



## Feature

Flexglo™ F21B Monochrome - White Light (Silicone) is a popular item for architectural market with rated power options of 6W/m, 9W/m, 12W/m. Its CRI value can reach 95Ra and maximum luminous flux is up to 450lm/m. 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.

## Electrical Parameter

Category	C-SFR-F21B-HB		
Voltage	24	24	24
Current (mA/m)	250.0	375.0	500.0
Power (W/m)	6	9	12
Circuit Type	CC	CC	CC
LED Type	2835	2835	2835
LEDs Qty/m	72	72	72
LEDs Qty/unit	6	6	6
Unit/m	12	12	12
Min. Cutting Length (mm)	83.3	83.3	83.3
Min. Cutting Length (in)	3.28	3.28	3.28

## Optical Parameter

CRI 80

Item Code	Finished Product							LED	
	CCT	CCT Tolerance	Color Tolerance	CRI	R9	Lumen/m	Lumen/ft	Color Tolerance	CRI
C-SFR-F21B-HB-24CC-22K-WM-72-80-6W-83.3	2200K	2238±66K	<5SDCM	80		190lm	58lm	<2.3SDCM	82~87
C-SFR-F21B-HB-24CC-27K-WM-72-80-6W-83.3	2700K	2725±85K	<5SDCM	80		235lm	72lm	<2.3SDCM	82~87
C-SFR-F21B-HB-24CC-30K-WM-72-80-6W-83.3	3000K	3045±105K	<5SDCM	80		235lm	72lm	<2.3SDCM	82~87
C-SFR-F21B-HB-24CC-35K-WM-72-80-6W-83.3	3500K	3465±245K	<5SDCM	80		235lm	72lm	<2.3SDCM	82~87
C-SFR-F21B-HB-24CC-40K-WM-72-80-6W-83.3	4000K	3985±150K	<5SDCM	80		235lm	72lm	<2.3SDCM	82~87
C-SFR-F21B-HB-24CC-57K-WM-72-80-6W-83.3	5700K	5669±305K	<5SDCM	80		235lm	72lm	<2.3SDCM	82~87
C-SFR-F21B-HB-24CC-22K-WM-72-80-9W-83.3	2200K	2238±66K	<5SDCM	80		285lm	87lm	<2.3SDCM	82~87
C-SFR-F21B-HB-24CC-27K-WM-72-80-9W-83.3	2700K	2725±85K	<5SDCM	80		350lm	107lm	<2.3SDCM	82~87
C-SFR-F21B-HB-24CC-30K-WM-72-80-9W-83.3	3000K	3045±105K	<5SDCM	80		350lm	107lm	<2.3SDCM	82~87
C-SFR-F21B-HB-24CC-35K-WM-72-80-9W-83.3	3500K	3465±245K	<5SDCM	80		350lm	107lm	<2.3SDCM	82~87
C-SFR-F21B-HB-24CC-40K-WM-72-80-9W-83.3	4000K	3985±150K	<5SDCM	80		350lm	107lm	<2.3SDCM	82~87
C-SFR-F21B-HB-24CC-57K-WM-72-80-9W-83.3	5700K	5669±305K	<5SDCM	80		350lm	107lm	<2.3SDCM	82~87
C-SFR-F21B-HB-24CC-22K-WM-72-80-12W-83.3	2200K	2238±66K	<5SDCM	80		380lm	116lm	<2.3SDCM	82~87
C-SFR-F21B-HB-24CC-27K-WM-72-80-12W-83.3	2700K	2725±85K	<5SDCM	80		470lm	143lm	<2.3SDCM	82~87
C-SFR-F21B-HB-24CC-30K-WM-72-80-12W-83.3	3000K	3045±105K	<5SDCM	80		470lm	143lm	<2.3SDCM	82~87
C-SFR-F21B-HB-24CC-35K-WM-72-80-12W-83.3	3500K	3465±245K	<5SDCM	80		470lm	143lm	<2.3SDCM	82~87
C-SFR-F21B-HB-24CC-40K-WM-72-80-12W-83.3	4000K	3985±150K	<5SDCM	80		470lm	143lm	<2.3SDCM	82~87
C-SFR-F21B-HB-24CC-57K-WM-72-80-12W-83.3	5700K	5669±305K	<5SDCM	80		470lm	143lm	<2.3SDCM	82~87

