



www.polinetlux.com
www.polinetltd.com.tr

Email: bilgi@polinetlux.com
info@polinetltd.com.tr



Istanbul Office: +90 885 8500776

Kocaeli Fabric: +90 262 7281513

Professional Products and Systems for Translucent Roof and Facade Cladding



**5 Duvarlı
Wall**



MEGALUX

U Lock System Multiwall Polycarbonate Panel

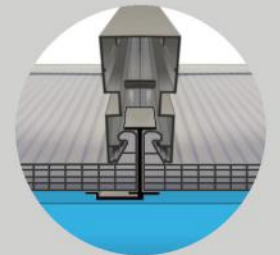
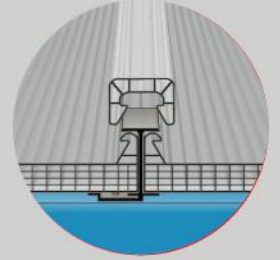
Modular Megalux Panels can be manufactured with a UV co- extruded layer to use both surfaces of the panel for versatile and reversible installation. The tooth grip-lock on the both sides of Megalux panels and pc or aluminium lock connector bars ensure easy installation by providing perfect waterproofing , very good resistance against high winds, snow loads and hail damage. Megalux panel width is 600 mm and available with different thicknesses. The all thickness alternatives of Megalux panels with 5 walls structure submit high light transmission and are variable for different color alternatives . 5 wall structure of Megalux has very high mechanical durability and excellent thermal insulation. Megalux pc panel system provide cost effective solutions thank to all these advantages. Megalux panels are supplied complete with the system accessories such as aluminum fixing hooks, profiles for safe , easy and faster installation. Megalux panel translucent glazing system is one of the best options in order to cover large areas on facades and roofs.

Application Areas

- Flat or curved roof lights
- Facade Cladding
- Sport ,industrial ,
- Universal building
- Refurbishment roof or facade
- Bus and Gas Station Canopy
- Winter garden , Greenhouses
- Bazaar roof

Advantages of Megalux

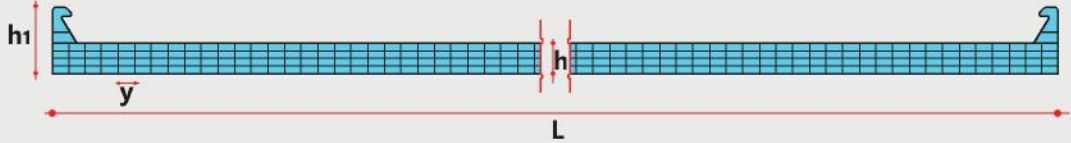








- High light transmission
- Variety of colours
- Excellent heat-insulating
- High fire resistance
- UV protection
- 10 warranty
- 200 times tougher than glass
- Easy and safe system



The Products and Systems of Polinet

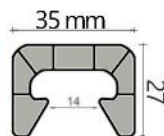
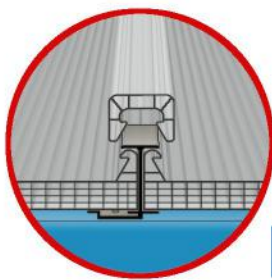
Reflect Daylight and Sky Colours Perfectly to Architectural Size



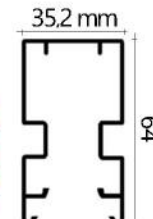
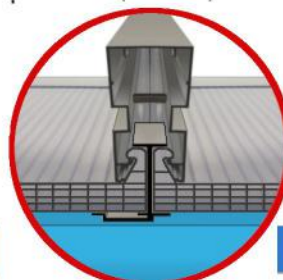
						
Thickness mm (h)	8	10	12	16	20	
Structure	Five Walls					
Cell width -mm(y)	8					
Width -mm (L)	600					
Thooth Heigth -mm (h1)	26	28	30	34	38	
Length	Standard 12 mt or at requested lengths					
Weigth - Kg/m ²	1,90	2,20	2,40	2,85	3,40	
Thermal Conductivity -W/m ² °K	2,50	2,39	2,24	2,10	1,80	
Min .Bendind Radius	1700	1900	2200	2800	3200	
Light Transmission-% (Please ask for other colour alternatives)						
Clear			72		63	60
Opal			50		45	43
Bronze			30			23
Blue			38		32	28
Green			33			21
Metalic Grey			26		19	16
Gold			32			28
Copper			23			20

PC and ALUMINIUM LOCK CONNECTOR PROFILE

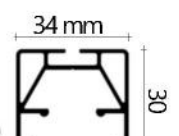
Thanks to our production technology, we are able to produce UV protection on both sides of the Pc panels to install both of surfaces of Megalux Pc panels . In standard applications, the pc panels are installed according to the tooth grip-lock facing out and the pc lock connector profiles (Pck-01) are attached to the tooth grip-lock by clicking . Aluminum lock connector profiles (51611) increase the strength of polycarbonate panel panels against high load values and provide safe, easy application in case the distances between horizontal purlins on the roof or facade main construction system are too high. In standard applications, pc panels or aluminum lock connector profiles (51611)are used with aluminum fixing hook. In reverse applications the aluminum lock connector profiles (51057) is fixed on horizontal purlins and the tooth grip-locks of Megalux pc panel are installed by clicking into the aluminum lock connector profiles (51057)



PCK-01



Kod:51611



Kod:51057

**Pc U Lock&Al.Fixing Hook
Standard Installation**

**Al.U lock& Al.Fixing Hook
Standard Installation**

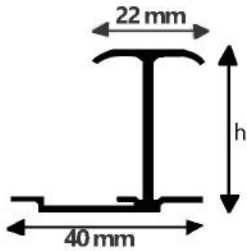
**AL.U lock
Reverse Installation**

*Ürün seçimlerinde kilit türlerine göre hazırlanmış yük değerleri & aşık mesafelerini gösteren tablolarını dikkate alınız.



