Flexglo™ F1212B Monochrome - White Light (Silicone)

3 year Warranty
Solvents Resistant
UV Resistant
Flame Resistant
Salt Water Resistant
IK10 Protection

Certification Mark	UL	CE	
Test Standard/Directive	UL2108 Class 2	CE-EMC	IS 10322
Certificate Serial Number	20180801-E360029	SZEM1712012372LMV	R-41128376
Report Reference	E360029-20130322	SZEM171201237201	NO.20190425001

2200K
2700K
3000K
3500K
4000K
5700K

Ambient Working Temperature
9W/m -40~60℃ /-40~140℉

Ambient Installation Temperature
-40℃ /-40℉

Storage Temperature
-40 ~ 60℃ /-40~140℉

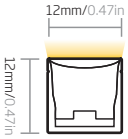
Max. Mounting Surface Temperature
85℃ /185℉
specified in the non-working state of light.

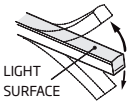
CV
Constant Voltage
DC24V

C-SFR-F1212B-VB

Min. Bending Diameter
100mm/3.94in

Min. Cutting Length
14.28mm/0.56in
2LEDs



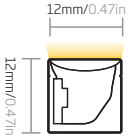


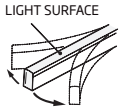
Vertical Bending

C-SFR-F1212B-HB

Min. Bending Diameter
100mm/3.94in

Min. Cutting Length
14.28mm/0.56in
2LEDs





Horizontal Bending

Note:
1. The illuminated light length shall be an integral multiple of min. cutting length.
2. 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 IP67.

Feature

Flexglo™ F1212B Monochrome - White Light (Silicone) is a new item designed for the architectural market with rated power of 9W/m, maximum luminous flux 480lm/m.Thanks to the excellent weatherproof and UV-resistant performance of silicone material, it features a wide ambient working temperature range of -40-60℃.

The IP67 Injection-moulded Connector is engineered for outdoor use, owing to its elegant appearance and strong adhesiveness acquired by the liquid silicone injection workmanship.

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

Item Code

C	SFR	F1212B	VB	24CV	30K	WM	140	80	9W	14.28
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	F1212 B= Monochrome	VB= Vertical Bending HB= Horizontal Bending	DC24V & Constant Voltage	22K=2200K 27K=2700K 30K=3000K 35K=3500K 40K=4000K 57K=5700K	WM= White & Milky	140	80	9W	14.28

Electrical Parameter

Category	C-SFR-F1212B-VB/HB
Voltage (V)	24
Current (mA/m)	375
Power (W/m)	9
Circuit Type	CV
LED Type	2835
LEDs Qty/m	140
LEDs Qty/unit	2
Unit/m	70
Min. Cutting Length (mm)	14.28
Min. Cutting Length (in)	0.56