# Flexglo™ F21B Monochrome - White Light (Silicone)

## CRI 90

Item Code	Finished Product							LED	
	CCT	CCT Tolerance	Color Tolerance	CRI	R9	Lumen/m	Lumen/ft	Color Tolerance	CRI
C-SFR-F21B-HB-24CC-27K-WM-72-90-12W-83.3	2700K	2725±85K	<5SDCM	90	35~80	420lm	128lm	<2.3SDCM	91~97
C-SFR-F21B-HB-24CC-30K-WM-72-90-12W-83.3	3000K	3045±105K	<5SDCM	90	35~80	420lm	128lm	<2.3SDCM	91~97
C-SFR-F21B-HB-24CC-35K-WM-72-90-12W-83.3	3500K	3465±245K	<5SDCM	90	35~80	420lm	128lm	<2.3SDCM	91~97
C-SFR-F21B-HB-24CC-40K-WM-72-90-12W-83.3	4000K	3985±150K	<5SDCM	90	35~80	420lm	128lm	<2.3SDCM	91~97

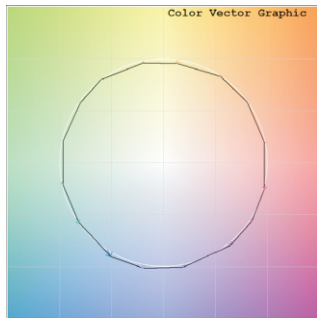
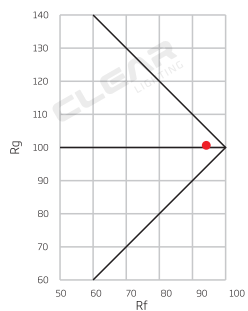
## CRI 95

Item Code	Finished Product							LED	
	CCT	CCT Tolerance	Color Tolerance	CRI	R9	Lumen/m	Lumen/ft	Color Tolerance	CRI
C-SFR-F21B-HB-24CC-30K-WM-72-95-12W-83.3	3000K	3045±105K	<5SDCM	95	80~99	350lm	107lm	<2.3SDCM	96-99

### Note:

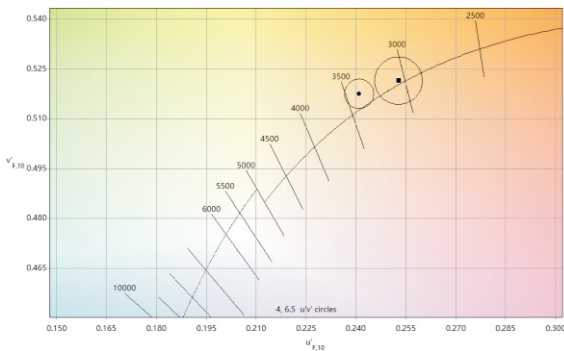
- CCT Tolerance refers to target CCT and tolerance (ANSI C78.377).
- Color Tolerance refers to CLEAR standard for the different batch of finished product and LED, and it's <3SDCM for same batches of finished product.

## TM-30



IES TM-30-15 is a new system of several related measures and graphics that can be used together to effectively evaluate and communicate a light source's color rendering properties. The development of the method involved synthesizing multiple related research efforts and combining ideas into a single, cohesive system of objective information that can be used to aid decision-making processes, such as finding the preferred light source for a given application or evaluating the tradeoffs between efficacy and color rendering.

Measure	Abbreviation	Description
Fidelity Index	Rf	Analogous to CIE Ra (CRI). Characterizes the average color shift of the 99 CES to characterize the overall level of similarity between the test source and reference illuminant. Values range from 0 to 100.
Gamut Index	Rg	Compares the area enclosed by the average chromaticity coordinates in each of 16 hue bins to characterize the average saturation level of the test source compared to the reference illuminant. A neutral score is 100, with values greater than 100 indicating an increase in saturation and values less than 100 indicating a decrease in saturation. The range in values grows as fidelity decreases.



