

EN

Macrolux® Systems

POLYCARBONATE SYSTEMS



-  INDUSTRY
-  COMMERCIAL BUILDING
-  PUBLIC CONSTRUCTION
-  ARCHITECTURE
-  DIY
-  GREENHOUSES
-  HOUSING
-  RURAL
-  SPORTS FACILITIES
-  WARRANTY
G10
10 YEARS

STABILIT AMERICA
Moscow, Tennessee

STABILIT BENELUX
Benthuizen, Holland

STABILIT CANADA
Inglewood, Ontario

STABILIT SUISSE
Stabio, Switzerland

STABILIT ITALIA
Stabio, Svizzera



STABILIT MEXICO
García, México
Tlalnepantla, México

STABILIT FRANCE
Chassal, France

POLIMEROS GI
Córdoba, España



Stabilit Suisse SA is part of a multinational group of companies producing semi-finished plastic materials, focused on the construction industry, as well as other areas including transport and general manufacturing.

Our synergy gives strength to our worldwide presence across a range of products and industries, providing the highest level of technical and logistical support.



Stabilit Suisse SA is an industry leader in the production of polycarbonate sheets and systems. Situated in Switzerland and with a team of over 100 skilled employees, our plant consists of the best quality extrusion technology, along with an in-house R&D laboratory and QA department.

1980

Founded
E.M.P. SA

1997

Founded
POLITEC SA

2012

Merfer
in Koscon
Industrial SA

2017

Acquisition
by Verzatec
Group

2018

Taking name
Stabilit Suisse SA

With over 40 years of polycarbonate manufacturing experience, **Stabilit Suisse SA**, along with our Macrolux brand, holds a strong worldwide reputation, with sales in over 40 countries across five continents, from South America to the Asia-Pacific region.

Our extensive range of products are recognised across international regions for their light-weight, thermal insulating, impact-resistant, light-transmitting and fire behavioural performance. This combination of properties gives way to ranging applications, such as architectural and large-scale construction, as well as lighting, DIY, automotive industry, interior design and furniture.





Macrolux[®]

POLYCARBONATE SHEETS AND SYSTEMS

- Introduction
- Polycarbonate properties

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Modulit[®]

MODULAR SYSTEMS FOR WALLS

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BDL

MODULAR SYSTEMS FOR ROOFS AND WALLS

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Ondatec

CORRUGATED MULTIWALL PANELS

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Grecatec[®]

CORRUGATED MULTIWALL PANELS

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Click 16

CONNECTED MULTIWALL PANELS SYSTEMS

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UV PROTECTION



LL

UV protection on one side

Sheets protected from the effects of UV rays on one side. This protection effectively allows the sheets to retain their original transparency and mechanical impact resistance properties for the duration of their service life.



XL

UV protection on both sides

Sheets protected from the effects of UV rays on both sides. Particularly suitable for applications where they may be exposed to direct and/or indirect solar radiation on both sides. This treatment also eliminates installation errors, while cutting is optimized since the sheeting is protected whichever side faces up.



NO UV

NO UV protection

Sheets not protected from the effects of UV rays, which cause them to degrade rapidly. They are ideal for all applications where direct exposure to solar radiation is not an issue.

CUSTOMIZATION



PLUS

Extra UV protection

Sheets with increased, extra strong protection from UV rays. Ideal for use in applications marked by particularly harsh environmental conditions.



XL PLUS

Extra UV protection on both sides

Sheets with increased, extra strong protection from UV rays on both sides. Ideal for use in applications marked by particularly harsh environmental conditions.



ANTIGLARE

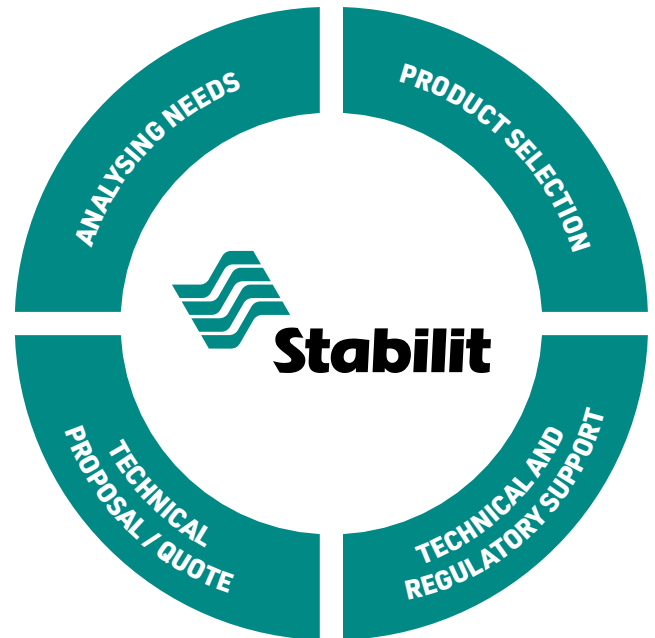
ANTI-REFLECTIVE treatment

The special ANTIGLARE treatment, on the UV protected side, significantly reduces the glare effect due to the reflection of the light rays. It also creates a pleasant diffusion of light inside the building.

Customer focus

Stabilit Suisse SA is a leader in innovative daylight solutions, which anticipate customer demands and market trends. **Stabilit Suisse** is the obvious choice for customers looking for a manufacturer who will support their project through from design stage to completion.

An all-round approach to see your project through to success



ANALYSING NEEDS

Identifying exact product requirements is the most intricate stage of the design process. Discussion regarding materials and product capabilities enable the project to go from concept to reality.



PRODUCT SELECTION

At design stage, our customers rely on our team's expertise to decide on product combinations best suited to their project. Our English-speaking technical department can review structural plans and make recommendations accordingly. Samples and technical data sheets are readily available.



TECHNICAL AND REGULATORY SUPPORT

In general, each structural project should conform to its own individual technical and environmental requirements. In addition, building regulations require that the project meets both technical and cost specifications.



TECHNICAL PROPOSAL / QUOTE

The final stages of the joint process, where customer and supplier's cooperation often ends is where Stabilit Suisse's support continues. We are here to help with subsequent installation, both remotely and onsite.

Assistance to ensure correct installation

OUR GREATEST AMBITION IS FOR THE APPLICATION TO BE A SUCCESS.

Stabilit Suisse SA also provides assistance on-site, ensuring correct product installation and long-term performance. Our aim is to provide overall customer satisfaction and to present our range as a showcase in each and every application.

Product certification



Stabilit Suisse products are certified by internationally accredited bodies and institutions.

Our sales department will be more than happy to give you detailed information on which certificates are available and on tested products.



Company certification

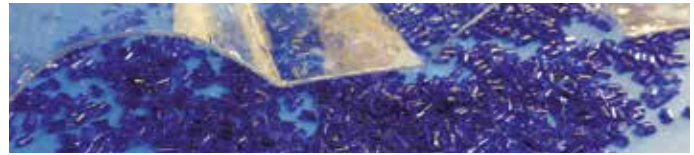
ISO 9001 certification

Our ISO 9001 certification provides assurance in terms of quality, service and testing of all raw materials we use, requiring adherence to the highest standards and compliance with strict control procedures.

COMPANY WITH
QUALITY SYSTEM
CERTIFIED BY DNV
ISO 9001

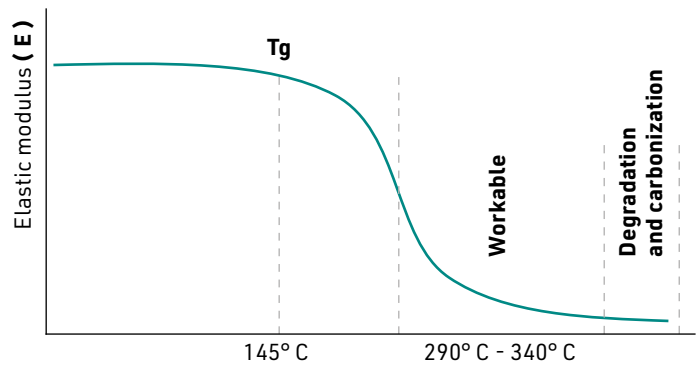
POLYCARBONATE

- Transparency 89%
- Dimensional stability from -40°C to +130°C
- High impact resistance
- Self-extinguishing (oxygen index 28%)
- Low creep
- Low density (1,21 g/cm³)
- Excellent thermal and electric insulation
- Extremely low moisture absorption (0,3%)
- Good UV resistance



Morphological structure:

Amorphous Aromatic Polymer
Polyester Family
High Tg (138°C ~ 145°C)



Elastic modulus $E_{pc} = 2300 \text{ N/mm}^2$

Polycarbonate properties

Polycarbonate is a thermoplastic polymer boasting excellent mechanical and physical properties. It is ductile and hardwearing, which is why it is used for such applications as producing CDs and DVDs; while the automotive, aviation and ballistics industries (airplane windows, car headlights, riot shields and helmets, etc.) value it for its impact resistance. All the above properties, along with its transparency, make polycarbonate suitable for building applications.