Optical Parameter

CRI 80

Item Code	Finished Product						LED	
	CCT	CCT Tolerance	Color Tolerance	CRI	Lumen/m	Lumen/ft	Color Tolerance	CRI
C-SFR-F1212B-VB-24CV-22K-WM-140-80-9W-14.28	2200K	2238±82K	<5SDCM	80	480lm	146lm	<2.3SDCM	82~87
C-SFR-F1212B-VB-24CV-27K-WM-140-80-9W-14.28	2700K	2725±115K	<5SDCM	80	480lm	146lm	<2.3SDCM	82~87
C-SFR-F1212B-VB-24CV-30K-WM-140-80-9W-14.28	3000K	3045±140K	<5SDCM	80	480lm	146lm	<2.3SDCM	82~87
C-SFR-F1212B-VB-24CV-35K-WM-140-80-9W-14.28	3500K	3465±170K	<5SDCM	80	480lm	146lm	<2.3SDCM	82~87
C-SFR-F1212B-VB-24CV-40K-WM-140-80-9W-14.28	4000K	3985±225K	<5SDCM	80	480lm	146lm	<2.3SDCM	82~87
C-SFR-F1212B-VB-24CV-57K-WM-140-80-9W-14.28	5700K	5665±355K	<5SDCM	80	480lm	146lm	<2.3SDCM	82~87
C-SFR-F1212B-HB-24CV-22K-WM-140-80-9W-14.28	2200K	2238±82K	<5SDCM	80	420lm	128lm	<2.3SDCM	82~87
C-SFR-F1212B-HB-24CV-27K-WM-140-80-9W-14.28	2700K	21405±115K	<5SDCM	80	420lm	128lm	<2.3SDCM	82~87
C-SFR-F1212B-HB-24CV-30K-WM-140-80-9W-14.28	3000K	3045±140K	<5SDCM	80	420lm	128lm	<2.3SDCM	82~87
C-SFR-F1212B-HB-24CV-35K-WM-140-80-9W-14.28	3500K	3465±170K	<5SDCM	80	420lm	128lm	<2.3SDCM	82~87
C-SFR-F1212B-HB-24CV-40K-WM-140-80-9W-14.28	4000K	3985±225K	<5SDCM	80	420lm	128lm	<2.3SDCM	82~87
C-SFR-F1212B-HB-24CV-57K-WM-140-80-9W-14.28	5700K	5665±355K	<5SDCM	80	420lm	128lm	<2.3SDCM	82~87

Note:
1. CCT tolerance and color tolerance both refer to ANSI C78.377 standard.
2. The color tolerance of finished products is kept <5SDCM from batch to batch and narrowed to <3SDCM at the same batch.

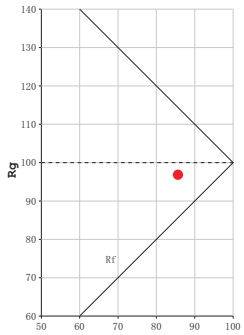
Max. Running Length

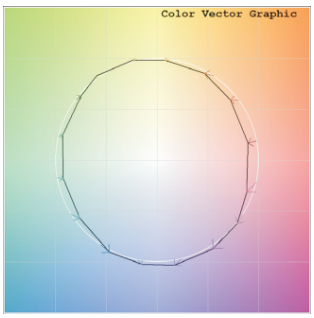
Input: DC24V

				
Type	Silicone Injection-moulded Connector		Socket Connector	
IP Rating	IP67		IP67	
Item code	Single-end Feed	Double-end Feed	Single-end Feed	Double-end Feed
C-SFR-F1212B-VB-9W	6m/19.69ft	12m/39.37ft	6m/19.69ft	12m/39.37ft
C-SFR-F1212B-HB-9W	6m/19.69ft	12m/39.37ft	6m/19.69ft	12m/39.37ft

Note:

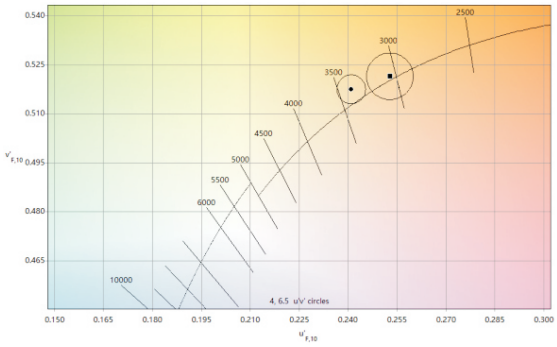
Note:
1. Above conclusion is based on voltage drop testing result of the light with 0.3m (0.98ft) cable only.
2. The maximum running length is based on the light in static full loading status exceptionally stated dynamic operating.
3. Above running length is only the light length excluding lengths of connectors. Please refer to the specific dimension of each connector.
4. The delivery length might be subject to the maximum packing length.





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.