## 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

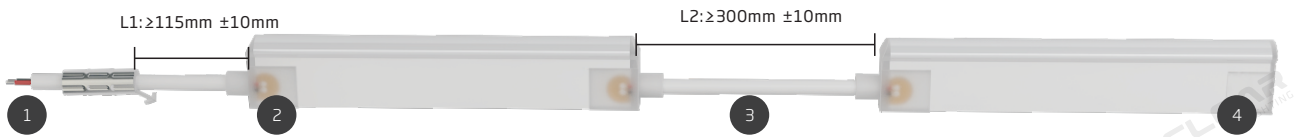
Type	Silicone Injection-moulded Connector	
IP Rating	IP68	
Item Code	Single-end Feed	Double-end Feed
C-SFR-F21B-6W	30m	60m
C-SFR-F21B-9W	18m	36m
C-SFR-F21B-12W	15m	30m

### Note:

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

# Connector Type

CLEAR LIGHTING



CLEAR LIGHTING

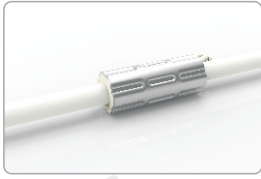
1	2	3	4
<p>Male &amp; Female Connector (Optional)</p> <div data-bbox="199 663 395 857"> <p>Male Connector</p> </div> <div data-bbox="199 1003 395 1198"> <p>Female Connector</p> </div>	<p>Silicone Injection-moulded Front Connector</p> <div data-bbox="539 663 735 857"> <p>End</p> </div> <div data-bbox="539 1003 735 1198"> <p>Side-L</p> </div> <div data-bbox="539 1350 735 1545"> <p>Side-R</p> </div> <div data-bbox="539 1693 735 1888"> <p>Bottom</p> </div>	<p>Silicone Injection-moulded Middle Connector</p> <div data-bbox="874 663 1070 857"> <p>Silicone Injection-moulded Jumper Maximum 8 Jumpers in 20m light Maximum 4 Jumpers in 10m light</p> </div> <div data-bbox="874 1003 1070 1198"> <p>Silicone Injection-moulded T-feed Maximum 8 T-feeds in 20m light Maximum 4 T-feeds in 10m light</p> </div>	<p>Silicone Injection-moulded End Cap</p> <div data-bbox="1209 663 1406 857"> <p>End cap</p> </div>

CLEAR LIGHTING

CLEAR LIGHTING

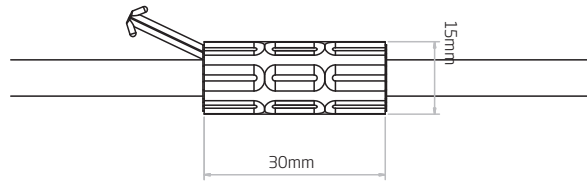
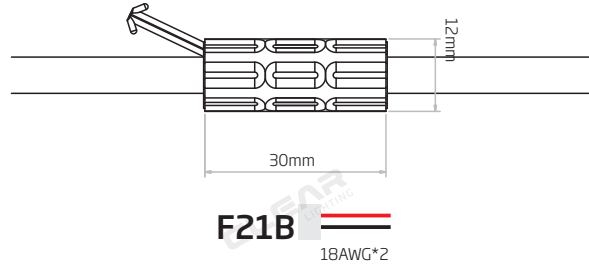
CLEAR LIGHTING

# 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.



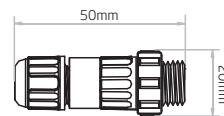
Note:

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

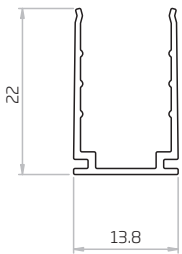


It uses high-quality 6063 aluminum with thin-wall, light-weight design to fit tightly the light body. It is deformation and rust resistant, and cost-effective.

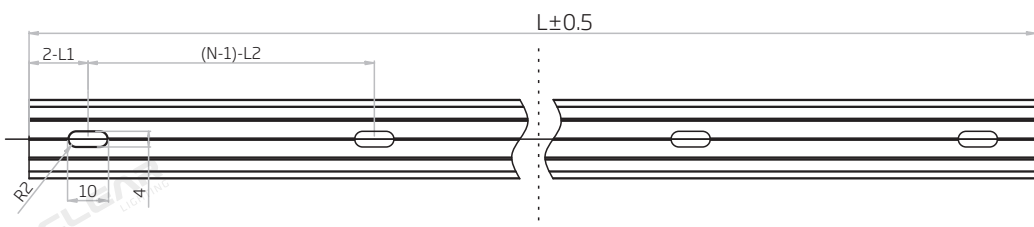
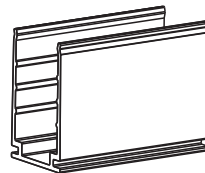
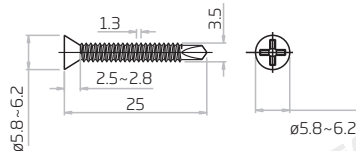
Please refer to the applicable installation ways.

