

Flexglo™ F21D Dynamic Light (Silicone)



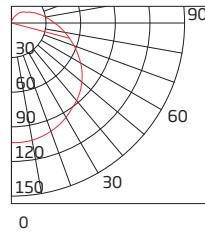
Certification Mark	UL	CE
Test Standard/Directive	UL2108 Class 2	CE-EMC
Certificate Serial Number	20180801-E360029	SZEM1712012372LMV
Report Reference	E360029-20130322	SZEM171201237201

2200K~5700K

Ambient Working Temperature ≤12W/m -40 ~ 55°C / -40 ~ 131°F	Ambient Installation Temperature ≥ -40°C / -40°F	Storage Temperature -40 ~ 60°C / -40 ~ 140°F
Max. Mounting Surface Temperature 85°C / 185°F <i>specified in the non-working state of light.</i>	Constant Voltage DC24V	

C-SFR-F21D-HB

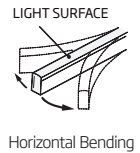
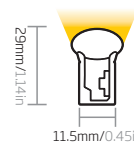
C-SFR-F21D-HB-24CC-22~57K-WM-144-80-12W-83.3



UNIT: cd
-C90/270

AVERAGE BEAM ANGLE (50%): 147.9°

- Min. Bending Diameter
120mm/4.72in
- Min. Cutting Length
83.3mm/3.28in
6+6LEDs



Bending-extreme
401 times

Tensile-instantaneous
>60 kg.f

Twist-extreme
9844 times

Warning: Extreme Destructive Tests in laboratory only, and it's forbidden to operate in practice.

Note:

- The illuminated light length shall be an integral multiple of min. cutting length.
- The waterproof reliability of the lighting fixture depends on the IP rating of connector, and please make sure connector is properly assembled before installation. The highest IP rating we can achieve is IP68.

Feature

Flexglo™ F21D Dynamic Light (Silicone) is tunable from 2200K to 5700K or other colors, and dim to warm are optional, setting the harmonious tone for the surrounding space. Thanks to the excellent weatherproof and UV-resistant performance of silicone material, it features a wide ambient working temperature range of -40-55 °C, especially suitable for harsh environment application.

Multiple connector options are available for different applications. Combined with the adoption of the DryWire™ technology, *The IP68 Injection-moulded Connector is engineered for outdoor use, owing to its elegant appearance and strong adhesiveness acquired by the liquid silicone injection workmanship. *The IP67 Field Assembly Connector, which is underpinned by the Insulfit™ technology that enables quick assembly in the field along with waterproof reliability (proper assembly required).

This product features a ultra long lifespan in outdoor application by leveraging other ClearTech™ such as the PinBoost™ technology enhancing physical reliability of light engine, the TwinFlex™ technology improving the conductivity and optimizing heat dissipation performance, the C-Mask™ technology making the light body self-cleaning and anti-UV and enabling consistent illumination.

Item Code

C	SFR	F21D	HB	24CV	22~57K	WM	144	80	12W	83.3
Company	Material	Product Series	Bending Direction	Voltage & Circuit Type	CCT	Base & Lighting Surface	LEDs Qty/m	CRI	Power/m	Min. Cutting Length (mm)
Clear	SFR= Silicone Flex Ribbon	F21D= Dynamic	HB= Horizontal Bending	DC24V & Constant Voltage	22~57K= 2200~5700K	WM= White & Milky	144	80	12W	83.3

Electrical Parameter

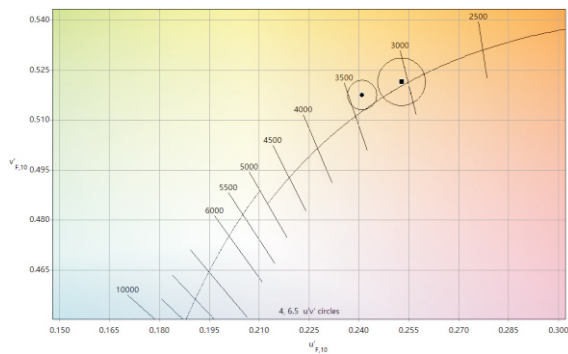
Category	C-SFR-F21D-HB
Voltage	24
Current (mA/m)	500.0
Power (W/m)	12
Circuit Type	CV
LED Type	3014
LEDs Qty/m	144
LEDs Qty/unit	12(6+6)
Unit/m	12
Min. Cutting Length (mm)	83.3
Min. Cutting Length (in)	3.28

Optical Parameter

Item Code	Finished Product						LED	
	CCT	CCT Tolerance	Color Tolerance	CRI	Lumen/m	Lumen/ft	Color Tolerance	CRI
C-SFR-F21D-HB-24CV-22~57K-WM-144-80-12W-83.3	2200K	2238±102K	<5SDCM	80	170lm	52lm	<2.3SDCM	82~87
	5700K	5669±355K	<5SDCM	80	210lm	64lm	<2.3SDCM	82~87

Note:

1. CCT Tolerance refers to target CCT and tolerance (ANSI C78.377).
2. Color Tolerance refers to CLEAR standard for finished product and LED.