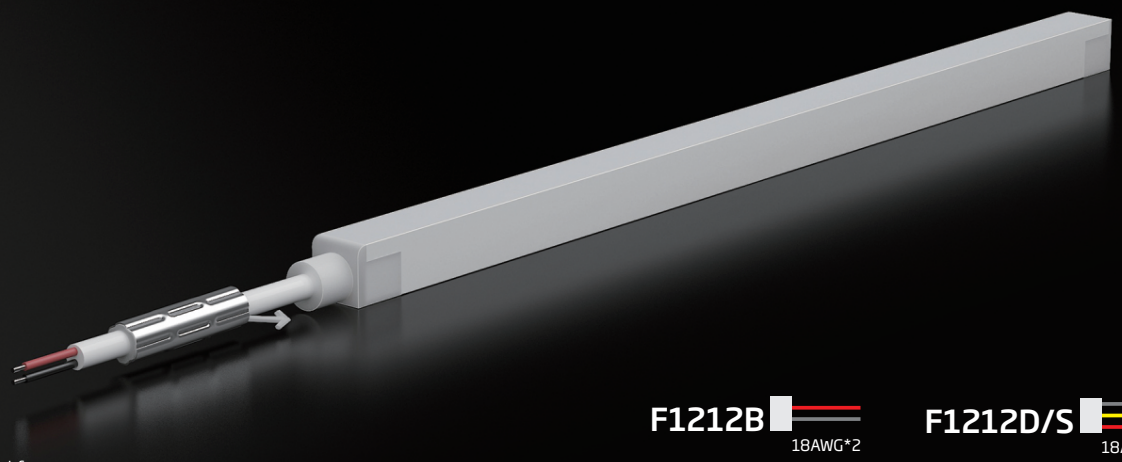
Measure	Abbreviation	Description
Fidelity Index	Rf	Analogous to CIE Ra (CRI). Characterizes the average color shift of the 99 CES to characterize the overall level of similarity between the test source and reference illuminant. Values range from 0 to 100.
Gamut Index	Rg	Compares the area enclosed by the average chromaticity coordinates nates 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 crease 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.

F1212 Silicone Injection-moulded Connector IP67



Recommended for,
1. Indoor environments.

Feature

Precision milling and special glue Silicone liquid injection-moulded workmanship enable an almost consistent size between connectors and light body, and the transparent terminal of the connector allows the seamless effects spliced end by end.

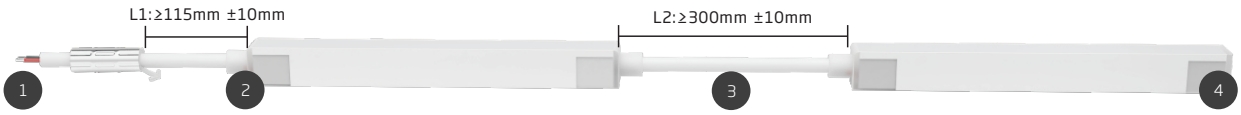
DryWire™ technology applied on the cable eliminates the capillary phenomenon through wires, which secured the long-term reliability in outdoor or any wet environments.
Light lengths can be customized on the basis of projects and pre-installation before the delivery eases the assembly trouble on site.

In-house Test

Test Object	No.	Experiment Item	Standard
Metal Parts	1	Weather Resistance-Salt Spray	IEC 68-2-11
Waterproof Connector	1	Waterproof-IPX5 / IPX7 / IPX8	CLEAR-defined [①]
	2	Swing-extreme	CLEAR-defined [①]

[①]Before waterproof test, high-low temperature cycling shock test has been implemented to simulate the outdoor harsh weather, and it's a more stringent standard we're compliant with than third party's.

Connector Type



1 Male & Female Connector (Optional)

Male Connector

Female Connector

2 Injection-moulded Front Connector

End

Side-L

Side-R

Bottom

3 Injection-moulded Middle Connector

Silicone Injection-moulded Jumper

Maximum 4 jumpers in 10m light

Silicone Injection-moulded T-feed

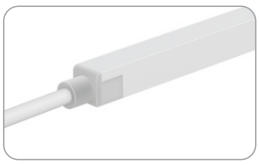
Maximum 4 T-feeds in 10m light

4 Injection-moulded End Cap

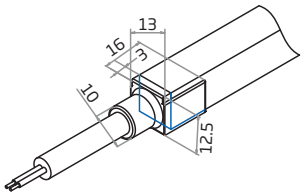
End cap

Dimension: mm

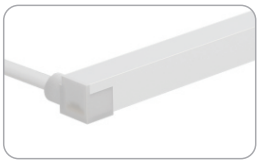
Silicone Injection-moulded Front Connector-End