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:

- 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-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



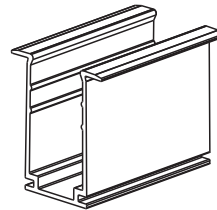
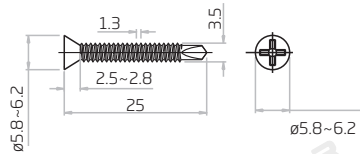
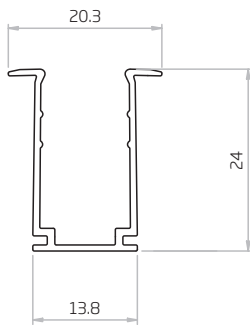
It uses high-quality 6063 aluminum with thin-wall, light-weight design to fit tightly the light body. It is deformation and rust resistant, and cost-effective. The "Flange" design is more suitable for recessed installation, better fits with the mounting groove and minimizes the operation tolerance during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



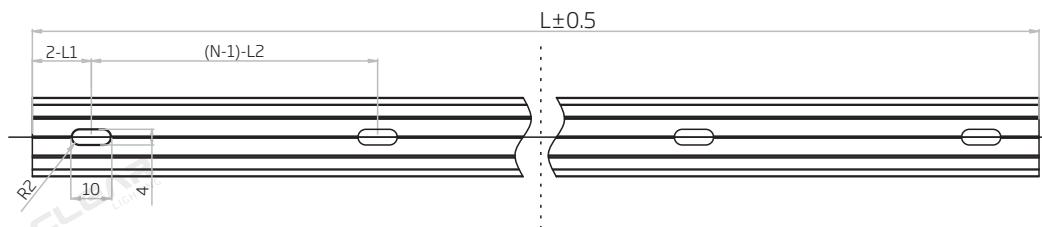
Please refer to the applicable installation ways.

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

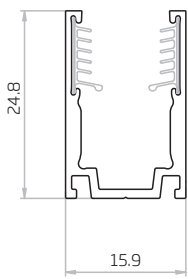


Specialized for the LED Flex Linear light, it was developed by combining the advantages of 6063 aluminum and elastic serrated tape. The inside elastic serrated tape as the grabbing force to keep continuous strong clamping force on the light body and protect the light from the damage caused by the large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

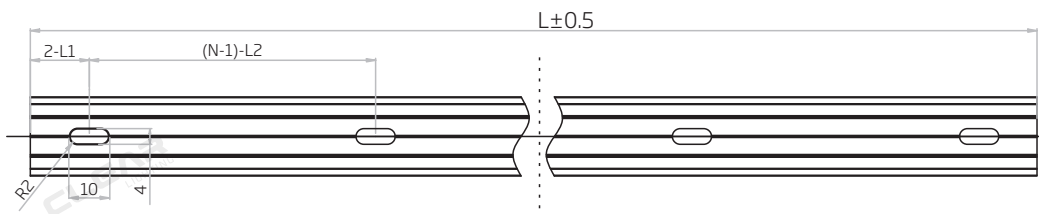
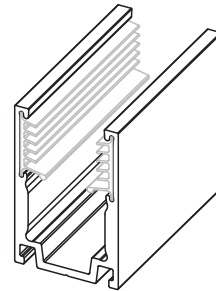
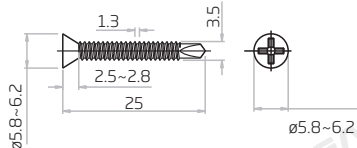
Please refer to the applicable installation ways.

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



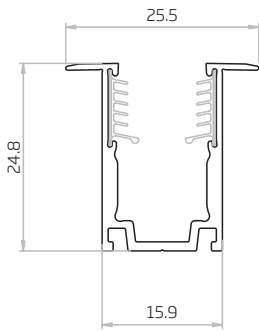
Specialized for the LED Flex Linear light, it was developed by combining the advantages of 6063 aluminum and elastic serrated tape. The inside elastic serrated tape as the grabbing force to keep continuous strong clamping force on the light body and protect the light from the damage caused by the large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