PC: main advantages	
Light weight and transparency	lighter structure
Can be produced in low thicknesses	lighter weight
Self-extinguishing	good reaction to fire performance
Versatile to use	cold bending and thermoforming
Possibility of different colors	wide range of design possibilities
Wide choice of surface finishes	plain, embossed, painted and metallic
Impact	ductile break = no shards in event of breakage
Dimensional stability	guaranteed long term
Compliance with industry standards	thermal insulation, loads, fire behaviour
LCA (Life Cycle Assessment)	favourable and totally recyclable at end of life cycle

TECHNICAL DATA		VALUE	UNIT	STANDARD
Mechanical properties				
Yield stress (50 mm/min)		63	MPa	ISO 527
Stress at break (50 mm/min)		70	MPa	ISO 527
Yield strain (50 mm/min)		6	%	ISO 527
Strain at break (50 mm/min)		120	%	ISO 527
Tensile modulus (1 mm/min)		2350	MPa	ISO 527
Impact properties				
Charpy V-notched impact strength	+ 23°C	75	kJ/m ²	ISO 179/1eA
	- 30°C	15	kJ/m ²	ISO 179/1eA
Izod notched impact strength	+ 23°C	70	kJ/m ²	ISO 180/1A
	- 30°C	12	kJ/m ²	ISO 180/1A
Physical properties				
Density		1,2	g/cm ³	ISO 1183
Water absorption (23°C; saturation)		0,35	%	ISO 62
Moisture absorption (23°C; 50% RH)		0,15	%	ISO 62
Water vapor permeability (23°C; 85% RH; 0,1 mm)		15	g/(m ² 24h)	ISO 15106-1
Thermal properties				
Coefficient of linear thermal expansion (23°C+55°C)		65 x 10 ⁻⁵	1/K	ISO 11359-2
Thermal conductivity		0,20	W/mK	ISO 8302
Vicat softening temperature (50N; 120°C/h)		145-149	°C	ISO 306
Typical values referred to polycarbonate as raw material.				

Comparison with other products

When compared with other commonly used construction plastics and with glass, polycarbonate demonstrates superiority in various properties.

	U.M.	PC	PMMA	PVC	PET	GRP	GLASS
Density	g/cm ³	1,20	1,19	1,38	1,33	1,42	2,50
Strength	kJ/m ²	70	2	4	3	1,2	-
Modulus of elasticity	N/mm ²	2.350	3.200	3.200	2.450	6.000	70.000
Linear thermal expansion	1/K	6,5 x 10 ⁻⁵	7,5 x 10 ⁻⁵	6,7 x 10 ⁻⁵	5,0 x 10 ⁻⁵	3,2 x 10 ⁻⁵	0,9 x 10 ⁻⁵
Thermal conductivity	W/m K	0,20	0,19	0,13	0,24	0,15	1,3
Max. service temperature	°C	120°	90°	60°	80°	140°	240°
UV transparency	%	4	40	nd	nd	19	80
Fire performance	-	very good	poor	poor	good	poor	excellent
Resistance to weathering	-	good	very good	poor	fair	poor	excellent
Chemical compatibility	-	fair	fair	good	good	good	very good
Typical values referred to different materials.							



Modulit®

20

40

50

55

60

Modulit® is a polycarbonate system extruded in modular panels used for the production of translucent vertical and / or inclined walls. The system is made by means of panel coupling, provided by "male / female" joints for a perfect fit. Thereby the installation is fast and easy, even for the inexperienced in the use of modular systems. The range of accessories, consisting of outer profiles in aluminium, hooks and gaskets, making the system complete, versatile and secure.



LL



XL



NO UV



PLUS



ANTIGLARE

Benefits

- Quick and easy to assemble
- High temperature insulation
- Excellent impact resistance
- Good light transmission
- Good fire performance
- Certified quality guarantee
- UV protection

WARRANTY
G10
10 YEARS

Main advantages of Modulit® system



Impact resistance

Polycarbonate's mechanical properties make this the technopolymer with the highest impact resistance, allowing it to provide optimum protection against accidental damage and weather-related damage. These qualities mean polycarbonate significantly outperforms other materials (glass, acrylic, PET, etc.) commonly used in applications where transparency is a key requirement. Impact resistance remains constant across a particularly wide temperature range.



Thermal expansion

Thermal expansion is a characteristic property of materials that consists in their tendency to change in size as temperature increases and decreases. This expansion is quantified via a coefficient that, in the case of polycarbonate, equates to $6,5 \times 10^{-5} \text{ 1/K}$ (0.065 mm/m°C). The fact that this coefficient value is much higher than the values associated with materials usually used for roofing and joinery (aluminium, steel, etc.) generates the need for solutions that compensate for this difference in thermal expansion, which thus needs to be factored in at the design stage and in all building applications.



Light transmission

Proper lighting design entails ensuring that the building interior receives the required amount of light. So it is clearly important to use sheets that let enough light through. The **Modulit®** product range gives you plenty of choice at the design stage of your project, with an array of colour options to meet your every need.



10 Warranty

Sheets with UV protection offer a 10-year warranty against yellowing, loss of light transmission and hail damage. Our sales department will be happy to provide you the exact warranty terms.



Fire behaviour

Fire safety is a fundamental necessity. **Modulit®** panels are tested in independent qualified laboratories on the basis of current applicable regulations in the construction industry. Our offices are at your disposal to provide you with details regarding the available certificates.



Thermal transmittance

Thermal transmittance, or U-value, is the mean flow of heat per m² that passes through a structure (the polycarbonate panel) separating two environments with different temperatures (usually separating a heated or air-conditioned room from outdoors). The lower this value, the more effective the insulation offered by the panel. With a view to reducing heating/air-conditioning costs - with a consequent reduction in harmful emissions into the atmosphere - international standards require both building materials and fenestration systems to meet ever-stricter thermal transmittance requirements. With its extensive range of multiwall panels, **Stabilit Suisse** is at the cutting edge when it comes to providing its customers with the most appropriate solutions in compliance with current standards.

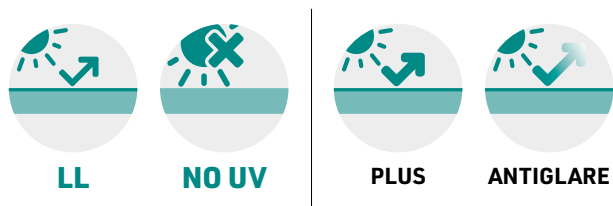


UV protection

Our co-extruded UV-protected layer blocks damaging UV rays that would lead to rapid degradation that causes yellowing and undermines the strength of the exposed surface. UV protection is applied using co-extrusion technology, whereby an even shielding layer can be produced to screen the polycarbonate from the UV component of the solar radiation. With this technology, the UV protection is made resistant to weathering and is not prone to damage by incorrect maintenance.

Modulit® 520 HC

Modulit® 520 HC is a polycarbonate system for the production of translucent vertical curtain walls to use in industrial and civil constructions. The system is made by multiwall extruded polycarbonate panels with honeycomb structure, thickness of 20 mm, module width 495 mm and UV protection obtained by co-extrusion on the external side. The system is made by means of panel coupling, provided by "male / female" joints for a perfect fit; perimeter profiles aluminium complete the fixing structure. Easy and economical installation, **Modulit® 520 HC** allows excellent light transmission, high load resistance and thermal insulation.

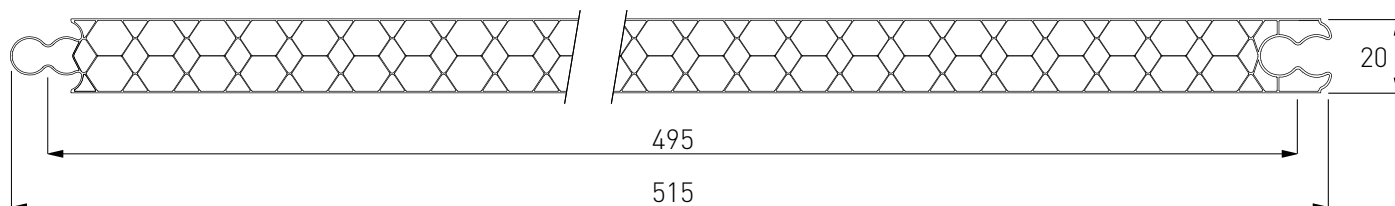


Also available for use in interior applications not exposed to UV

Thickness (mm)

20

UV PROTECTED WALL



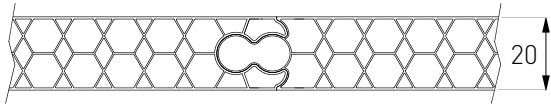
Modulit® 520 HC technical data			
Thickness	20 mm		
Structure	honeycomb		
Module width	495 mm		
Length	upon request		
Thermal transmittance	2,0 W/m² K		
Colours		LT*	G Value**
	Clear (8005)	52%	64%
	Opal (8121)	31%	49%
UV protection	coextruded on the external side		
Warranty	10-year warranty against hail damage, yellowing, loss of light transmission		
Service temperature	-40°C / +120°C		
Thermal expansion coefficient	0,065 mm/m°C (6,5 x 10 ⁻⁵ 1/K)		
Fire certification	EUROCLASS B s1 d0		

* Values calculated according to ASTM standard.