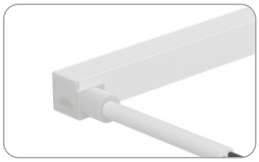
F1212B/F1212D/F1212A/F1212E/HB-IM/FC-01/02-E
F1212B/F1212D/F1212A/F1212E/VB-IM/FC-01/02-E



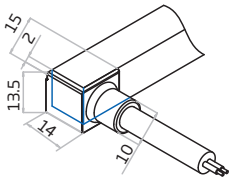
Silicone Injection-moulded Front Connector-Side



F1212B/F1212D/F1212A/F1212E/HB-SIM/FC-02-SL
F1212B/F1212D/F1212A/F1212E/VB/SIM/FC-01/02-SL

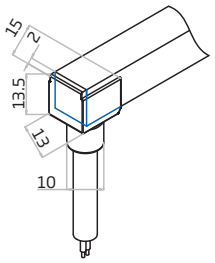


F1212B/F1212D/F1212A/F1212E/HB-SIM/FC-01-SR
F1212B/F1212D/F1212A/F1212E/VB-SIM/FC-01/02-SR

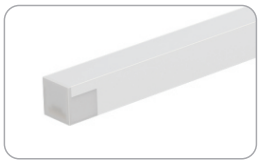


Silicone Injection-moulded Front Connector-Bottom

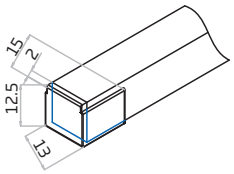
F1212B/F1212D/F1212A/F1212E-HB-SIM/FC-01/02-B
F1212B/F1212D/F1212A/F1212E-VB-SIM/FC-01/02-B



Silicone Injection-moulded End Cap

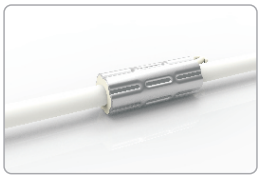


F1212B/F1212D/F1212A/F1212E-SIM/EC



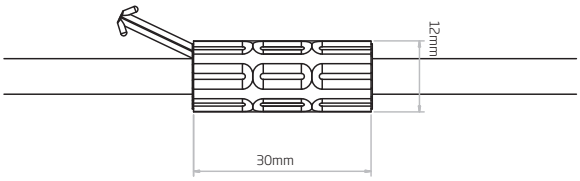
Note:
1.Unless otherwise stated, the tolerance of the connector is ±0.5mm,
2.To avoid damage from the excessive force on cable joint, please keep at least 20mm of cable ahead in the natural state.

Anti-wicking Ferrule



The anti-wicking ferrule is located at 115mm (±10mm tolerance) from the connector on the cable.

For protection against water ingress from inside of cable wire and hence damage the light.



F1212B 18AWG*2

F1212D/S 18AWG*3

F1212A 22AWG*3 20AWG*1

F1212E 24AWG*1 26AWG*4

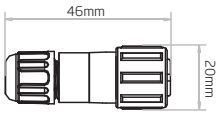
Note:

1.Unless otherwise stated, the tolerance is ±0.5mm.

2.The removal of anti-wicking ferrule will void the warranty if any water ingression caused by it.

Male & Female Connector

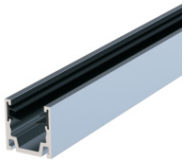
For plug and play cable junction, IP67



Note:

Unless otherwise stated,the tolerance is ±2mm.

