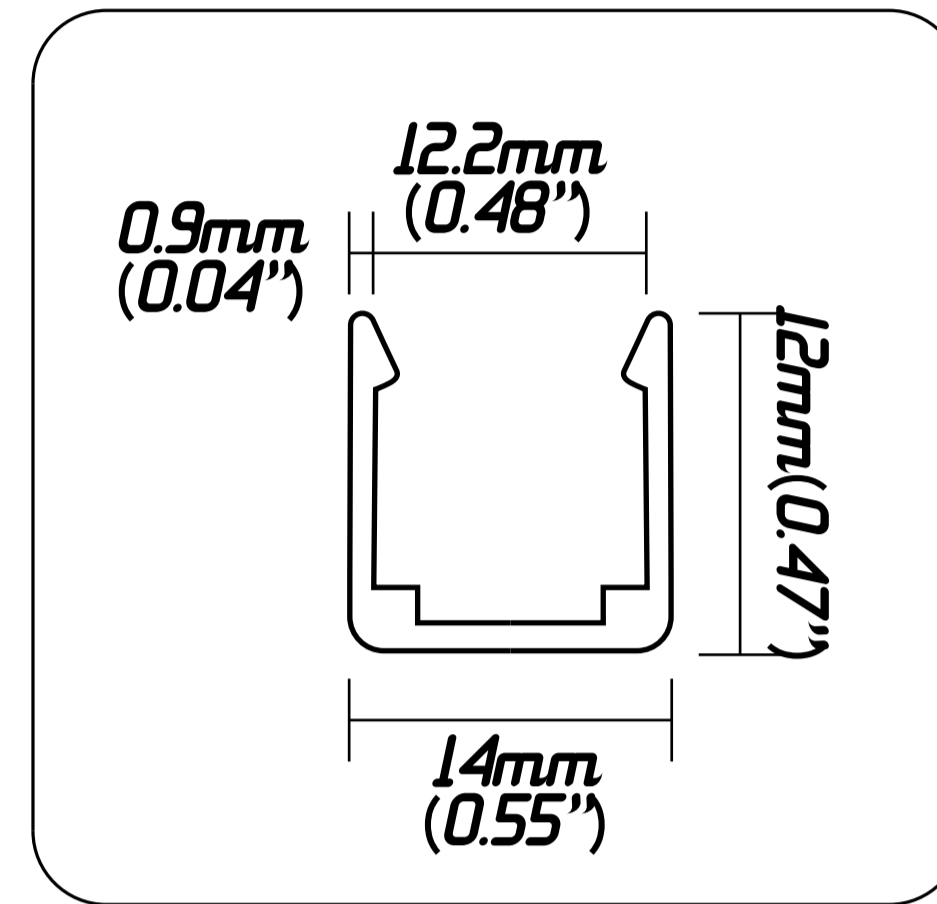
**Mounting Aluminum Channel**



**2CM ALUMINUM PROFILE**



**ALUMINUM CHANNEL (1M)**



**Mounting Flexible Stainless Channel**