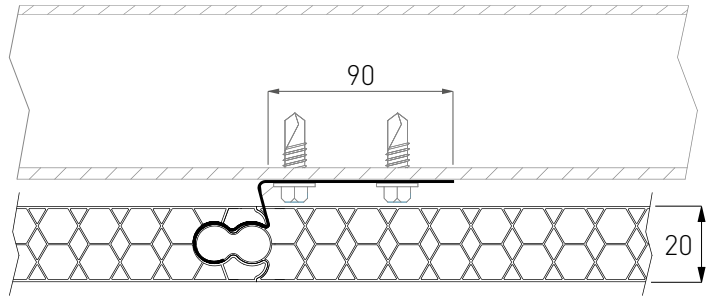
** Values calculated according to internal method.

Modulit® 520 HC joining scheme

• Section panel / panel joining

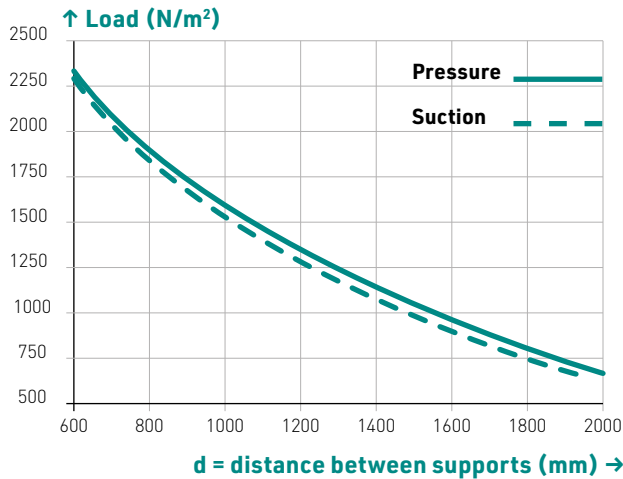


• Section panel / hook / panel joining

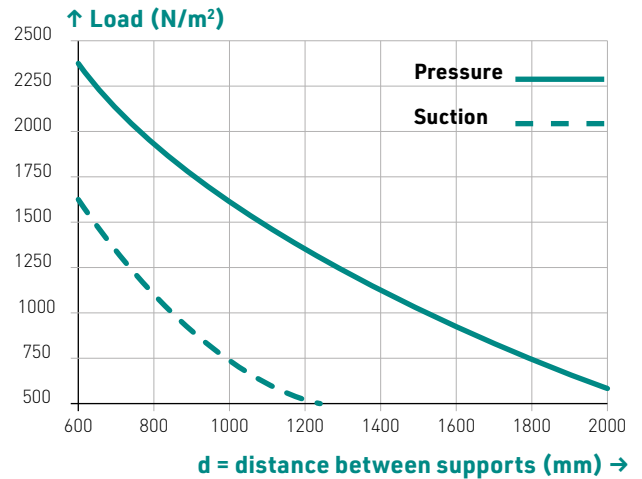


Modulit® 520 HC load tables

• Load chart with 2 supports



• Load chart with 3 or more supports



The load tables refer to the breakage load value of the system, i.e. the lowest value between: the collapse of the panel, failure of the frame or the panel springing out of its housing. The designer will check the actual loads acting on the system as well as the coefficients of amplification and safety to be applied in consideration of both the climatic conditions of the site, both the general and particular characteristics of the structure in which the polycarbonate is inserted. For these evaluations, refer to the specific regulations in force in each country. For detailed technical data, or for more information, refer to the Technical Manual or to the Stabilit Suisse Office.

Modulit® 520 HC specifications

Construction of Modulit® 520 HC translucent wall system consisting of:

Multiwall polycarbonate panel, coextruded UV-protection on the outer surface, honeycomb structure 20 mm thickness, certified thermal transmittance 2,0 W/m² K, clear colour (other colours available on request), edges closed with aluminium tape; dimensions: module width 495 mm, length upon request; 10-year warranty.

Perimeter aluminium profiles*.

External gasket in EPDM rubber.

Stainless steel fixing hook (if required).

* raw or anodized or lacquered: contact our sales offices to find out about standards, surcharges, minimum orders, availability.

Modulit® 520 HC installation options with simple profiles

- Installation within supports with bottom sill



- Installation within supports without bottom sill



$H = L - 40 \text{ mm}$ (L = distance between aluminum profiles; H = panel height)

- Detail of the upper profile



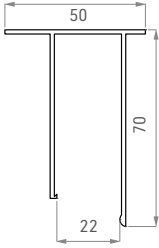
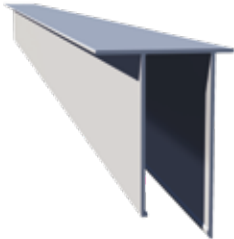
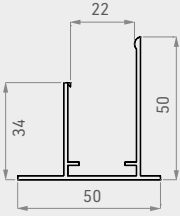

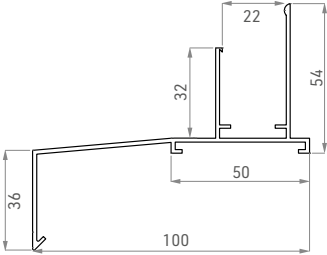

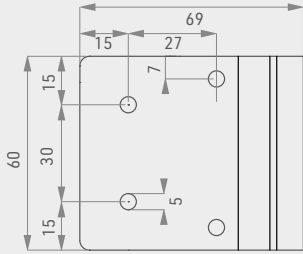
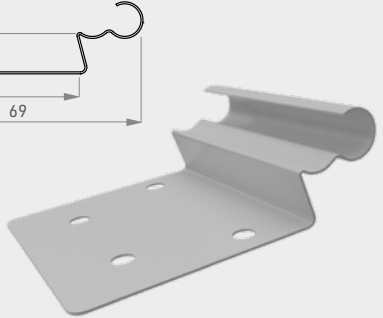

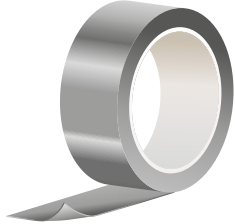


- Detail of the lower profile with sill



- Detail of the panel fixing with hook



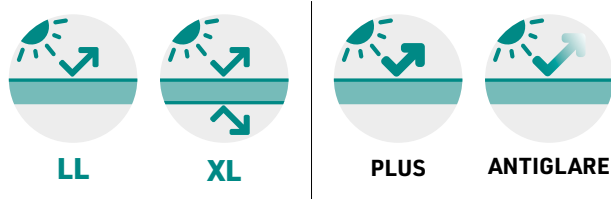
Modulit® 520 HC accessories

ACCESSORY	CODE		TECHNICAL DESIGN / RENDERING	
Simple profile upper / side aluminium profile*	M9V1	-		
Simple profile lower aluminium profile*	M9V2	-		
Simple profile Lower aluminium profile* with sill	M9V3	-		
Steel hook	M9V8	-		
Aluminium adhesive tape (50 m roll)	M965	height 38 mm		
	M957	height 50 mm		
	M968	height 38 mm perforated		
	M969	height 50 mm perforated		
EPDM gasket	M998	-		

* raw or anodized or lacquered: contact our sales offices to find out about standards, surcharges, minimum orders, availability.

Modulit® 338 LP

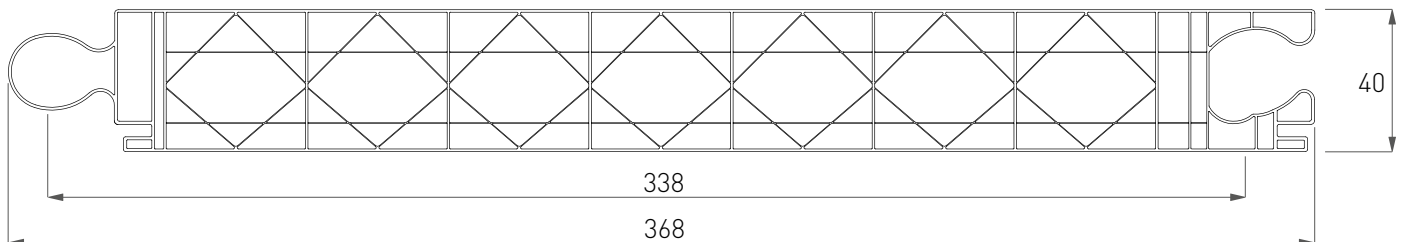
Modulit® 338 LP system is a polycarbonate system for the production of translucent vertical curtain walls to use in industrial and civil constructions. The system is made by multiwall extruded polycarbonate panels with 6 wall structure, thickness of 40 mm, module width 338 mm and UV protection obtained by co-extrusion on the external side. The system is made by means of panel coupling, provided by "male / female" joints; perimeter profiles in aluminium, fixing hook and gasket complete the fixing structure. Easy and economical installation, **Modulit® 338 LP** allows excellent light transmission, high load resistance and thermal insulation.