Pc END CUP

It is used to close the mouth of the locks and can be easily attached to both ends of the locks thanks to its teeth. It prevents dust and dirt from entering the pc locks and panels.



ALUMINIUM FIXING HOOKS

Pc Panel Thickness	8 mm	10 mm	12 mm	16 mm	20 mm
Al. Fixing H. Code	51615	51182	51612	51181	51180
Al. Fixing. H. Height-h	32 mm	34 mm	36 mm	40 mm	44 mm



Standard length (L) of Aluminum fixing hooks is 40 mm. Height of hooks vary according to the Megalux pc panel thickness. Aluminum fixing hooks fix to construction purlins by screwing. The teeth of Megalux pc panels are inserted into hooks. In flat applications, Aluminum fixing hooks can also be used as continual profile to increase the strength of PC panels against roof and wall loads in case very large distances between purlins of the construction.

ALUMINIUM PROFILES OF MEGALUX PC PANEL SYSTEM

U lock Connector Profile	Ridge Profile-Left	Screw Profile	Upper-End Profile	Upper-End Profile
Code:51057	Code:51169	Code: 51188	Code:51187	Code:51610
Code:51611	Code: 51170	Code 51183-84-85	Code:51186	Code:13022
U lock Connector Profile	Ridge Profile-Right	End Profile	Body Profile	Body Profile

*Standard length of the aluminium profiles is 6 metres and anodized. They can be produced special length and colour according to projects.

INOX ALLEN SCREW & NUT



They are fixed onto side of aluminium lock profile to tighten the mouth of the lock profile. By this way, aluminium lock profiles (51611) are tightly locked the teeth of Megalux pc panels.

ADHESIVE TAPES



Adhesive Tape-25 (for pc panel of 10 and 12 mm thickness)
 Filtered A. Tapes-25 (for pc panel of 10 and 12 mm thickness)
 Adhesive Tape-38 (for pc panel of 16 and 20 mm thickness)
 Filtered A. Tapes-38 (for pc panel of 16 and 20 mm thickness)



It is recommended to seal pc panel with filter adhesive tapes because of condensation could occur inside of pc panel. Pc panels are drained and ventilated by means of filter adhesive tapes.

EPDM GASKETS

	Code:2522	the quantity of one box	250 mt/15 kg
	Code:624		275 mt/15 kg

Epdm gaskets which are used with aluminium profiles of the system, provide waterproof and show very high resistance to weather conditions. Refer to system details for compatibility of gaskets with the aluminium profiles.

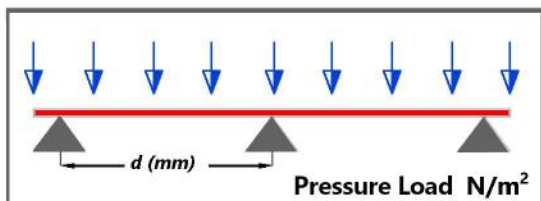
POLYETHYLENE SUPPORTER



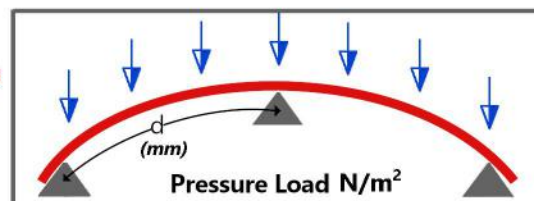
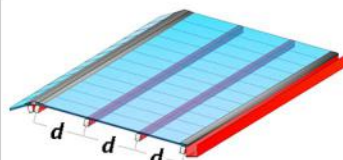
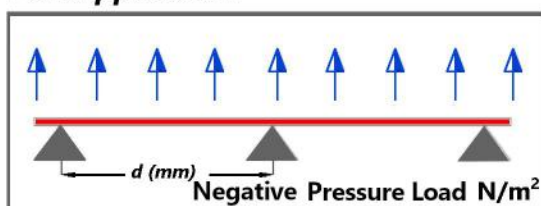
High density 30x30x570 mm polyethylene supporters are put into the body profile (51057) used for edge finishes in Megalux panel reverse applications for filling purposes.

THE DISTANCES BETWEEN PURLINS According to Loads and System Solutions

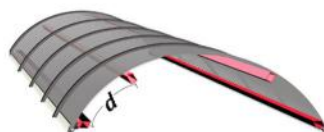
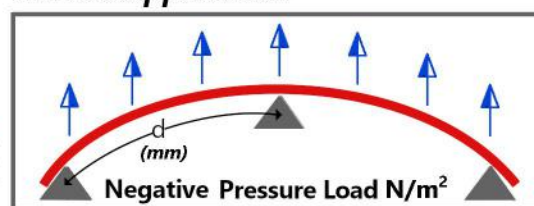
In the tables prepared for at least three purlins regarding to the pressure loads, the maximum purlin distances of construction in the curved or flat form are indicated according to Megalux pc panels of 8 10, 12, 16 and 20 mm thickness and type of U lock. The data concerning to min. bended radiuses according to panels thicknesses must be taken into account for curved applications. It must decide the purlins distances of the construction according to the versatile pressure and aerodynamic factors of the place where the system will be installed. If necessary, purlin distances should be determined by considering the safety factor. If necessary, contact the Polinet Project Department for further information on application details.