F1212 Mounting Profile

Picture	Name/Item Code	Installation Way
	Serrated Aluminum Profile F1212-SA/PL-20/500/1000/2000mm	

F1212 Socket Connector IP67

F1212B 22AWG*2

F1212D/S 18AWG*3

Recommended for

1. Outdoor environments.
2. Uncertain breakdown lengths or on-site length adjustment.

Feature

This new type fill the gap that there is no DIY connector available for the outdoor use of F1212, meeting the needs of length adjustment on site, and allows you to adapt to the installation environment against the length measurement error or unexpected design change. Also, it achieves the unique balance between waterproof performance and physical dimension, highly functional yet incredibly minimal, giving you an extraordinary visual experience from details. The whole assembling process is tool-less and quick, benefiting from its simple but smart structure design.

In-house Test

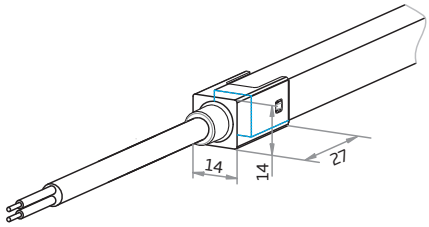
Test Object	No.	Experiment Item	Standard
Metal Parts	1	Weather Resistance-Salt Spray	IEC 68-2-11
Waterproof Connector	1	Waterproof-IPX5 / IPX7 / IPX8	CLEAR-defined[①]
	2	Swing-extreme	CLEAR-defined[①]

[①]Before waterproof test, high-low temperature cycling shock test has been implemented to simulate the outdoor harsh weather, and it's a more stringent standard we're compliant with than third party's.

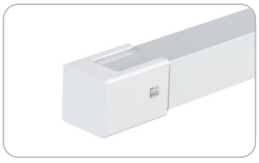
Dimension: mm

Socket Front Connector

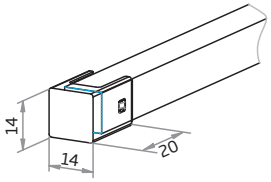
F1212B-HB-SO/FC-01/02-E
F1212B-VB-SO/FC-01/02-E
F1212D-HB-SO/FC-01/02-E
F1212D-VB-SO/FC-01/02-E
F1212S-HB-SO/FC-01/02-E
F1212S-VB-SO/FC-01/02-E



Socket End Cap



F1212-SO/EC



Note:
1.Unless otherwise stated, the tolerance of the connector is ±0.5mm,
2.To avoid damage from the excessive force on cable joint, please keep at least 60mm of cable ahead in the natural state.

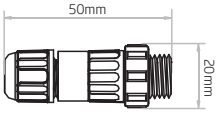
F1212B	-	SO/FC	-	01	-	E	-	300mm
F1212B-HB/VB F1212D-HB/VB F1212S-HB/VB		SO=Socket FC=Front Connector EC=End Cap		01=01 End 02=02 End		E=End Feed		300mm Cable 1000mm Cable 3000mm Cable 5000mm Cable

Item Code(B)	Item Code(D)	Item Code(S)
F1212B-HB-SO/FC-01-E-300mm	F1212D-HB-SO/FC-01-E-300mm	F1212S-HB-SO/FC-01-E-300mm
F1212B-HB-SO/FC-02-E-300mm	F1212D-HB-SO/FC-02-E-300mm	F1212S-HB-SO/FC-02-E-300mm
F1212B-VB-SO/FC-01-E-300mm	F1212D-VB-SO/FC-01-E-300mm	F1212S-VB-SO/FC-01-E-300mm
F1212B-VB-SO/FC-02-E-300mm	F1212D-VB-SO/FC-02-E-300mm	F1212S-VB-SO/FC-02-E-300mm
F1212B-SO/EC	F1212D-SO/EC	F1212S-SO/EC

Note:
1.Please ensure the cable length is not more than the "Max. Cable Length" in the page mentioned above according to light length and its wire gauge to minimize voltage drop.
2.All the nominal cable lengths are measured before processing, so the delivered (visible) ones would be a little shorter. Please contact us before ordering if any strict requirement on them.
3.The tolerance range of cable length enlarges as the cable becomes longer, maximum up to ±50mm.