Thickness
(mm)

40

UV PROTECTED WALL



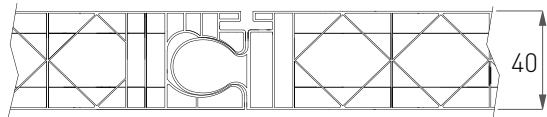
Modulit® 338 LP technical data			
Thickness	40 mm		
Structure	6 walls		
Module width	338 mm		
Length	upon request		
Thermal transmittance	1,3 W/m² K		
Colours		LT*	G Value**
	Clear (8005)	58%	66%
	Opal (8121)	37%	54%
UV protection	coextruded on the external side (both sides upon request)		
Warranty	10-year warranty against hail damage, yellowing, loss of light transmission		
Service temperature	-40°C / +120°C		
Thermal expansion coefficient	0,065 mm/m°C (6,5 x 10 ⁻⁵ 1/K)		
Fire certification	EUROCLASS B s1 d0		

* Values calculated according to EN410 and EN14500 standard in conformity to the indications of the norm EN16153.

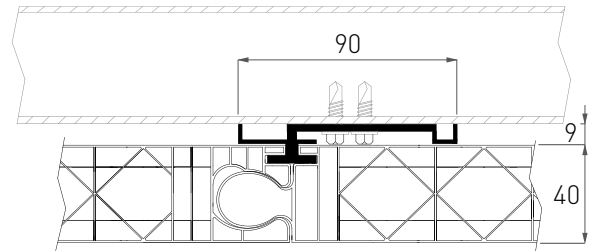
** Values calculated in conformity to the indications of the norm EN16153.

Modulit® 338 LP joining scheme

• Section panel / panel joining

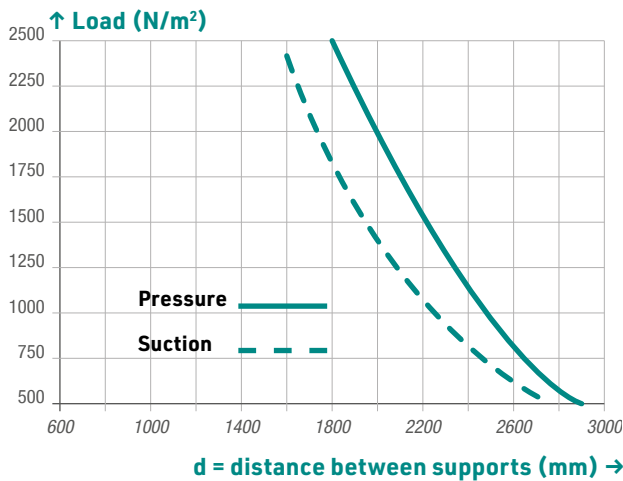


• Section panel / hook / panel joining

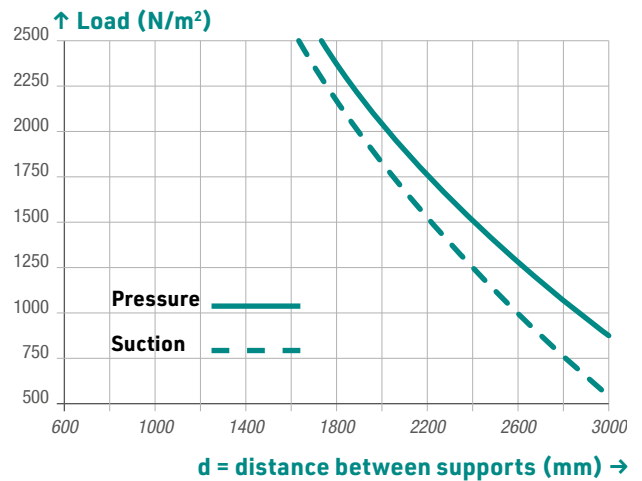


Modulit® 338 LP load charts

• Load chart with 2 supports



• Load chart with 3 or more supports



The load tables refer to the breakage load value of the system, i.e. the lowest value between: the collapse of the panel, failure of the frame or the panel springing out of its housing. The designer will check the actual loads acting on the system as well as the coefficients of amplification and safety to be applied in consideration of both the climatic conditions of the site, both the general and particular characteristics of the structure in which the polycarbonate is inserted. For these evaluations, refer to the specific regulations in force in each country. For detailed technical data, or for more information, refer to the Technical Manual or to the Stabilit Suisse Office.

Modulit® 338 LP specifications

Construction of Modulit® 338 LP translucent wall system consisting of:

Polycarbonate multiwall panel, external co-extruded UV-protection, diagonal 6 wall structure, 40 mm thickness, certified thermal transmittance 1,3 W/m² K, clear colour (other colours available on request), edges closed with aluminium tape; dimensions: module width 338 mm, length upon request; 10-year warranty.

Perimeter aluminium profiles*.

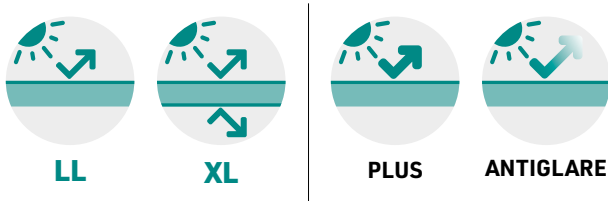
External gaskets in EPDM rubber.

Aluminium hook (if required).

* raw or anodized or lacquered: contact our sales offices to find out about standards, surcharges, minimum orders, availability.

Modulit® 500 LP

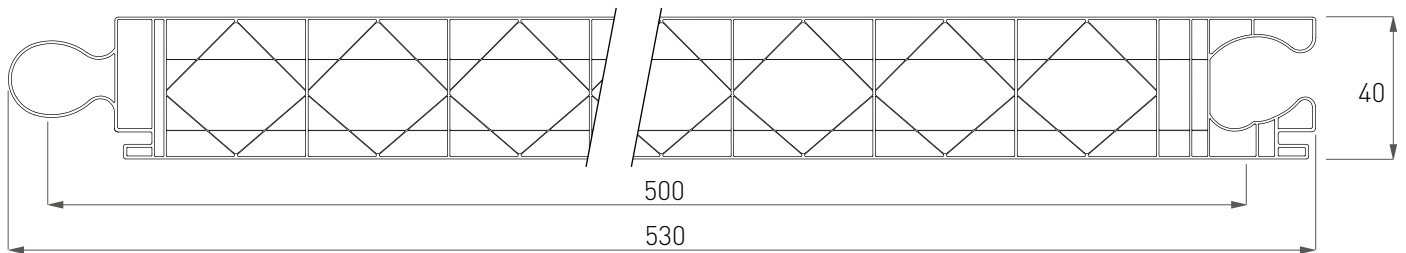
Modulit® 500 LP system is a polycarbonate system for the production of translucent vertical curtain walls to use in industrial and civil constructions. The system is made by multiwall extruded polycarbonate panels with 6 wall structure, thickness of 40 mm, module width 500 mm and UV protection obtained by co-extrusion on the external side. The system is made by means of panel coupling, provided by "male / female" joints for a perfect fit; perimeter profiles in aluminium complete the fixing structure. Easy and economical installation, **Modulit® 500 LP** allows excellent light transmission, high load resistance and thermal insulation.



Thickness
(mm)

40

UV PROTECTED WALL



Modulit® 500 LP technical data			
Thickness	40 mm		
Structure	6 walls		
Module width	500 mm		
Length	upon request		
Thermal transmittance	1,3 W/m ² K		
Colours		LT*	G Value**
	Clear (8005)	58%	66%
	Opal (8121)	37%	54%
UV protection	coextruded on the external side (both sides upon request)		
Warranty	10-year warranty against hail damage, yellowing, loss of light transmission		
Service temperature	-40°C / +120°C		
Thermal expansion coefficient	0,065 mm/m°C (6,5 x 10 ⁻⁵ 1/K)		
Fire certification	EUROCLASS B s1 d0		

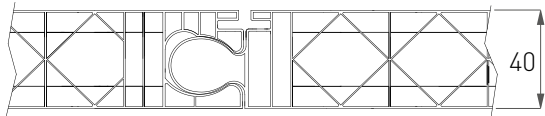
* Values calculated according to EN410 and EN14500 standard in conformity to the indications of the norm EN16153.