Color Matching

Color temperature value stated on all CLEAR's documents refers to finished products. LED's color temperature would be shifted by the light diffuser made of PVC or silicone material. CLEAR calibrates color temperature and color coordinate of tailor-made LEDs with proprietary color-matching algorithms to produce a precise color temperature and color coordinate close to black body locus for finished products. All LEDs would be strictly tested and tightly controlled to ensure finished products can meet ANSI standard.

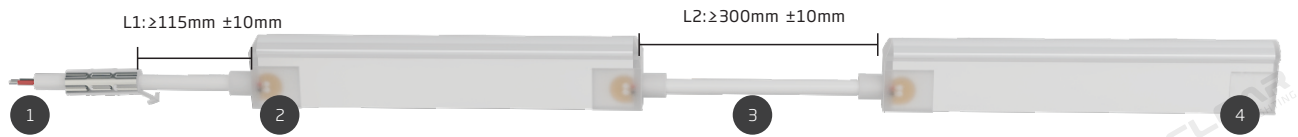
Max. Running Length Input: DC24V

Type	Silicone Injection-moulded Connector	
IP Rating	IP68	
Item Code	Single-end Feed	Double-end Feed
C-SFR-F21D-12W-Static full loading	15m	30m
C-SFR-F21D-12W-Dynamic operating	20m	40m

Note:

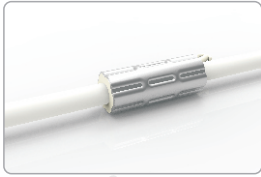
1. Above conclusion is based on voltage drop testing result of the light with 0.3m cable only.
2. The maximum running length is based on the light in static full loading status exceptionally stated dynamic operating.
3. Above running length is only the light length excluding lengths of connectors. Please refer to the specific dimension of each connector.
4. The delivery length might be subject to the maximum packing length.

Connector Type



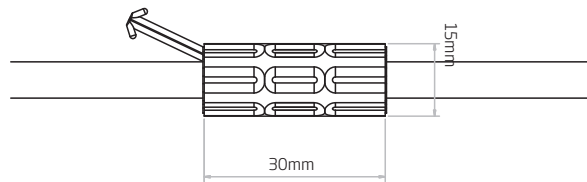
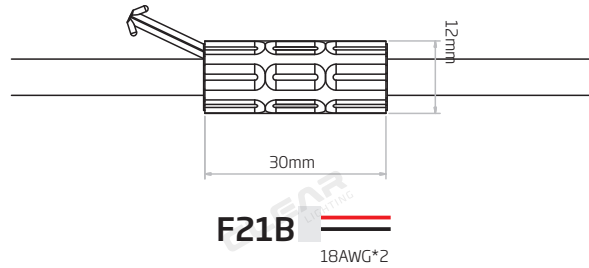
1	2	3	4
<p>Male & Female Connector (Optional)</p>  <p>Male Connector</p>  <p>Female Connector</p>	<p>Silicone Injection-moulded Front Connector</p>  <p>End</p>  <p>Side-L</p>  <p>Side-R</p>  <p>Bottom</p>	<p>Silicone Injection-moulded Middle Connector</p>  <p>Silicone Injection-moulded Jumper Maximum 8 Jumpers in 20m light Maximum 4 Jumpers in 10m light</p>  <p>Silicone Injection-moulded T-feed Maximum 8 T-feeds in 20m light Maximum 4 T-feeds in 10m light</p>	<p>Silicone Injection-moulded End Cap</p>  <p>End cap</p>

Anti-wicking Ferrule



The anti-wicking ferrule is designed to lower the risk of water ingress from the cable in case of inadequate waterproof treatment on site.

For underwater application, do not immerse anti-wicking ferrule in the water.



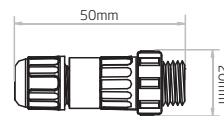
Note:

1. Unless otherwise stated, the tolerance is $\pm 0.5\text{mm}$.
2. The removal of anti-wicking ferrule will void the warranty if any water ingress caused by it.

Male & Female Connector



For plug and play cable junction, IP67



Note:

Unless otherwise stated, the tolerance is $\pm 2\text{mm}$.