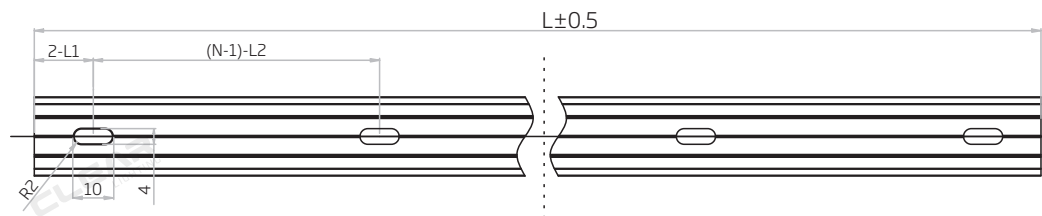
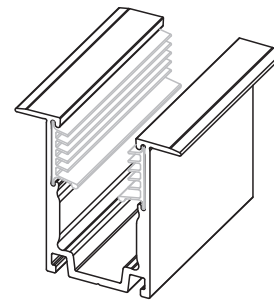
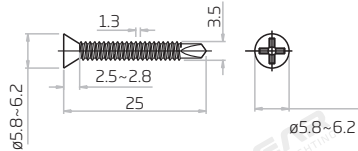
Please refer to the applicable installation ways.

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

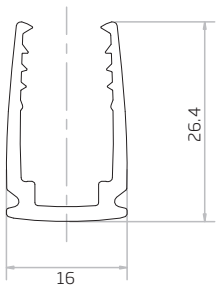


It uses thickened PC profile to 3mm thickness, specialized for underwater application up to 2m depth, and has excellent properties in rust, corrosion and fracture resistance.

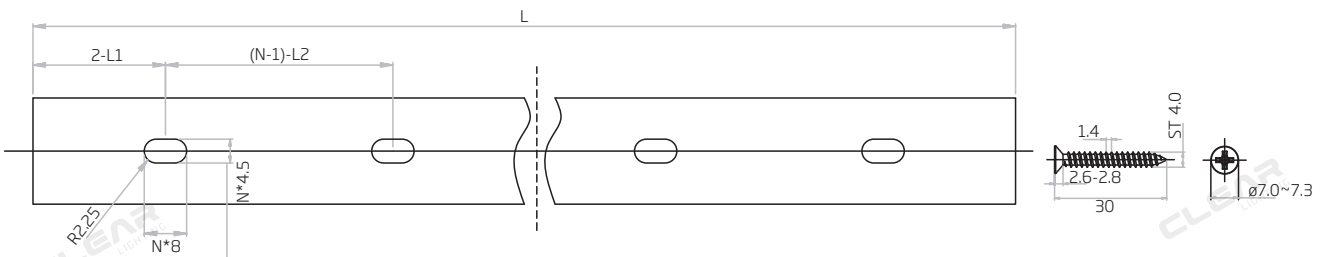
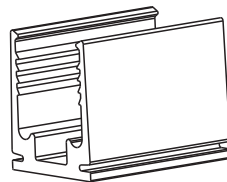
Please refer to the applicable installation ways.