** Values calculated in conformity to the indications of the norm EN16153.

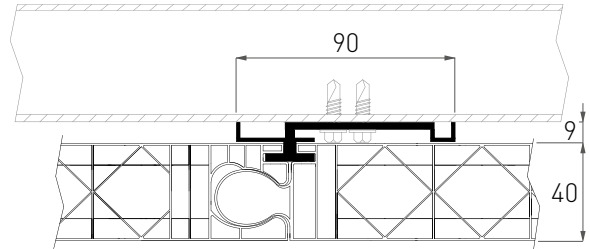


Modulit® 500 LP joining scheme

• section panel / panel joining

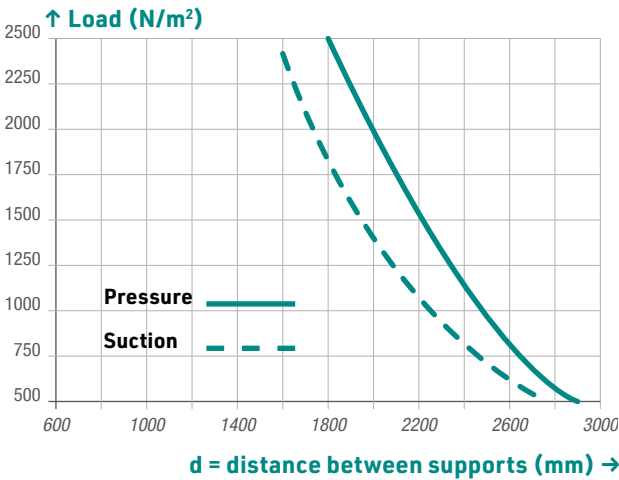


• section panel / hook / panel joining

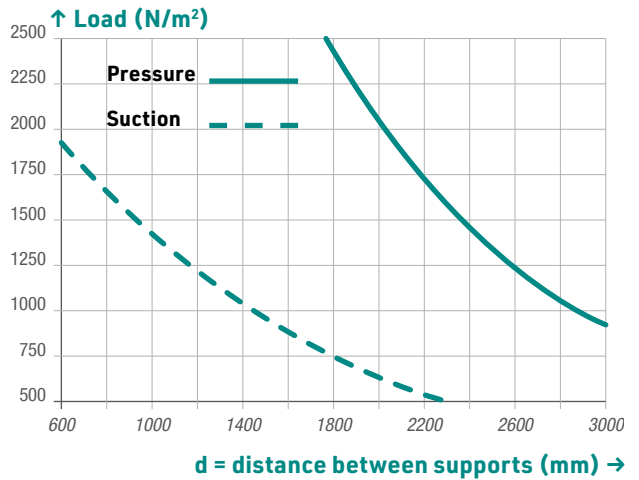


Modulit® 500 LP load charts

• Load chart with 2 supports



• Load chart with 3 or more supports



The load tables refer to the breakage load value of the system, i.e. the lowest value between: the collapse of the panel, failure of the frame or the panel springing out of its housing. The designer will check the actual loads acting on the system as well as the coefficients of amplification and safety to be applied in consideration of both the climatic conditions of the site, both the general and particular characteristics of the structure in which the polycarbonate is inserted. For these evaluations, refer to the specific regulations in force in each country. For detailed technical data, or for more information, refer to the Technical Manual or to the Stabilit Suisse Office.

Modulit® 500 LP specifications

Construction of Modulit® 500 LP translucent wall system consisting of:

Polycarbonate multiwall panel, external co-extruded UV-protection, diagonal 6 wall structure, 40 mm thickness, certified thermal transmittance 1,3 W/m² K, clear colour (other colours available on request), edges closed with aluminium tape; dimensions: module width 500 mm, length upon request; 10-year warranty.

Perimeter aluminium profiles*.

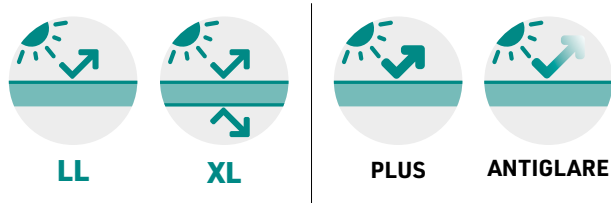
External gaskets in EPDM rubber.

Aluminium hook (if required).

* raw or anodized or lacquered: contact our sales offices to find out about standards, surcharges, minimum orders, availability.

Modulit® 511 LP 40 mm

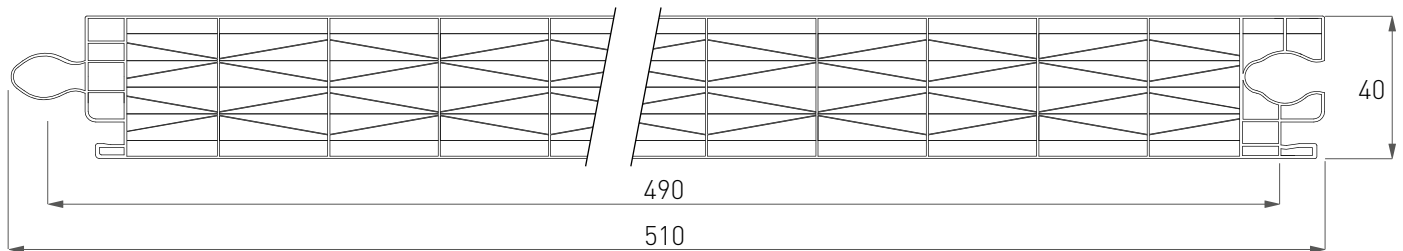
Modulit® 511 LP 40 mm system is a polycarbonate system for the production of translucent vertical curtain walls to use in industrial and civil constructions. The system is made by multiwall extruded polycarbonate panels with 11 walls double-X structure, thickness of 40 mm, module width 490 mm and UV protection obtained by co-extrusion on the external side. The system is made by means of panel coupling, provided by "male / female" joints for a perfect fit; perimeter profiles in aluminium complete the fixing structure. Easy and economical installation, **Modulit® 511 LP 40 mm** allows excellent light transmission, high load resistance and thermal insulation.



Thickness
(mm)

40

UV PROTECTED WALL



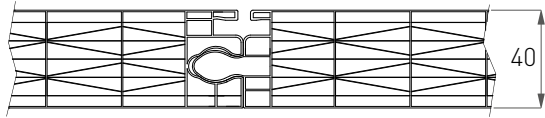
Modulit® 511 LP 40 mm technical data			
Thickness	40 mm		
Structure	11 walls		
Module width	490 mm		
Length	upon request		
Thermal transmittance	0,97 W/m ² K		
Colours		LT*	G Value**
	Clear (8005)	43%	50%
	Opal (8121)	28%	44%
UV protection	coextruded on the external side (both sides upon request)		
Warranty	10-year warranty against hail damage, yellowing, loss of light transmission		
Service temperature	-40°C / +120°C		
Thermal expansion coefficient	0,065 mm/m°C (6,5 x 10 ⁻⁵ 1/K)		
Fire certification	EUROCLASS B s1 d0		

* Values calculated according to EN410 and EN14500 standard in conformity to the indications of the norm EN16153.

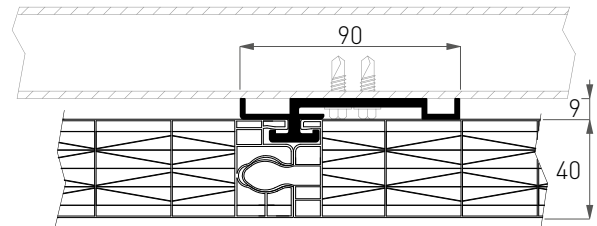
** Values calculated in conformity to the indications of the norm EN16153.

Modulit® 511 LP 40 mm joining scheme

• Section panel / panel joining

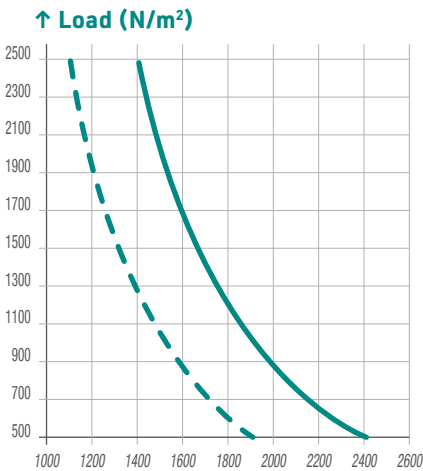


•• Section panel / hook / panel joining



Modulit® 511 LP 40 mm load charts

• 2 supports

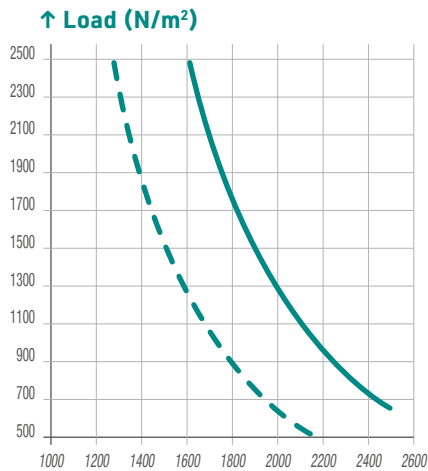


d = distance between supports (mm) →

Pressure/Suction (max deflection 1/100) — — —

Pressure/Suction (max deflection 1/50) — — —

• 3 supports PRESSURE

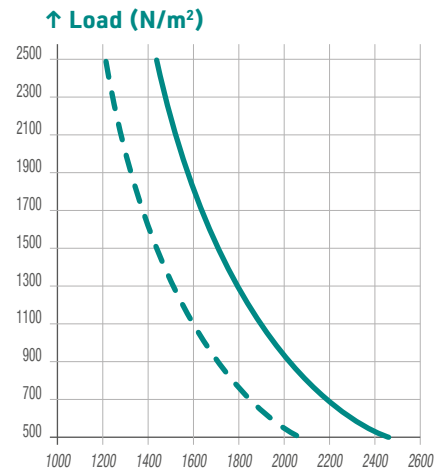


d = distance between supports (mm) →

Pressure (max deflection 1/100) — — —

Pressure (max deflection 1/50) — — —

• 3 supports SUCTION



d = distance between supports (mm) →

Suction (max deflection 1/100) — — —

Suction (max deflection 1/50) — — —

Modulit® 511 LP 40 mm specifications

Construction of Modulit® 511 LP 40 mm composito da:

Polycarbonate multiwall panel, external co-extruded UV-protection, 11 wall structure, 40 mm thickness, certified thermal transmittance 0,97 W/m² K, clear colour (other colours available on request), edges closed with aluminium tape; dimensions: module width 490 mm, length upon request; 10-year warranty.