Flat Application



Curved Application



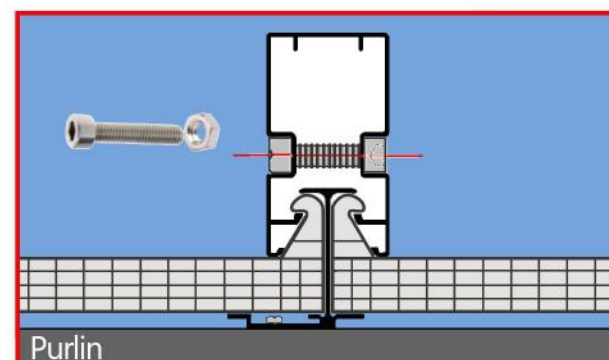
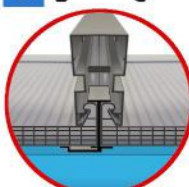
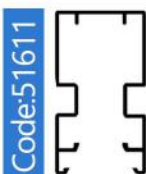
Min. Bending Radius-mm					
8mm	10mm	12mm	16mm	20mm	
1700	1900	2200	2800	3200	

Pc U lock Flat Installation		Distances Between Purlins (mm)					
Load	N/m ²	8mm	10mm	12mm	16mm	20mm	
Load Downwards	900	1200	1300	1400	1550	1700	
	1200	1100	1200	1300	1450	1600	
	1500	1000	1100	1200	1350	1500	
	1800	900	1000	1100	1250	1400	
Load Upwards	900	1100	1200	1300	1450	1600	
	1200	1000	1100	1200	1350	1500	
	1500	900	1000	1100	1250	1400	
	1800	800	900	1000	1150	1300	

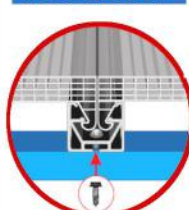


Pc U lock Curved Installation		Distances Between Purlins (mm)					
Load	N/m ²	8mm	10mm	12mm	16mm	20mm	
Load Downwards	900	1400	1500	1600	1750	1900	
	1200	1300	1400	1500	1650	1800	
	1500	1200	1300	1400	1550	1700	
	1800	1050	1200	1300	1450	1600	
Load Upwards	900	1250	1350	1450	1550	1750	
	1200	1150	1250	1350	1450	1650	
	1500	1050	1150	1250	1350	1550	
	1800	950	1050	1150	1250	1450	

Aluminium U lock Flat Installation		Distances Between Purlins (mm)					
Load	N/m ²	8mm	10mm	12mm	16mm	20mm	
Load Downwards	900	-	2000	2200	2350	2500	
	1200	-	1800	2000	2200	2350	
	1500	-	1650	1800	2000	2250	
	1800	-	1500	1600	1800	2000	
Load Upwards	900	-	1700	1800	2150	2300	
	1200	-	1550	1650	2000	2150	
	1500	-	1400	1500	1850	2000	
	1800	-	1250	1350	1700	1850	

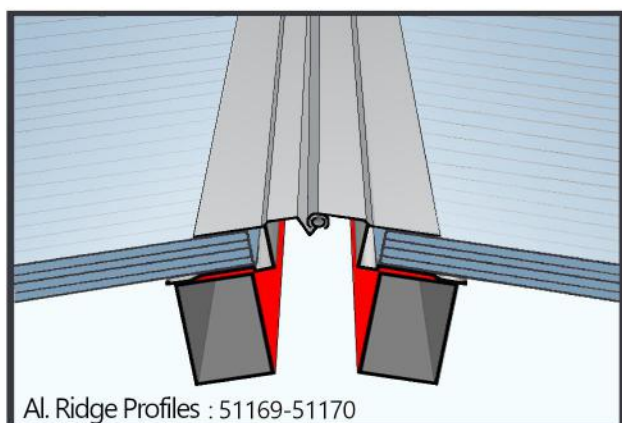
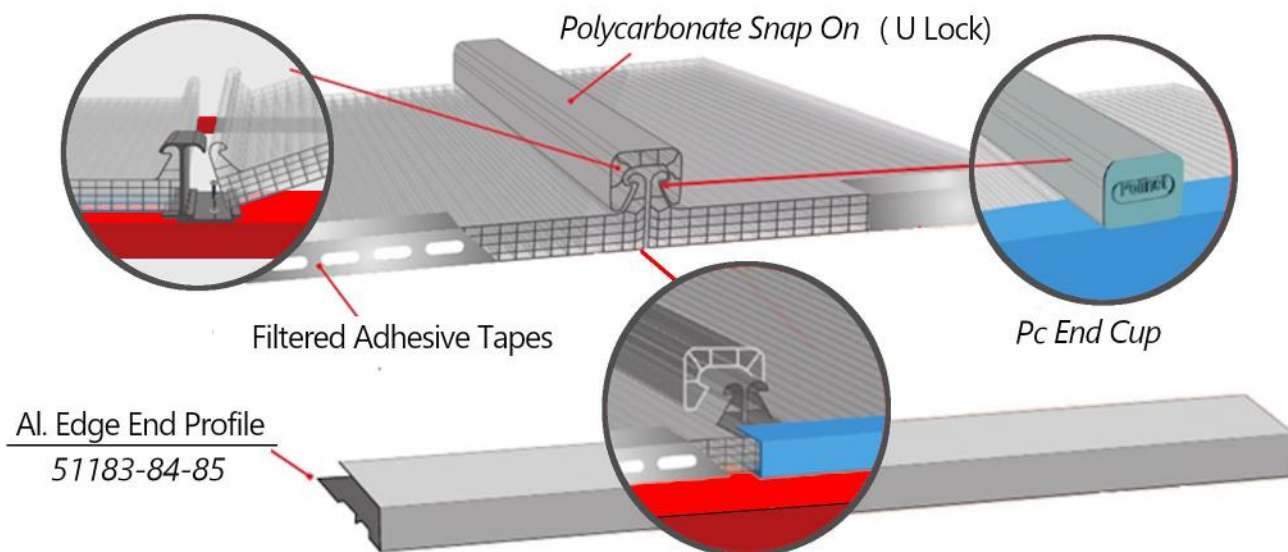