Aluminum Profile

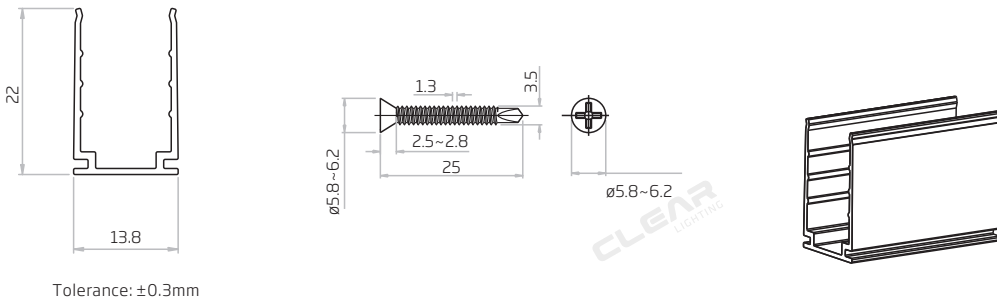


It uses high-quality 6063 aluminum with thin-wall, light-weight design to fit tightly the light body. It is deformation and rust resistant, and cost-effective.

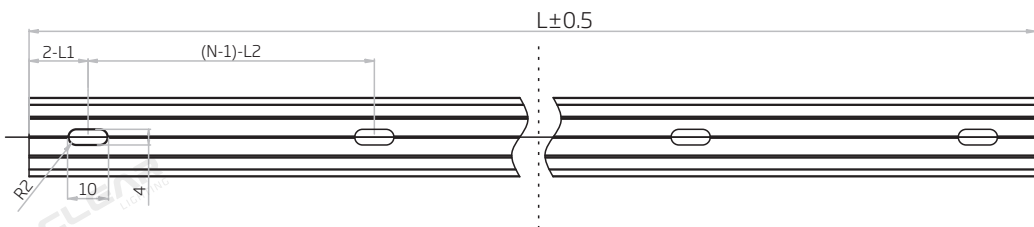
Please refer to the applicable installation ways.

Test Object	No.	Experiment Item	Standard
Metal Parts	1	Weather Resistance-Salt Spray	IEC 68-2-11
Mounting profile	2	Clamping force	CLEAR-defined

Dimension: mm



Tolerance: $\pm 0.3\text{mm}$



Note:

1. 2-L1 refers to two of symmetric L1 in each piece of profile.
 2. (N-1)-L2 refers to (N minus one) of symmetric L2 in each piece of profile.
- "N" hereby stands for its corresponding "Hole Number" in the below table

Item Code	Standard Length	L1	L2	Slotted Hole	Hole Number
F21-A/PL-35MM-AL	35mm/1.38in	17.5mm/0.69in	/	4*10mm/0.16*0.39in	1
F21-A/PL-500MM-AL	500mm/19.68in	50mm/1.97in	200mm/7.87in	4*10mm/0.16*0.39in	3
F21-A/PL-1000MM-AL	1000mm/39.37in	100mm/3.93in	200mm/7.87in	4*10mm/0.16*0.39in	5
F21-A/PL-2000MM-AL	2000mm/78.74in	100mm/3.93in	200mm/7.87in	4*10mm/0.16*0.39in	10

Flange Aluminum Profile



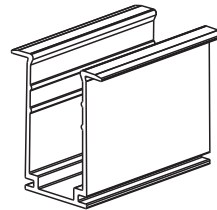
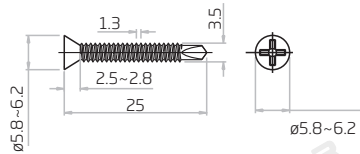
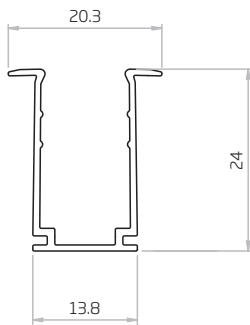
It uses high-quality 6063 aluminum with thin-wall, light-weight design to fit tightly the light body. It is deformation and rust resistant, and cost-effective. The "Flange" design is more suitable for recessed installation, better fits with the mounting groove and minimizes the operation tolerance during construction to some extent, like shielding the rough edges and the gaps of oversized groove.



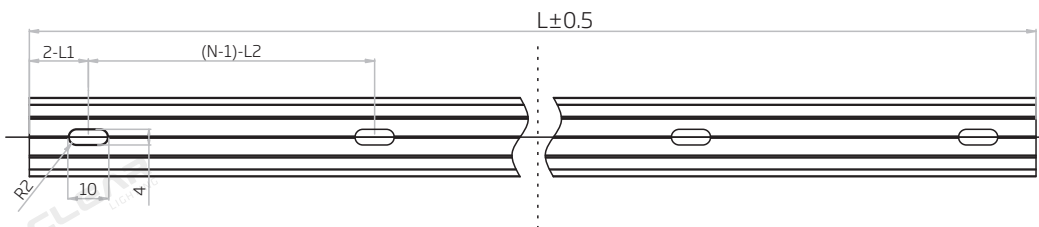
Please refer to the applicable installation ways.