Perimeter aluminium profiles*.

External gaskets in EPDM rubber.

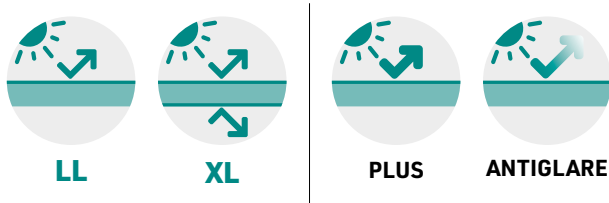
Aluminium hook (if required).

* raw or anodized or lacquered: contact our sales offices to find out about standards, surcharges, minimum orders, availability.

The designer will check the actual loads acting on the system as well as the coefficients of amplification and safety to be applied in consideration of both the climatic conditions of the site, both the general and particular characteristics of the structure in which the polycarbonate is inserted. For these evaluations, refer to the specific regulations in force in each country. For detailed technical data, or for more information, refer to the Technical Manual or to the Stabilit Suisse Office.

Modulit® 511 LP 50 mm

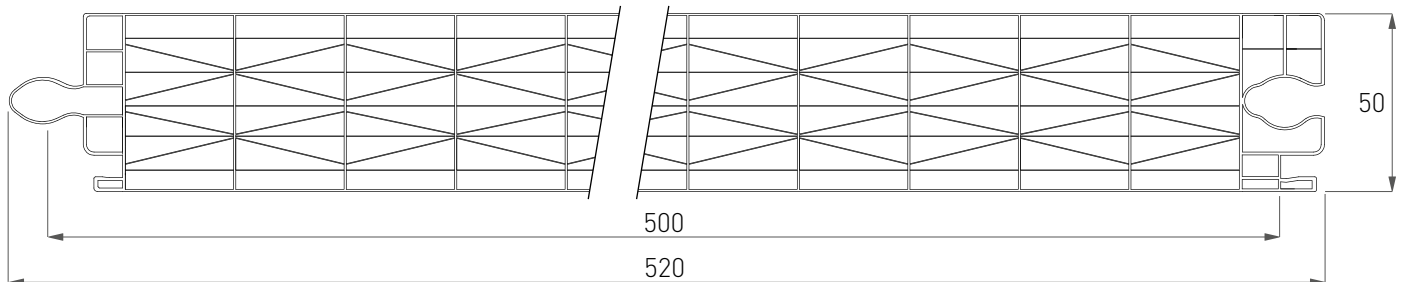
Modulit® 511 LP 50 mm system is a polycarbonate system for the production of translucent vertical curtain walls to use in industrial and civil constructions. The system is made by multiwall extruded polycarbonate panels with 11 walls double-X structure, thickness of 50 mm, module width 500 mm and UV protection obtained by co-extrusion on the external side. The system is made by means of panel coupling, provided by "male / female" joints for a perfect fit; perimeter profiles in aluminium complete the fixing structure. Easy and economical installation, Modulit® 511 LP 50 mm allows excellent light transmission, high load resistance and thermal insulation.



Thickness
(mm)

50

UV PROTECTED WALL



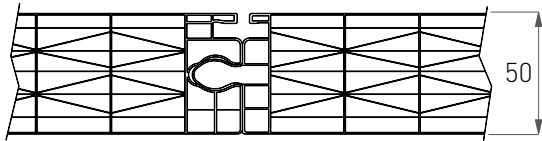
Modulit® 511 LP 50 mm technical data			
Thickness	50 mm		
Structure	11 walls		
Module width	500 mm		
Length	upon request		
Thermal transmittance	0,9 W/m ² K		
Colours		LT*	G Value**
	Clear (8005)	41%	50%
	Opal (8121)	27%	43%
UV protection	Coextruded on the external side (both sides upon request)		
Warranty	10-year warranty against hail damage, yellowing, loss of light transmission		
Service temperature	-40°C / +120°C		
Thermal expansion coefficient	0,065 mm/m°C (6,5 x 10 ⁻⁵ 1/K)		
Fire certification	EUROCLASS B s1 d0		

* Values calculated according to EN410 and EN14500 standard in conformity to the indications of the norm EN16153.

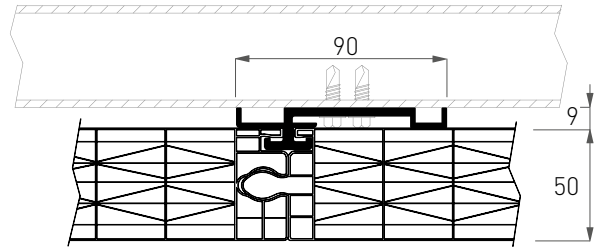
** Values calculated in conformity to the indications of the norm EN16153.

Modulit® 511 LP 50 mm joining scheme

• Section panel / panel joining

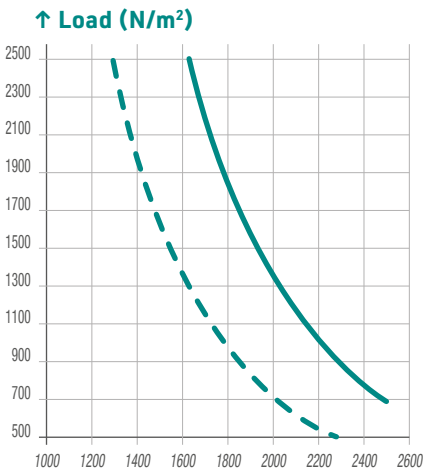


• Section panel / hook / panel joining



Modulit® 511 LP 50 mm load charts

• 2 supports

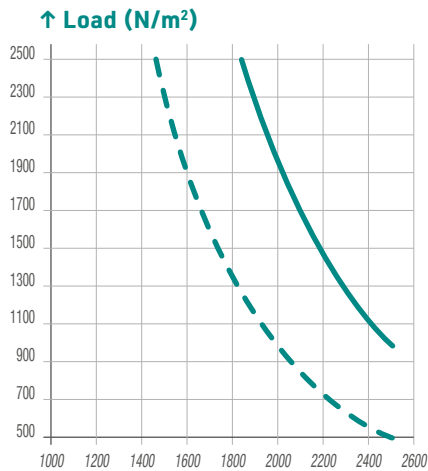


d = distance between supports (mm) →

Pressure/Suction (max deflection 1/100) — — —

Pressure/Suction (max deflection 1/50) — — —

• 3 supports PRESSURE

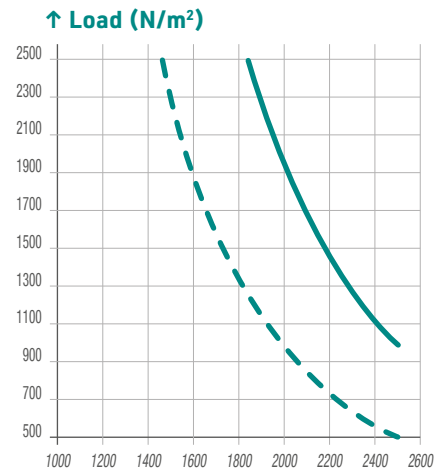


d = distance between supports (mm) →

Pressure (max deflection 1/100) — — —

Pressure (max deflection 1/50) — — —

• 3 supports SUCTION



d = distance between supports (mm) →

Suction (max deflection 1/100) — — —

Suction (max deflection 1/50) — — —

Modulit® 511 LP 50 mm specifications

Construction of Modulit® 511 LP 50 mm translucent wall system consisting of:

Polycarbonate multiwall panel, external co-extruded UV-protection, 11 wall structure, 50 mm thickness, thermal transmittance 0,9 W/m² K, clear colour (other colours available on request), edges closed with aluminium tape; dimensions: module width 500 mm, length upon request; 10-year warranty.

Perimeter aluminium profiles*.

External gaskets in EPDM rubber.

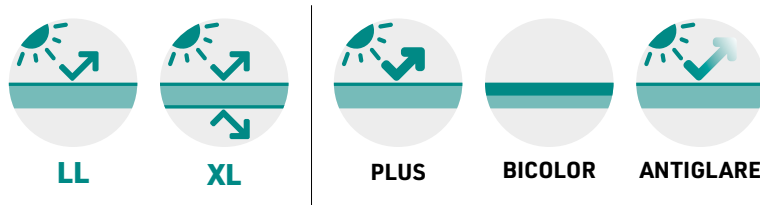
Aluminium hook (if required).

* raw or anodized or lacquered: contact our sales offices to find out about standards, surcharges, minimum orders, availability.

The designer will check the actual loads acting on the system as well as the coefficients of amplification and safety to be applied in consideration of both the climatic conditions of the site, both the general and particular characteristics of the structure in which the polycarbonate is inserted. For these evaluations, refer to the specific regulations in force in each country. For detailed technical data, or for more information, refer to the Technical Manual or to the Stabilit Suisse Office.