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

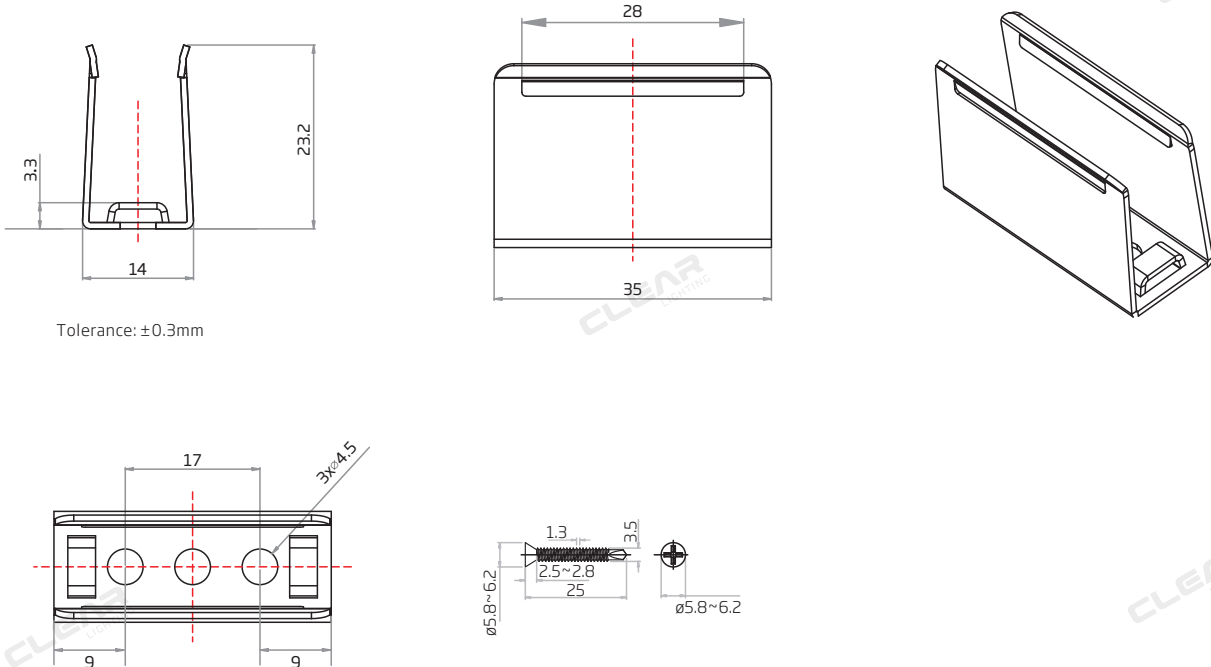


It uses grade 316 stainless steel with excellent property of deformation and rust resistance. The material makes it suitable for humid coastal surroundings and weak acid-base industrial environments that other mounting profiles can't accommodate. The structural design and material characteristics collectively 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

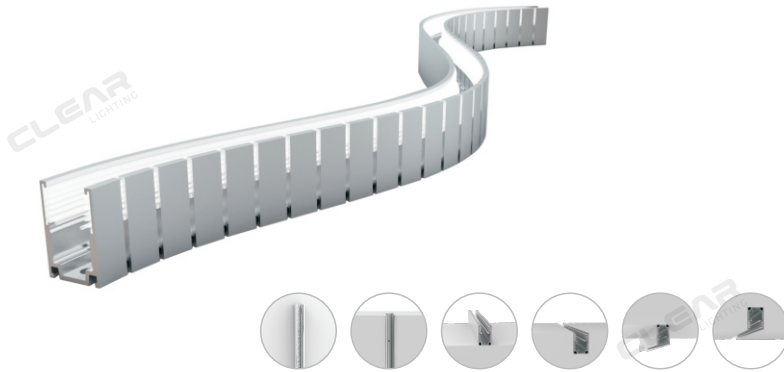
## Dimension: mm



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

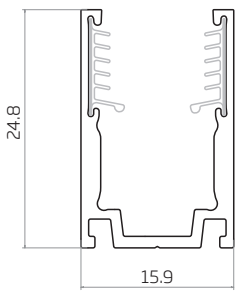


It is an expanded design of the serrated aluminum profile, and caters for the continuously streamlined aesthetics of curve shape. The secondary precision cutting process, not only maintains the advantage of clamping force, but also enables the two-way horizontal bending directions with super shape memory.

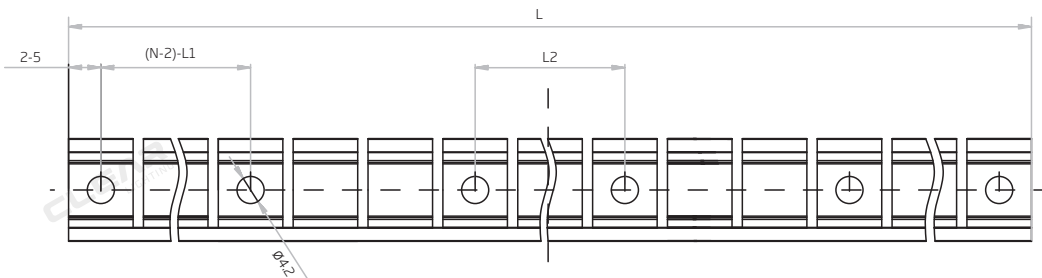
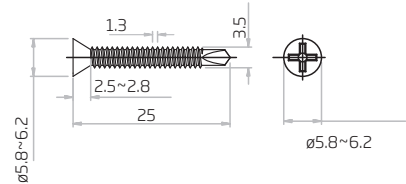
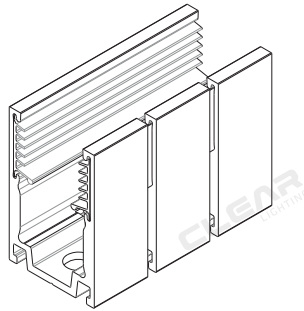
Please refer to the applicable installation ways.