Test Object	No.	Experiment Item	Standard
Metal Parts	1	Weather Resistance-Salt Spray	IEC 68-2-11
Mounting profile	2	Clamping force	CLEAR-defined

Dimension: mm



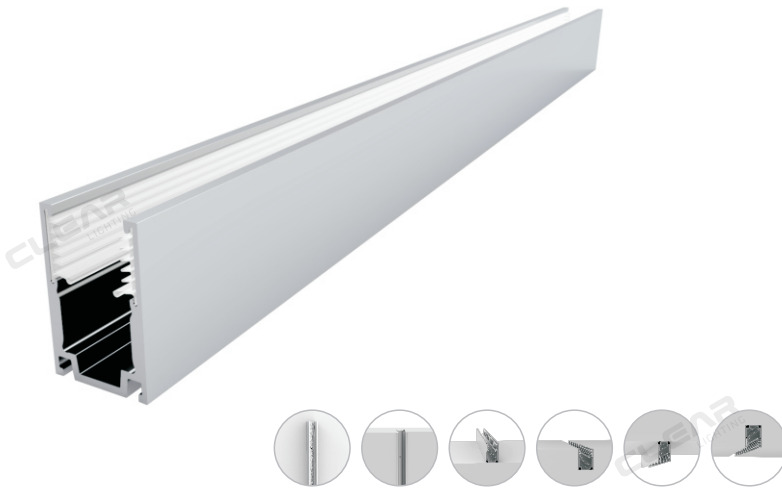
Tolerance: $\pm 0.3\text{mm}$



Note:
 1. 2-L1 refers to two of symmetric L1 in each piece of profile.
 2. (N-1)-L2 refers to (N minus one) of symmetric L2 in each piece of profile.
 "N" hereby stands for its corresponding "Hole Number" in the below table

Item Code	Standard Length	L1	L2	Slotted Hole	Hole Number
F21-FA/PL-35MM-AL	35mm/1.38in	17.5mm/0.69in	/	4*10mm/0.16*0.39in	1
F21-FA/PL-500MM-AL	500mm/19.68in	50mm/1.97in	200mm/7.87in	4*10mm/0.16*0.39in	3
F21-FA/PL-1000MM-AL	1000mm/39.37in	100mm/3.93in	200mm/7.87in	4*10mm/0.16*0.39in	5
F21-FA/PL-2000MM-AL	2000mm/78.74in	100mm/3.93in	200mm/7.87in	4*10mm/0.16*0.39in	10

Serrated Aluminum Profile

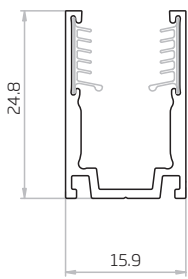


Specialized for the LED Flex Linear light, it was developed by combining the advantages of 6063 aluminum and elastic serrated tape. The inside elastic serrated tape as the grabbing force to keep continuous strong clamping force on the light body and protect the light from the damage caused by the large friction in the process of installation and dismantlement.

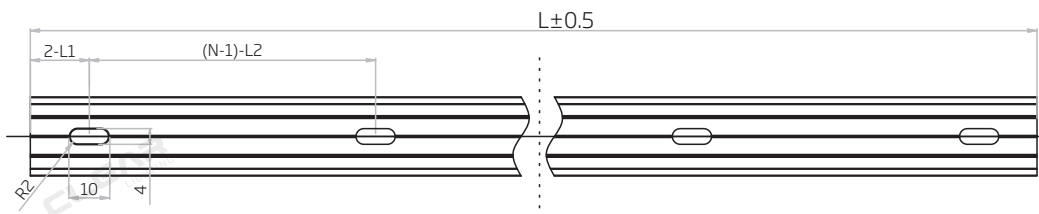
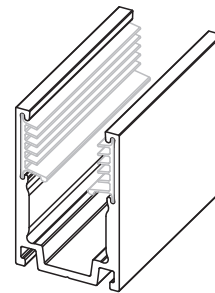
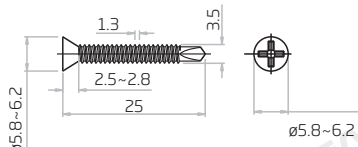
Please refer to the applicable installation ways.