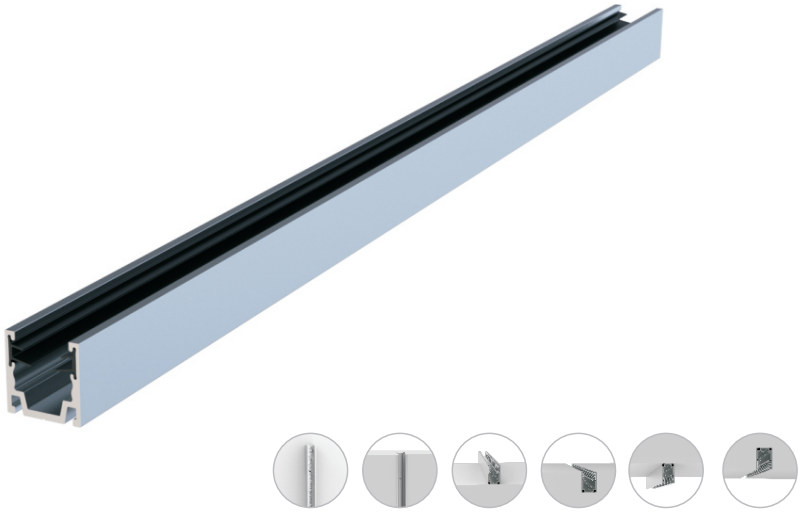
Male & Female Connector

For plug and play cable junction, IP65



Note:
Unless otherwise stated,the tolerance is ±2mm.

Serrated Aluminum Profile

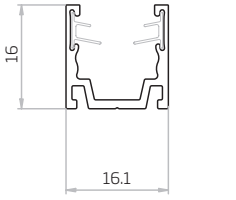


Specialized for the LED Flex Linear light, it was developed by combining the advantages of 6063 aluminum and elastic serrated tape. The inside elastic serrated tape as the grabbing force to keep continuous strong clamping force on the light body and protect the light from the damage caused by the large friction in the process of installation and dismantlement. It can stand max. 50 times of the light weight under -20~70℃ and is easy to install and dismantle.

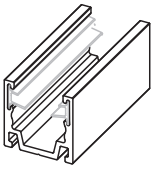
Please refer to the applicable installation ways.

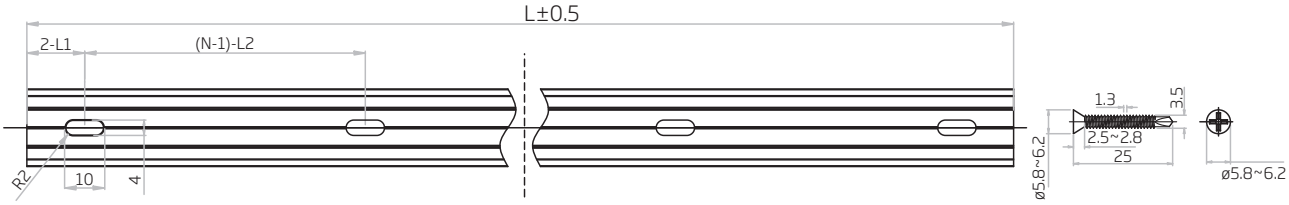
Test Object	No.	Experiment Item	Standard
Metal Parts	1	Weather Resistance-Salt Spray	IEC 68-2-11
Mounting profile	2	Clamping force	CLEAR-defined