Aluminium U lock Flat Reserve Installation		Distances Between Purlins (mm)					
Load	N/m ²	8mm	10mm	12mm	16mm	20mm	
Load Downwards	900	1750	2000	2250	2500	2700	
	1200	1600	1800	2000	2250	2500	
	1500	1500	1650	1750	1950	2250	
	1800	1400	1550	1650	1800	2000	
Load Upwards	900	1550	1700	1800	1950	2250	
	1200	1400	1550	1700	1800	2100	
	1500	1250	1450	1550	1700	1950	
	1800	1150	1350	1450	1600	1800	

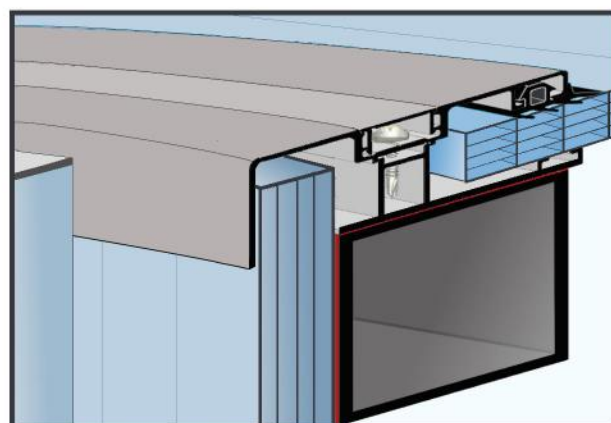


Aluminium U lock Curved Reserve Installation		Distances Between Purlins (mm)					
Load	N/m ²	8mm	10mm	12mm	16mm	20mm	
Load Downwards	900	2250	2500	2700	3000	3250	
	1200	2050	2300	2500	2800	3000	
	1500	1850	2200	2300	2600	2850	
	1800	1650	2000	2100	2400	2700	
Load Upwards	900	2050	2250	2400	2750	3000	
	1200	1950	2100	2250	2500	2800	
	1500	1800	1950	2100	2300	2600	
	1800	1650	1800	1900	2100	2400	

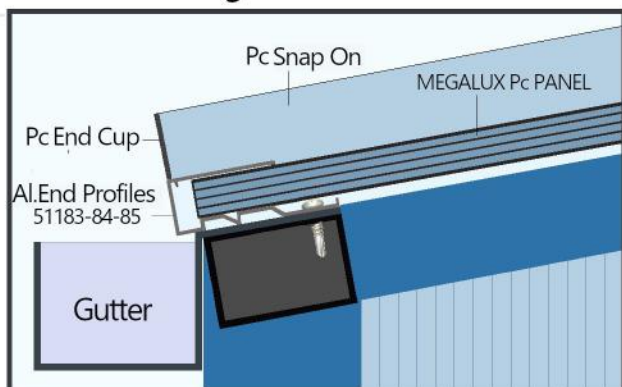
DETAIL OPTIONS for INSTALLATION of MEGALUX Pc PANEL & Pc SNAP ON



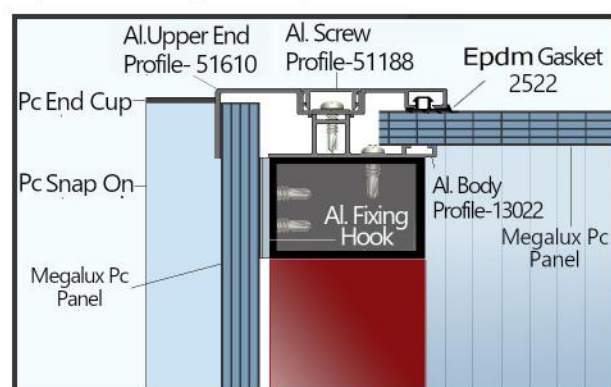
Ridge Details



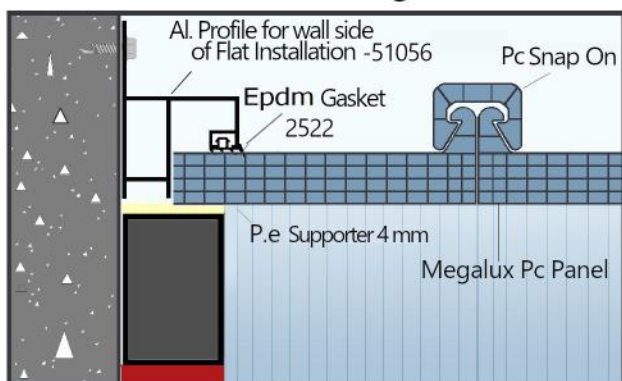
Topside Finishing Detail of Curved or Flat installation