Test Object	No.	Experiment Item	Standard
Metal Parts	1	Weather Resistance-Salt Spray	IEC 68-2-11
Mounting profile	2	Clamping force	CLEAR-defined

Dimension: mm



Tolerance: $\pm 0.3\text{mm}$



Note:

- 2-L1 refers to two of symmetric L1 in each piece of profile.
 - (N-1)-L2 refers to (N minus one) of symmetric L2 in each piece of profile.
- "N" hereby stands for its corresponding "Hole Number" in the below table

Item Code	Standard Length	L1	L2	Slotted Hole	Hole Number
F21-SA/PL-20MM-AL	20mm/0.787in	10mm/0.39in	/	4*10mm/0.16*0.39in	1
F21-SA/PL-500MM-AL	500mm/19.68in	50mm/1.97in	200mm/7.87in	4*10mm/0.16*0.39in	3
F21-SA/PL-1000MM-AL	1000mm/39.37in	100mm/3.93in	200mm/7.87in	4*10mm/0.16*0.39in	5
F21-SA/PL-2000MM-AL	2000mm/78.74in	100mm/3.93in	200mm/7.87in	4*10mm/0.16*0.39in	10

Flange Serrated Aluminum Profile



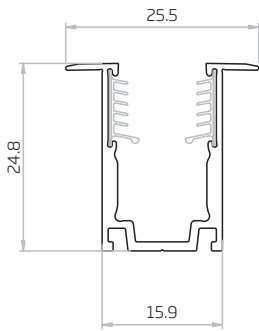
Specialized for the LED Flex Linear light, it was developed by combining the advantages of 6063 aluminum and elastic serrated tape. The inside elastic serrated tape as the grabbing force to keep continuous strong clamping force on the light body and protect the light from the damage caused by the large friction in the process of installation and dismantlement.

The "Flange" design is more suitable for recessed installation, better fits with the mounting groove and minimizes the operation tolerance during construction to some extent, like shielding the rough edges and the gaps of oversized groove.

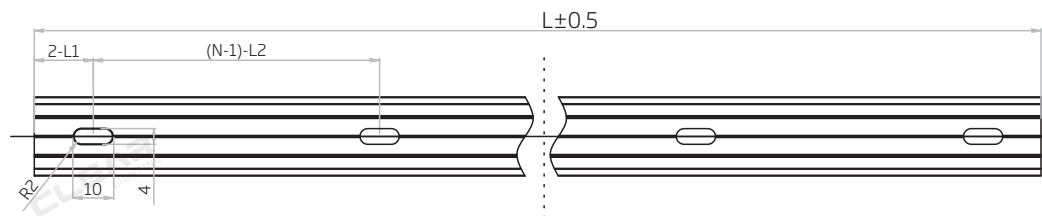
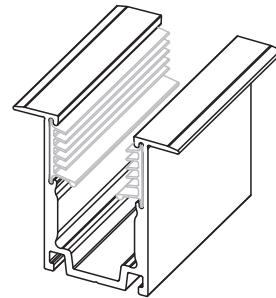
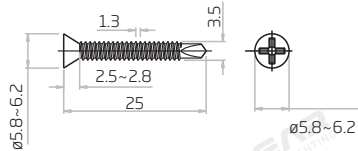
Please refer to the applicable installation ways.

Test Object	No.	Experiment Item	Standard
Metal Parts	1	Weather Resistance-Salt Spray	IEC 68-2-11
Mounting profile	2	Clamping force	CLEAR-defined

Dimension: mm



Tolerance: $\pm 0.3\text{mm}$



Note:

- 2-L1 refers to two of symmetric L1 in each piece of profile.
 - (N-1)-L2 refers to (N minus one) of symmetric L2 in each piece of profile.
- "N" hereby stands for its corresponding "Hole Number" in the below table

Item Code	Standard Length	L1	L2	Slotted Hole	Hole Number
F21-FSA/PL-20MM-AL	20mm/0.787in	10mm/0.39in	/	4*10mm/0.16*0.39in	1
F21-FSA/PL-500MM-AL	500mm/19.68in	50mm/1.97in	200mm/7.87in	4*10mm/0.16*0.39in	3
F21-FSA/PL-1000MM-AL	1000mm/39.37in	100mm/3.93in	200mm/7.87in	4*10mm/0.16*0.39in	5
F21-FSA/PL-2000MM-AL	2000mm/78.74in	100mm/3.93in	200mm/7.87in	4*10mm/0.16*0.39in	10

F21 Thickened Plastic Profile

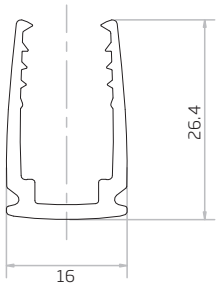


It uses thickened PC profile to 3mm thickness, specialized for underwater application up to 2m depth, and has excellent properties in rust, corrosion and fracture resistance.