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

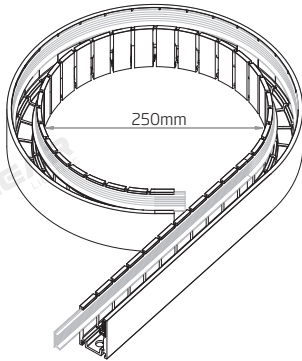
Item Code	Standard Length	L1	L2	Screw Hole	Hole Number
F21-BSA/PL-500MM-AL	500mm/19.68in	110.3mm/4.34in	48.9mm/1.92in	$\phi 4.2\text{mm}/0.17\text{in}$	6
F21-BSA/PL-1000MM-AL	1000mm/39.37in	116.5mm/4.59in	98.8mm/3.89in	$\phi 4.2\text{mm}/0.17\text{in}$	10

# Installation Instructions

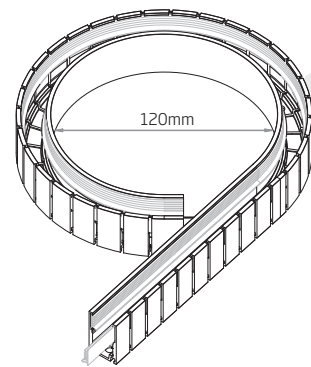
Friendly Reminder: please read instructions carefully before operation.

## Bending Diameter

Min. Bending Diameter (Toothed Side inwards)

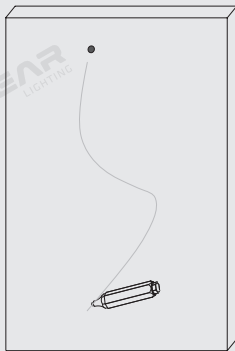


Min. Bending Diameter (Toothed Side outwards)



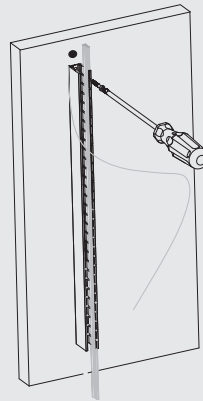
## Installation

### Step 1



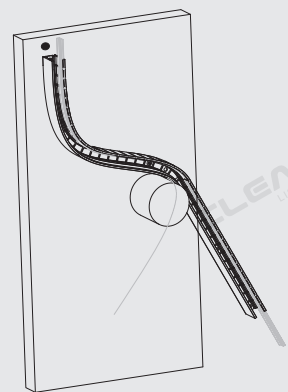
Mark the required shape on the mounting surface or print the sketch in the scale of 1:1 if complicated.

### Step 2



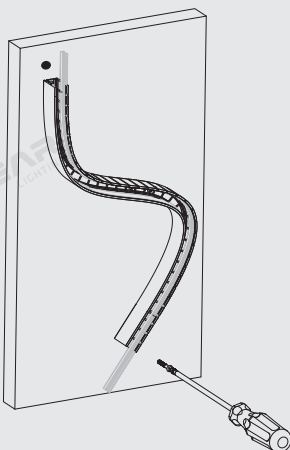
Get the front connector outside of profile and keep at least 10mm more apart. Fix the screw starting from the power input end.

### Step 3



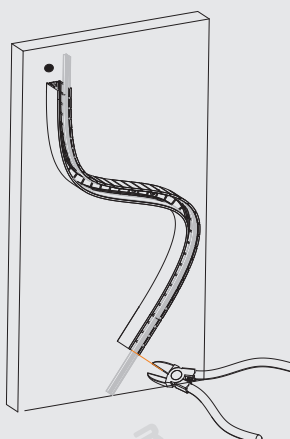
Use cylinder or disc-like object you have to assist with shaping.

### Step 4



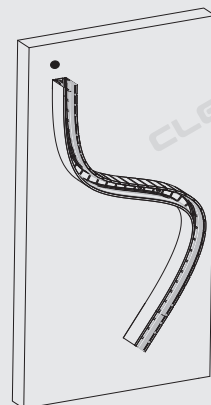
Fix the rest in sequence along with the marks.

### Step 5



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

### Step 6



Finish and fix the light in.