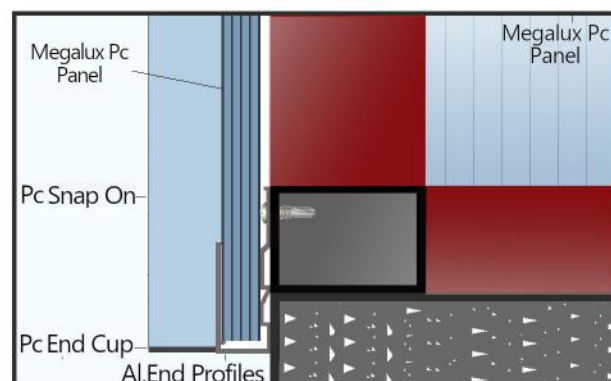
Gutter Side Finishing Detail



Bottom Side Finishing Detail of Vertical installation

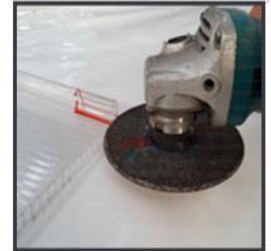
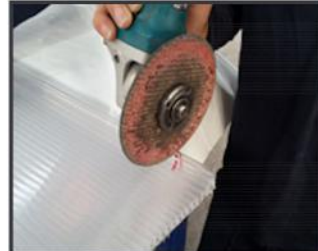
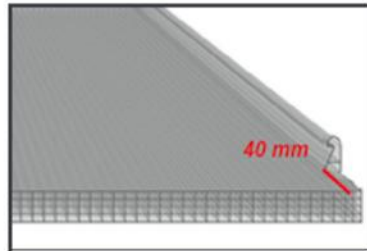
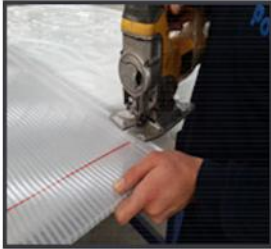


Wall-side Finishing Detail Of Flat Roof

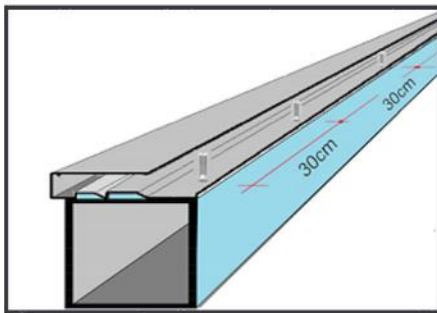
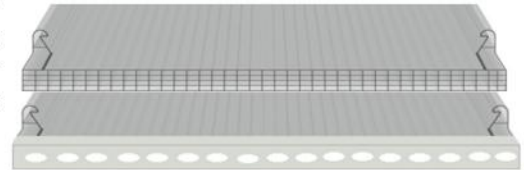


INFORMATION ABOUT MEGALUX PC PANEL INSTALLATION with PC SNAP ON

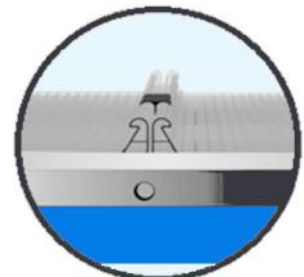
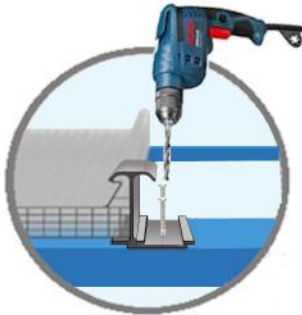
1. Check the length measurement in the skylight area to be applied. If the panels lengths are longer than the roof slope or vault spring length, shorten the length of the panels by cutting them with a jigsaw.
2. The both teeth grip-lock of the pc panel should be cut 40mm inward from their edges with a grinder in order to insert the panels into the end aluminium profile like the following illustrations.



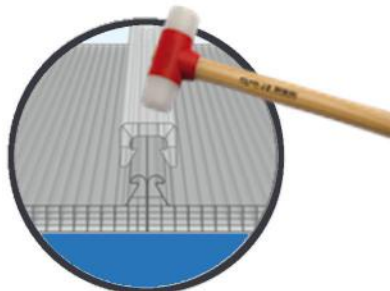
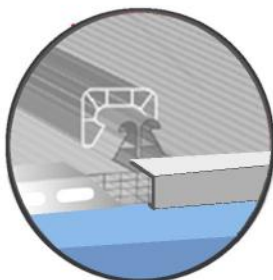
3. Before the installation, the both open edges of panel must be closed with adhesive tape in order to prevent to enter dust into pc panels. It is recommended to seal pc panel with filter adhesive tapes because of condensation could occur inside of pc panel. PC panels are drained and ventilated by means of filter adhesive tapes.