Modulit® 511 LP 55 mm

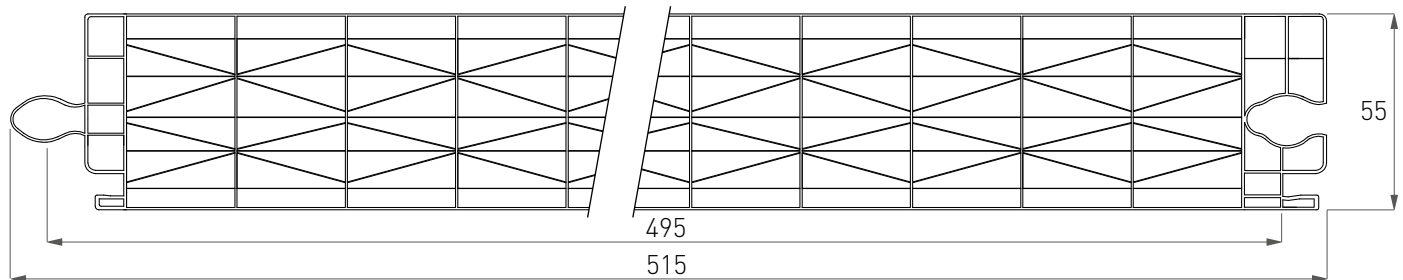
Modulit® 511 LP 55 mm system is a polycarbonate system for the production of translucent vertical curtain walls to use in industrial and civil constructions. The system is made by multiwall extruded polycarbonate panels with 11 walls double-X structure, thickness of 55 mm, module width 495 mm and UV protection obtained by co-extrusion on the external side. The system is made by means of panel coupling, provided by "male / female" joints for a perfect fit; perimeter profiles in aluminium complete the fixing structure. Easy and economical installation, Modulit® 511 LP 55 mm allows excellent light transmission, high load resistance and thermal insulation.



Thickness
(mm)

55

UV PROTECTED WALL



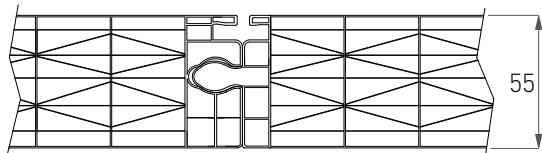
Modulit® 511 LP 55 mm technical data			
Thickness	55 mm		
Structure	11 walls		
Module width	495 mm		
Length	upon request		
Thermal transmittance	0,87 W/m ² K		
Colours		LT*	G Value**
	Clear (8005)	39%	50%
	Opal (8121)	27%	43%
UV protection	coextruded on the external side (both sides upon request)		
Warranty	10-year warranty against hail damage, yellowing, loss of light transmission		
Service temperature	-40°C / +120°C		
Thermal expansion coefficient	0,065 mm/m°C (6,5 x 10 ⁻⁵ 1/K)		
Fire certification	EUROCLASS B s1 d0		

* Values calculated according to EN410 and EN14500 standard in conformity to the indications of the norm EN16153.

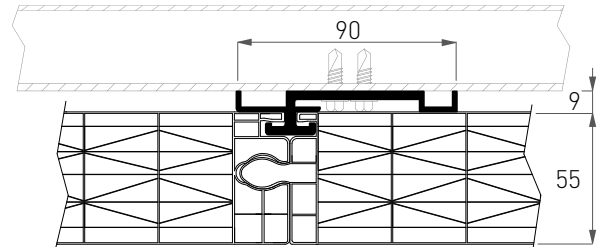
** Values calculated in conformity to the indications of the norm EN16153.

Modulit® 511 LP 55 mm joining scheme

• Section panel / panel joining



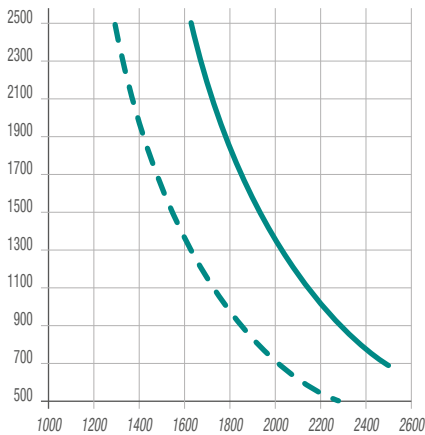
• Section panel / hook / panel joining



Modulit® 511 LP 55 mm load charts

• 2 supports

↑ Load (N/m²)



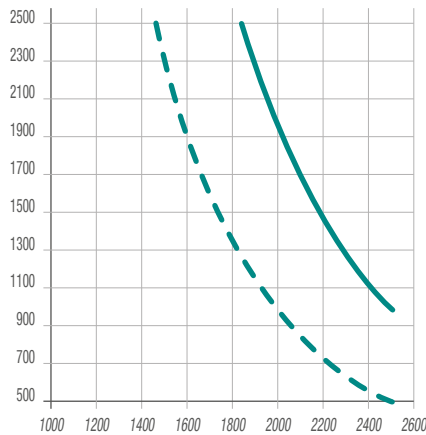
d = distance between supports (mm) →

Pressure/Suction (max deflection 1/100) — — —

Pressure/Suction (max deflection 1/50) — — —

• 3 supports PRESSURE

↑ Load (N/m²)



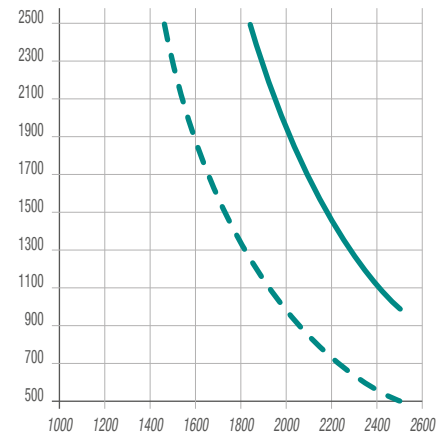
d = distance between supports (mm) →

Pressure (max deflection 1/100) — — —

Pressure (max deflection 1/50) — — —

• 3 supports SUCTION

↑ Load (N/m²)



d = distance between supports (mm) →

Suction (max deflection 1/100) — — —

Suction (max deflection 1/50) — — —

Modulit® 511 LP 55 mm specifications

Construction of Modulit® 511 LP 55 mm translucent wall system consisting of:

Polycarbonate multiwall panel, external co-extruded UV-protection, 11 wall structure, 55 mm thickness, thermal transmittance 0,87 W/m² K, clear colour (other colours available on request), edges closed with aluminium tape; dimensions: module width 495 mm, length upon request; 10-year warranty.

Perimeter aluminium profiles*.

External gaskets in EPDM rubber.

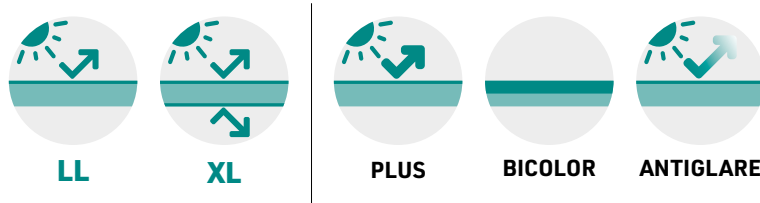
Aluminium hook (if required).

* raw or anodized or lacquered: contact our sales offices to find out about standards, surcharges, minimum orders, availability.

The designer will check the actual loads acting on the system as well as the coefficients of amplification and safety to be applied in consideration of both the climatic conditions of the site, both the general and particular characteristics of the structure in which the polycarbonate is inserted. For these evaluations, refer to the specific regulations in force in each country. For detailed technical data, or for more information, refer to the Technical Manual or to the Stabilit Suisse Office.

Modulit® 511 LP 60 mm

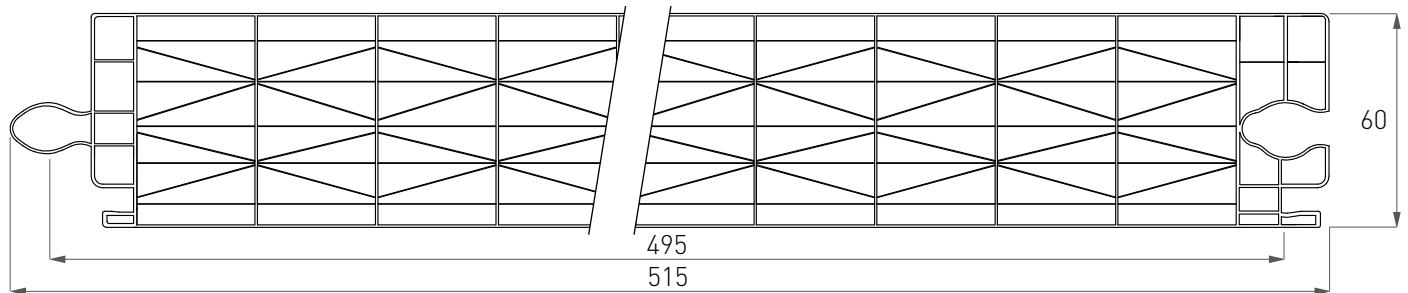
Modulit® 511 LP 60 mm system is a polycarbonate system for the production of translucent vertical curtain walls to use in industrial and civil constructions. The system is made by multiwall extruded polycarbonate panels with 11 walls double-X structure, thickness of 60 mm, module width 495 mm and UV protection obtained by co-extrusion on the external side. The system is made by means of panel coupling, provided by "male / female" joints for a perfect fit; perimeter profiles aluminium complete the fixing structure. Easy and economical installation, **Modulit® 511 LP 60 mm** allows excellent light transmission, high load resistance and thermal insulation.