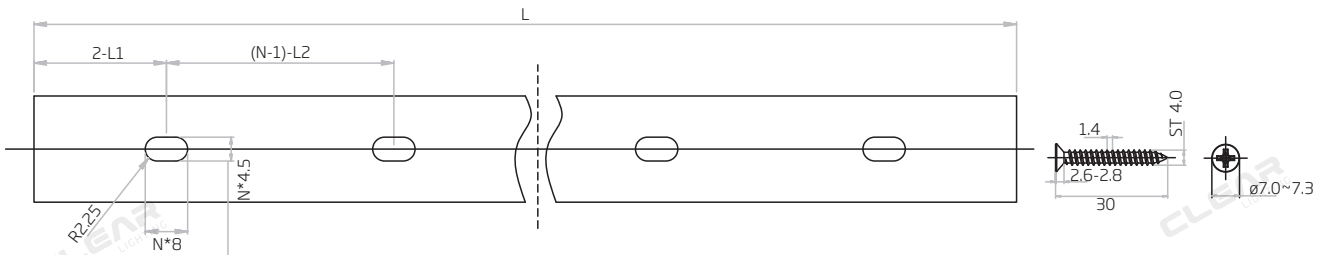
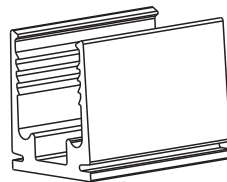
Please refer to the applicable installation ways.

Test Object	No.	Experiment Item	Standard
Mounting profile	1	Clamping force	CLEAR-defined

Dimension: mm



Tolerance: $\pm 0.5\text{mm}$



Note:
 1. 2-L1 refers to two of symmetric L1 in each piece of profile.
 2. (N-1)-L2 refers to (N minus one) of symmetric L2 in each piece of profile.
 "N" hereby stands for its corresponding "Hole Number" in the below table

Item Code	Standard Length	L1	L2	Slotted Hole	Hole Number
F21-TP/PL-35MM-TT	35mm/1.38in	17.5mm/0.69in	/	4.5*8mm/0.18*0.31in	1
F21-TP/PL-500MM-TT	500mm/19.68in	50mm/1.97in	200mm/7.87in	4.5*8mm/0.18*0.31in	3
F21-TP/PL-1000MM-TT	1000mm/39.37in	100mm/3.93in	200mm/7.87in	4.5*8mm/0.18*0.31in	5
F21-TP/PL-2000MM-TT	2000mm/78.74in	100mm/3.93in	200mm/7.87in	4.5*8mm/0.18*0.31in	10