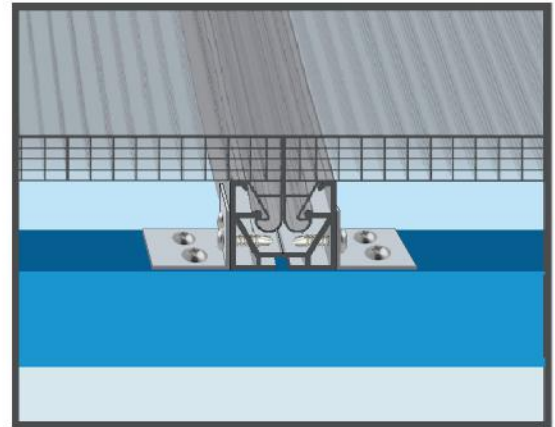
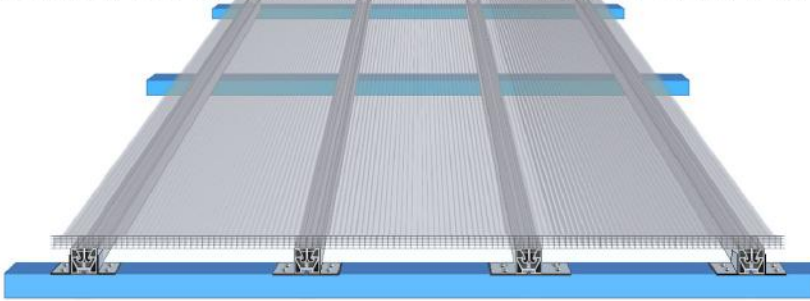
4. Aluminum end or ridge profiles should be screwed to purlin every 30 cm. Then holes should be made on the outer side surface of the profile every 50-60 cm by a drill for water drain.



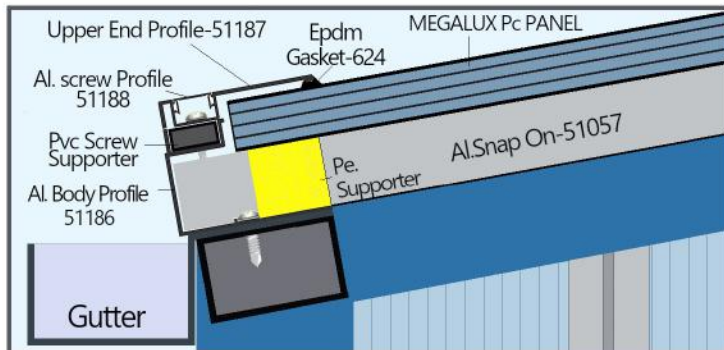
5. Megalux PC panels should be installed with aluminum fixing hooks. The aluminum hooks should be fixed min two screws on every purlins of roof or facade as long as the length of pc panel. Insert teeth grip-lock of the pc panels into the aluminium hooks by turning pc panels directions like the following picture. Drive pc panels into the end aluminium profiles. The pc snap can be attached on to teeth grip-lock of the pc panels by clicking whereby hand or plastic or wooden hammer. Lastly insert the pc end cup on mouth of pc snap on. All these steps should be repeated in order for installing all pc panels.



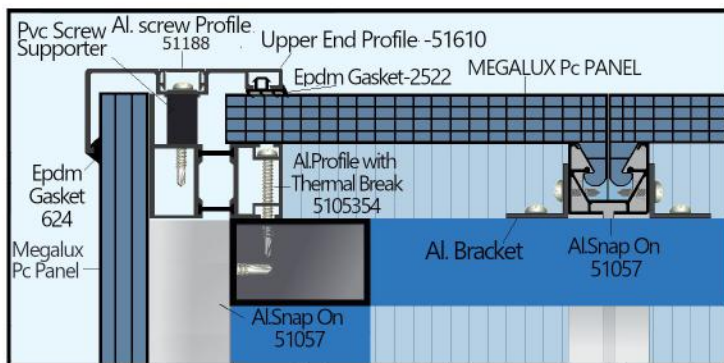
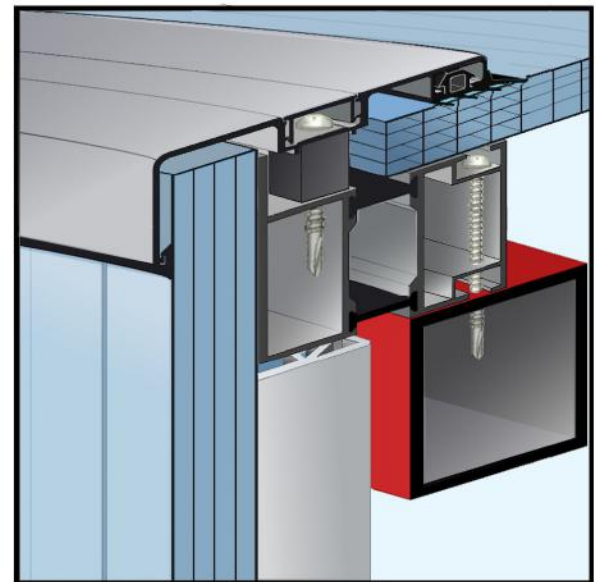
DETAIL OPTIONS for INSTALLATION of MEGALUX Pc PANEL & AL. SNAP ON- 51057