Dimension: mm



Tolerance: ±0.3mm

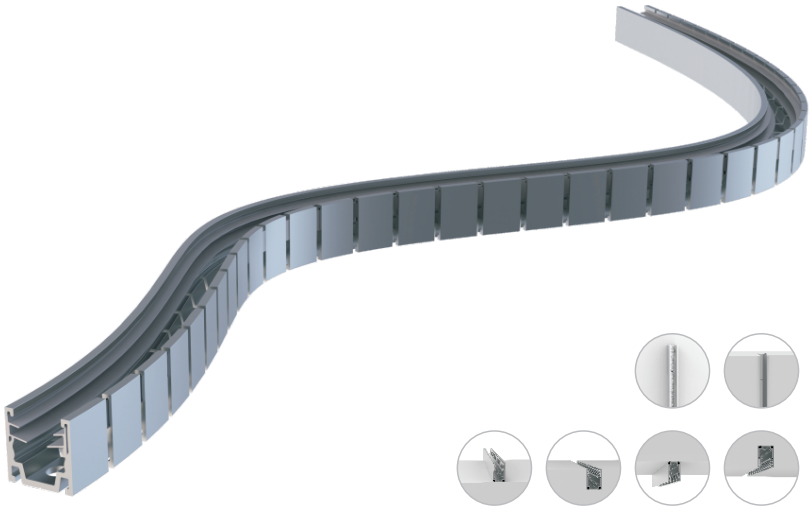




Note:
1. 2-L1 refers to two of symmetric L1 in each piece of profile.
2. (N-1)-L2 refers to (N minus one) of symmetric L2 in each piece of profile.
"N" hereby stands for its corresponding "Hole Number" in the below table

Item Code	Standard Length	L1	L2	Slotted Hole	Hole Number
F1212-SA/PL-20MM-AL	20mm/0.787in	10mm/0.39in	/	4*10mm/0.16*0.39in	1
F1212-SA/PL-500MM-AL	500mm/19.68in	50mm/1.97in	200mm/7.87in	4*10mm/0.16*0.39in	3
F1212-SA/PL-1000MM-AL	1000mm/39.37in	100mm/3.93in	200mm/7.87in	4*10mm/0.16*0.39in	5
F1212-SA/PL-2000MM-AL	2000mm/78.74in	100mm/3.93in	200mm/7.87in	4*10mm/0.16*0.39in	10

F1212 Bendable Serrated Aluminum Profile

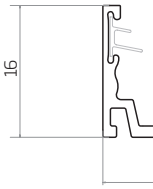


It is an expanded design of the serrated aluminum profile, and caters for the continuously streamlined aesthetics of curve shape. The secondary precision cutting process, not only maintains the advantage of clamping force, but also enables the two-way horizontal bending directions with super shape memory.

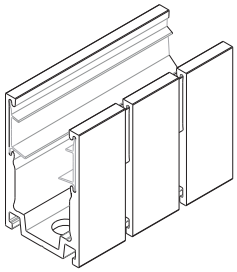
Please refer to the applicable installation ways.

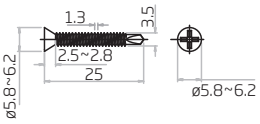
Test Object	No.	Experiment Item	Standard
Metal Parts	1	Weather Resistance-Salt Spray	IEC 68-2-11
Mounting profile	2	Clamping force	CLEAR-defined

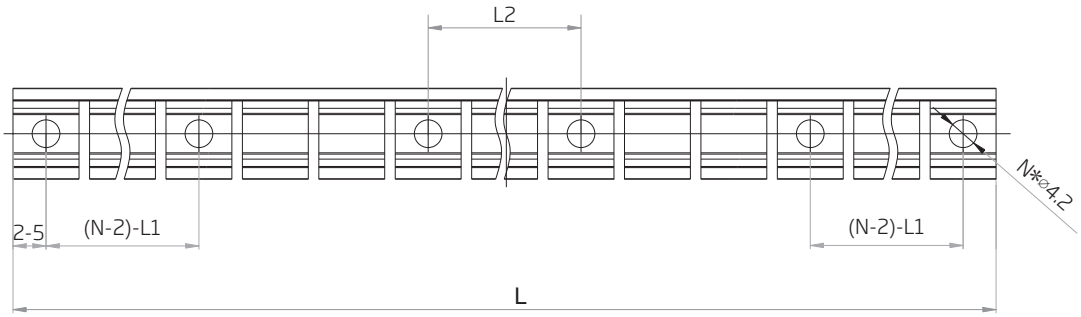
Dimension: mm



Tolerance: ±0.3mm







Note:
1. 2-5 refers to two of symmetric 5mm in each piece of profile.
2. (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