F21 Stainless Steel Profile

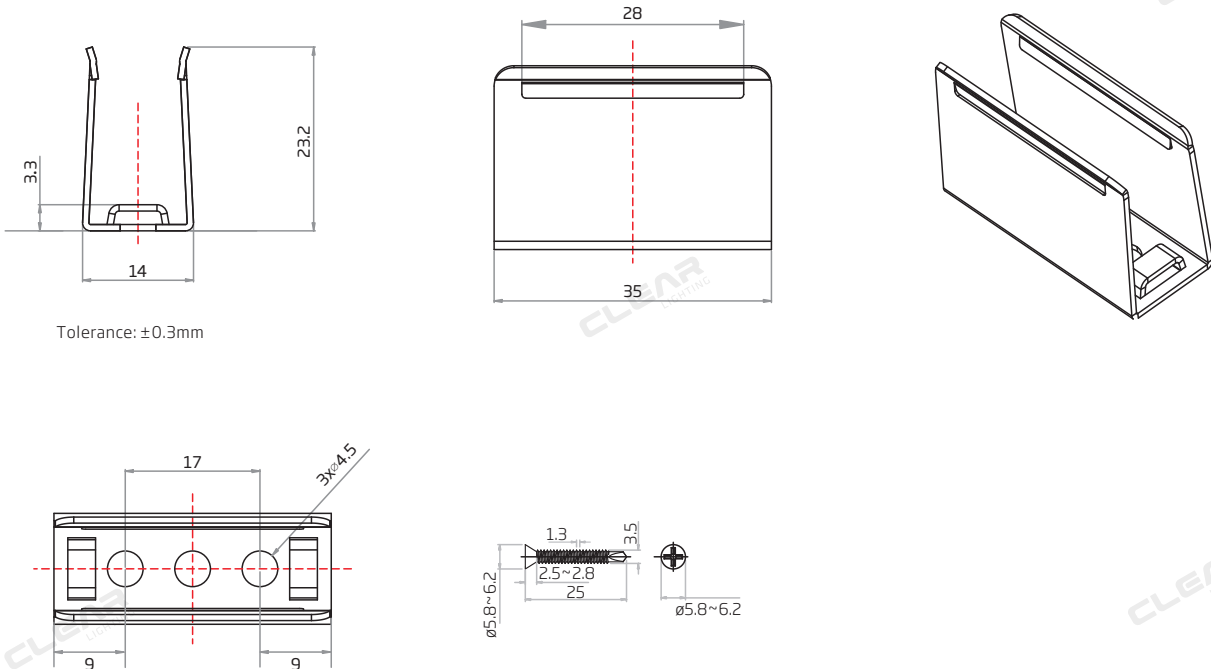


It uses grade 316 stainless steel with excellent property of deformation and rust resistance. The material makes it suitable for humid coastal surroundings and weak acid-base industrial environments that other mounting profiles can't accommodate. The structural design and material characteristics collectively ensure a tight clamping force. It's very convenient and reliable even for suspended installation in the curve shape.

Please refer to the applicable installation ways.

Test Object	No.	Experiment Item	Standard
Metal Parts	1	Weather Resistance-Salt Spray	IEC 68-2-11
Mounting profile	2	Clamping force	CLEAR-defined

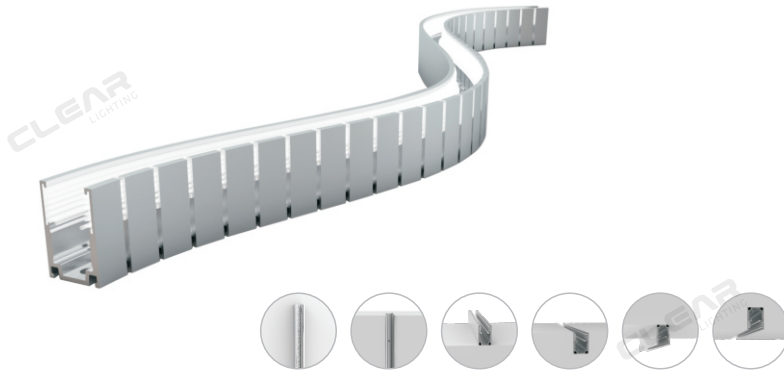
Dimension: mm



Tolerance: $\pm 0.3\text{mm}$

Item Code	Standard Length	Screw Hole	Hole Number
F21-SS/PL-35MM-SSL	35mm/1.378in	$\phi 4.5\text{mm}/0.18\text{in}$	3

Bendable Serrated Aluminum Profile

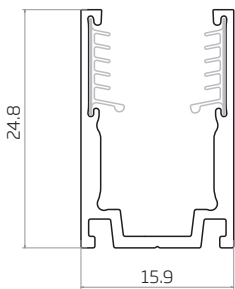


It is an expanded design of the serrated aluminum profile, and caters for the continuously streamlined aesthetics of curve shape. The secondary precision cutting process, not only maintains the advantage of clamping force, but also enables the two-way horizontal bending directions with super shape memory.

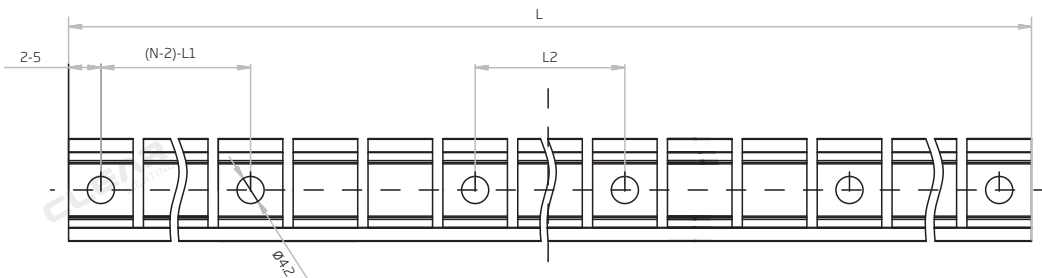
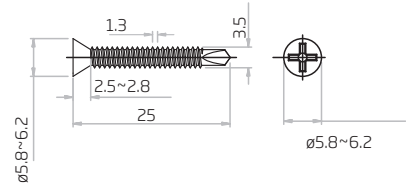
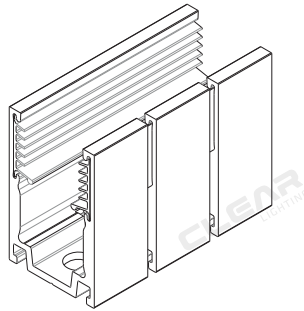
Please refer to the applicable installation ways.