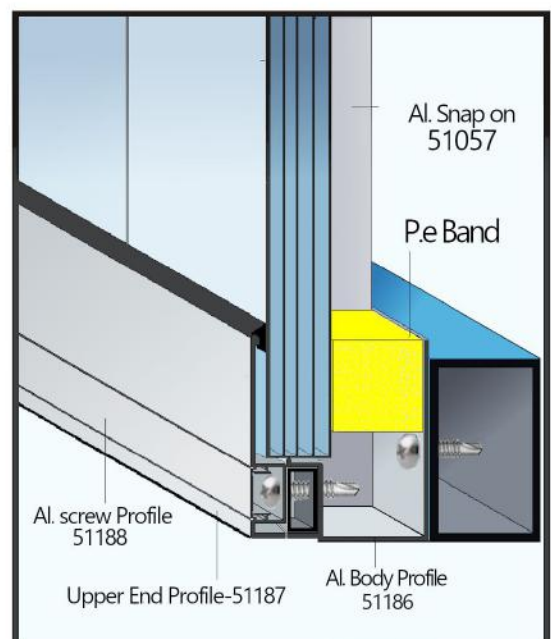
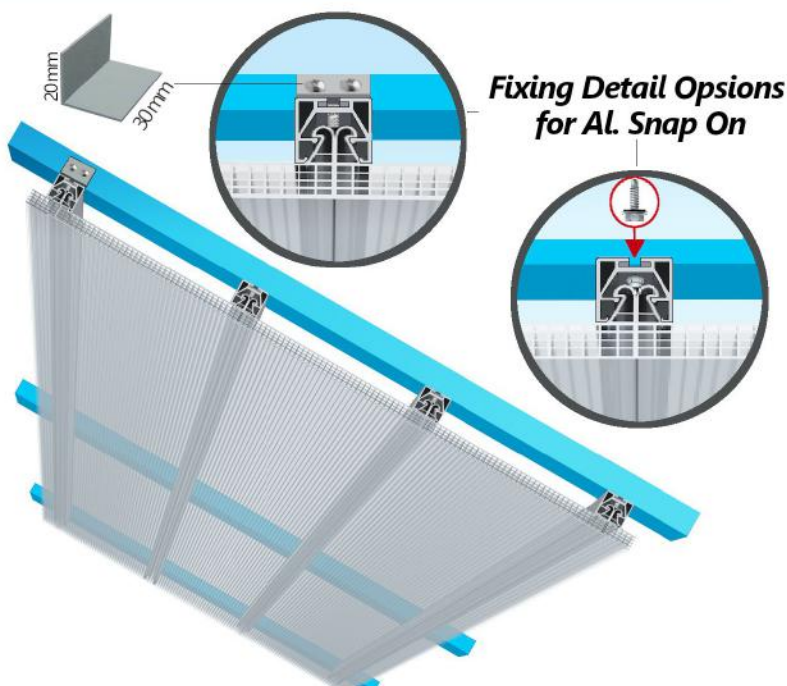
Fixing Detail of AL. Snap On to Purlin