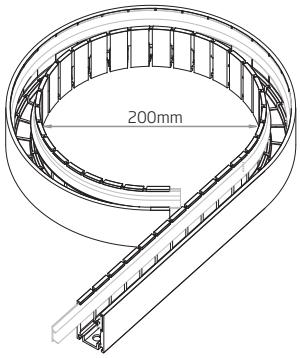
Item Code	Standard Length	L1	L2	Screw Hole	Hole Number
F1212-BSA/PL-500MM-AL	500mm/19.68in	110.3mm/4.34in	48.9mm/1.92in	ø4.2mm/0.17in	6
F1212-BSA/PL-1000MM-AL	1000mm/39.37in	111.4mm/4.39in	98.8mm/3.89in	ø4.2mm/0.17in	10

Installation Instructions

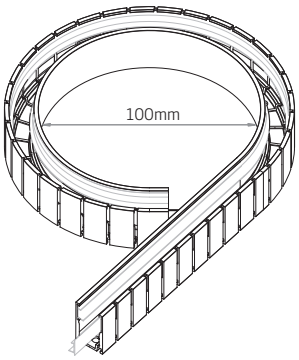
Friendly Reminder: please read instructions carefully before operation.

Bending Diameter

Min. Bending Diameter (Toothed Side inwards)

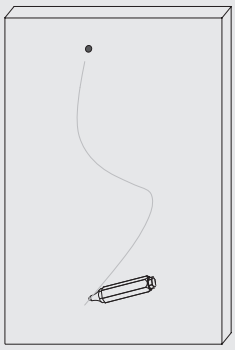


Min. Bending Diameter (Toothed Side outwards)



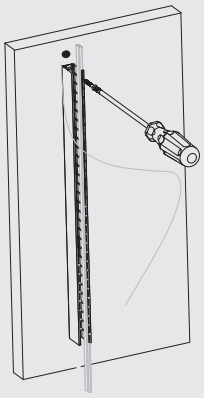
Installation

Step 1



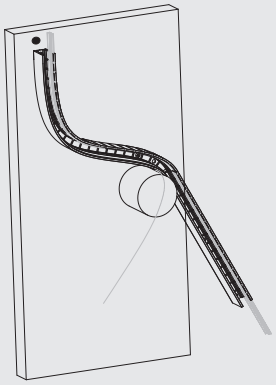
Mark the required shape on the mounting surface or print the sketch in the scale of 1:1 if complicated.

Step 2



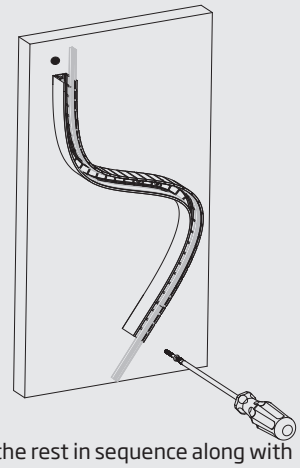
Get the front connector outside of profilel and keep at least 10mm more apart. Fix the screw starting from the power input end.

Step 3



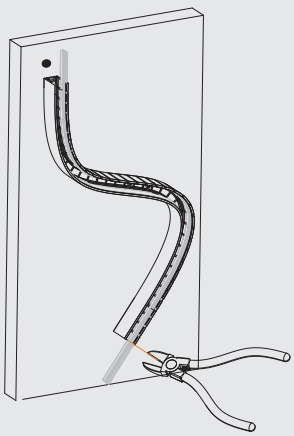
Use cylinder or disc-like object you have to assist with shaping.

Step 4



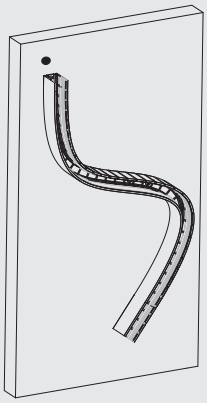
Fix the rest in sequence along with the marks.

Step 5



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

Step 6



Finish and fix the light in.