Test Object	No.	Experiment Item	Standard
Metal Parts	1	Weather Resistance-Salt Spray	IEC 68-2-11
Mounting profile	2	Clamping force	CLEAR-defined

Dimension: mm



Tolerance: $\pm 0.3\text{mm}$



Note:

- 2-5 refers to two of symmetric 5mm in each piece of profile.
 - (N-2)-L1 refers to (N minus two) of symmetric L1 in each piece of profile.
- "N" hereby stands for its corresponding "Hole Number" in the below table

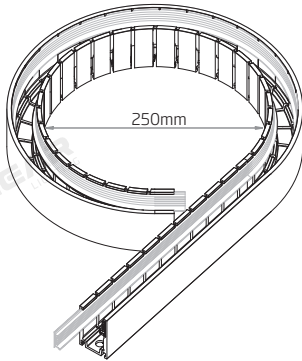
Item Code	Standard Length	L1	L2	Screw Hole	Hole Number
F21-BSA/PL-500MM-AL	500mm/19.68in	110.3mm/4.34in	48.9mm/1.92in	$\phi 4.2\text{mm}/0.17\text{in}$	6
F21-BSA/PL-1000MM-AL	1000mm/39.37in	116.5mm/4.59in	98.8mm/3.89in	$\phi 4.2\text{mm}/0.17\text{in}$	10

Installation Instructions

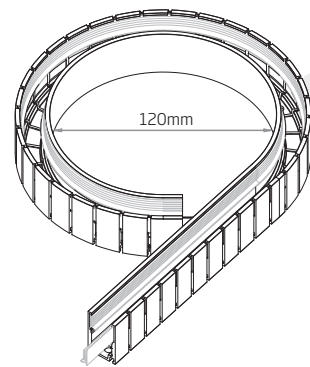
Friendly Reminder: please read instructions carefully before operation.

Bending Diameter

Min. Bending Diameter (Toothed Side inwards)

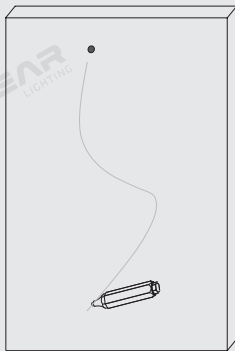


Min. Bending Diameter (Toothed Side outwards)



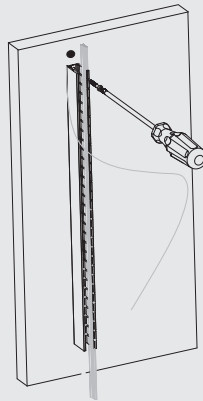
Installation

Step 1



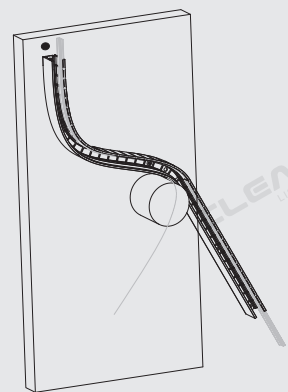
Mark the required shape on the mounting surface or print the sketch in the scale of 1:1 if complicated.

Step 2



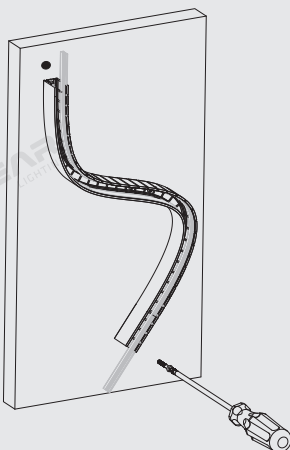
Get the front connector outside of profile and keep at least 10mm more apart. Fix the screw starting from the power input end.

Step 3



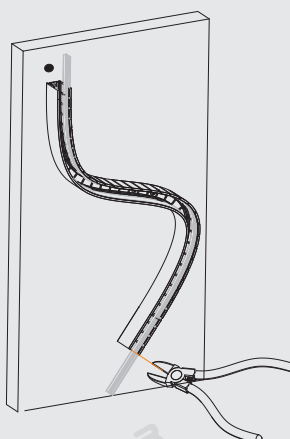
Use cylinder or disc-like object you have to assist with shaping.

Step 4



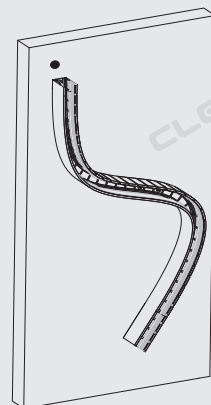
Fix the rest in sequence along with the marks.

Step 5



Adjust the serrated silicone tape and remove the redundant lengths at both ends.

Step 6



Finish and fix the light in.