Gutter Side Finishing Detail

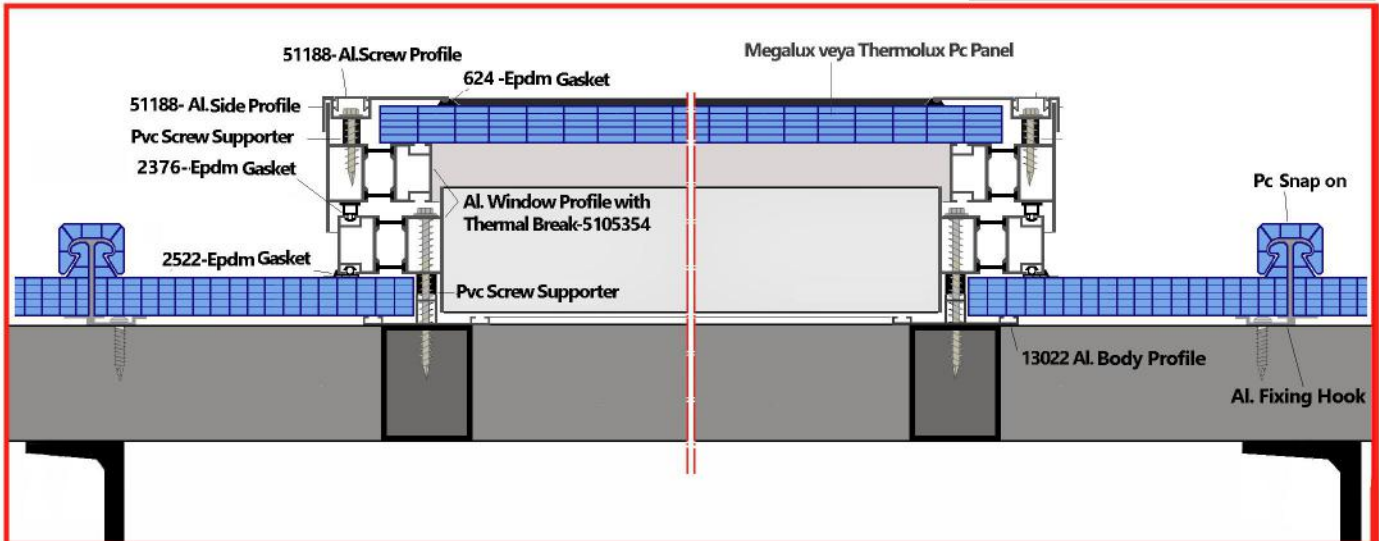


Top Side Finising Details of Curved or Flat Installation

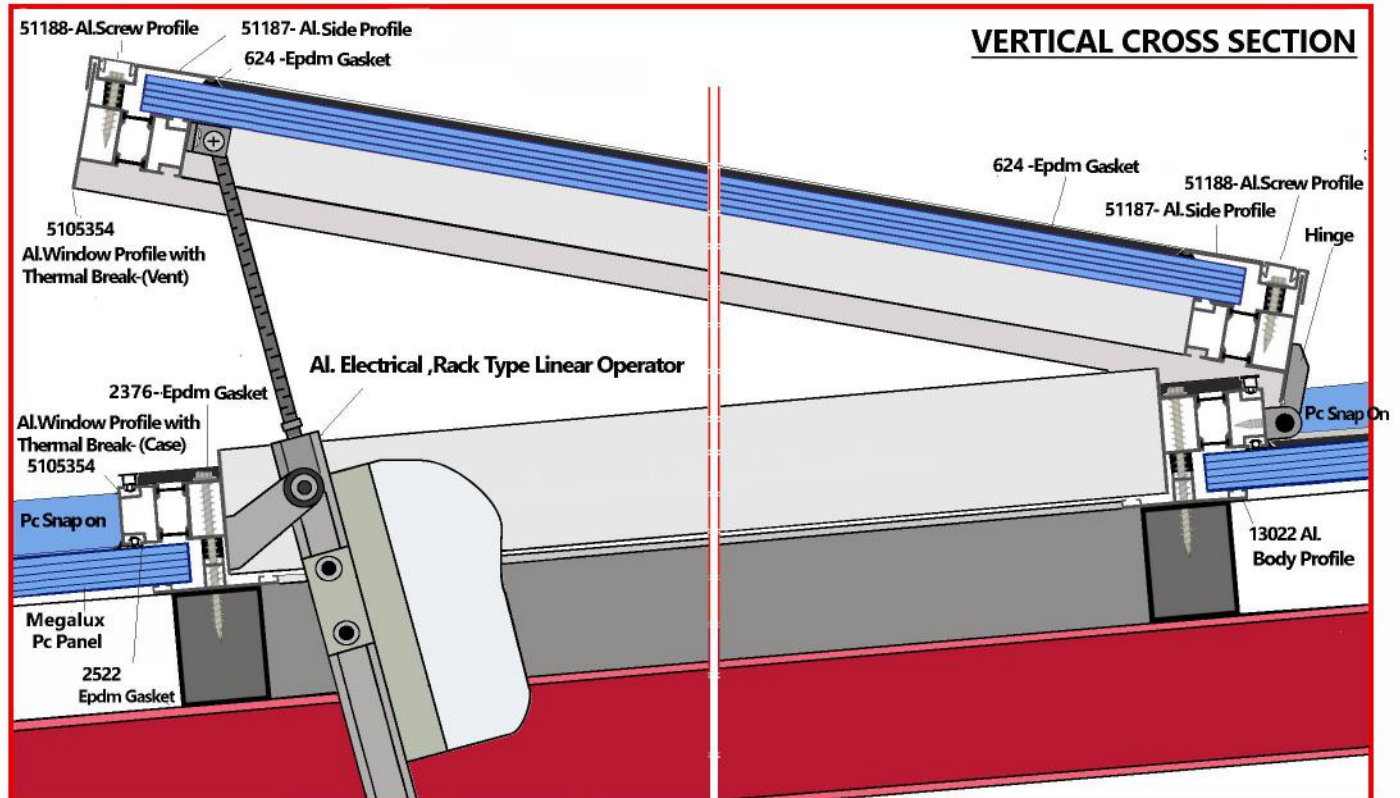


Bottom Side Detail of Vertical Installation

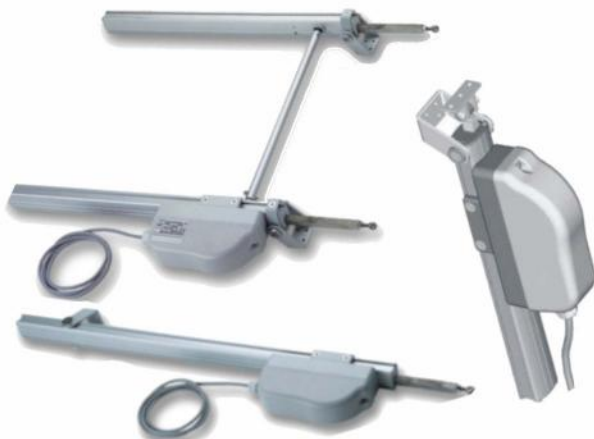
HORIZONTAL CROSS SECTION



VERTICAL CROSS SECTION



AUTOMATION SYSTEM PRODUCTS FOR THE ROOF WINDOW



Al. Electrical, Rack Type Linear Operator -24 or 230 V
l=55 and 75 cm



CONTROL UNITS -24 V & 220 V



CONTROL OPERATORS
Buton or Remote operator



OPTIONAL ACCESSORIES
Smoke-Rain-Wind