Thickness
(mm)

60

UV PROTECTED WALL



Modulit® 511 LP 60 mm technical data

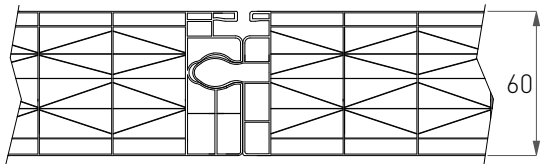
Thickness	60 mm		
Structure	11 walls		
Module width	495 mm		
Length	upon request		
Thermal transmittance	0,8 W/m ² K		
Colours		LT*	G Value**
	Clear (8005)	44%	51%
	Opal (8121)	18%	39%
UV protection	coextruded on the external side (both sides upon request)		
Warranty	10-year warranty against hail damage, yellowing, loss of light transmission		
Service temperature	-40°C / +120°C		
Thermal expansion coefficient	0,065 mm/m°C (6,5 x 10 ⁻⁵ 1/K)		
Fire certification	EUROCLASS B s1 d0		

* Values calculated according to EN410 and EN14500 standard in conformity to the indications of the norm EN16153.

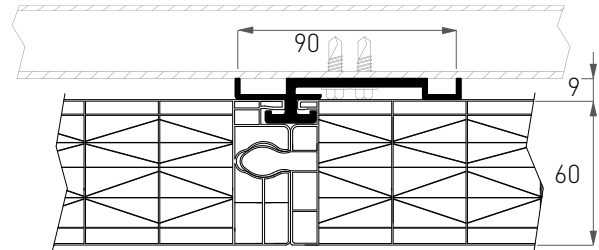
** Values calculated in conformity to the indications of the norm EN16153.

Modulit® 511 LP 60 mm joining scheme

• Section panel / panel joining



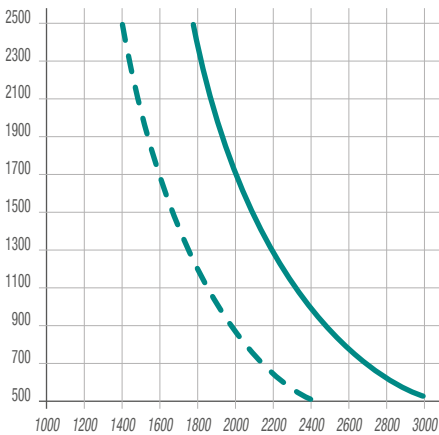
• Section panel / hook / panel joining



Modulit® 511 LP 60 mm load charts

• 2 supports

↑ Load (N/m²)



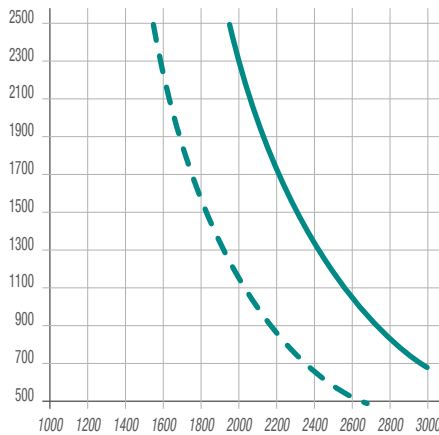
d = distance between supports (mm) →

Pressure/Suction (max deflection 1/100) — — —

Pressure/Suction (max deflection 1/50) — — —

• 3 supports PRESSURE

↑ Load (N/m²)



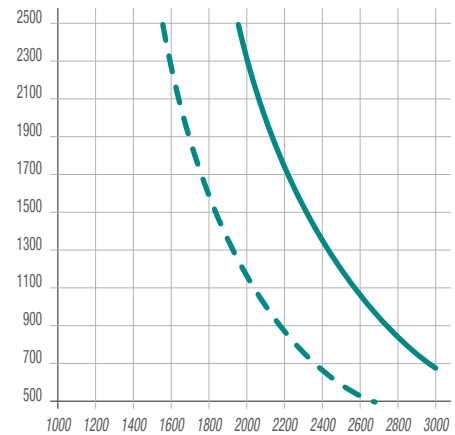
d = distance between supports (mm) →

Pressure (max deflection 1/100) — — —

Pressure (max deflection 1/50) — — —

• 3 supports SUCTION

↑ Load (N/m²)



d = distance between supports (mm) →

Suction (max deflection 1/100) — — —

Suction (max deflection 1/50) — — —

Modulit® 511 LP 60 mm specifications

Construction of Modulit® 511 LP 60 mm translucent wall system consisting of:

Polycarbonate multiwall panel, external co-extruded UV-protection, 11 wall structure, 60 mm thickness, thermal transmittance 0,8 W/m² K, clear colour (other colours available on request), edges closed with aluminium tape; dimensions: module width 495 mm, length upon request; 10-year warranty.

Perimeter aluminium profiles*.

External gaskets in EPDM rubber.

Aluminium hook (if required).

* raw or anodized or lacquered: contact our sales offices to find out about standards, surcharges, minimum orders, availability.

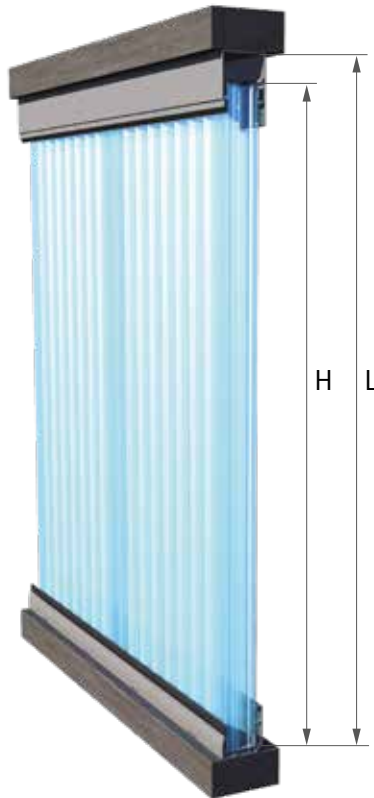
The designer will check the actual loads acting on the system as well as the coefficients of amplification and safety to be applied in consideration of both the climatic conditions of the site, both the general and particular characteristics of the structure in which the polycarbonate is inserted. For these evaluations, refer to the specific regulations in force in each country. For detailed technical data, or for more information, refer to the Technical Manual or to the Stabilit Suisse Office.

Installation options for Modulit® 338 LP, Modulit® 500 LP and Modulit® 511 LP with simple profiles

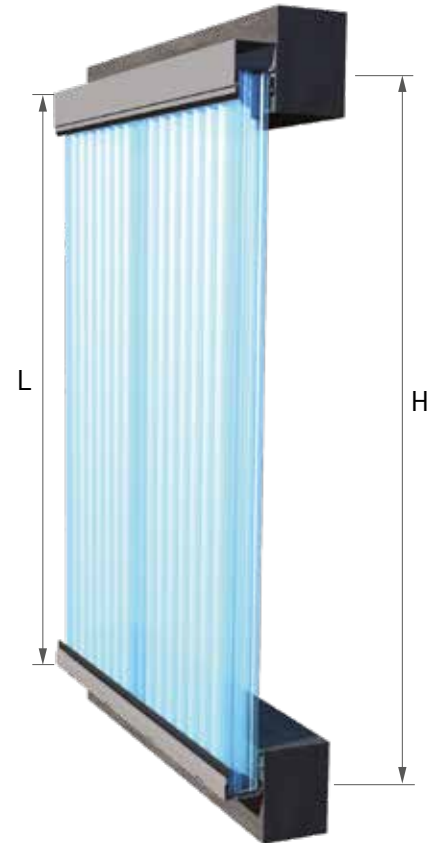
- Installation within supports with bottom sill



- Installation within supports without bottom sill



- External installation without sill



$H1 = L1 - 40 \text{ mm}$ ($L1$ = distance between aluminum profiles; $H1$ = panel height)
 $H = L - 35 \text{ mm}$ (L = distance between aluminum profiles; H = panel height)

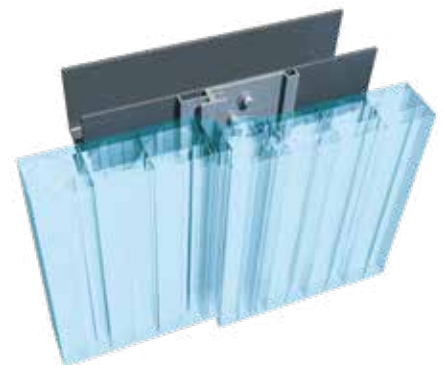
- Detail of the upper profile



- Detail of the lower profile with sill



- Detail of the panel fixing with hook





Installation options for Modulit® 338 LP, Modulit® 500 LP and Modulit® 511 LP with thermal cut profiles

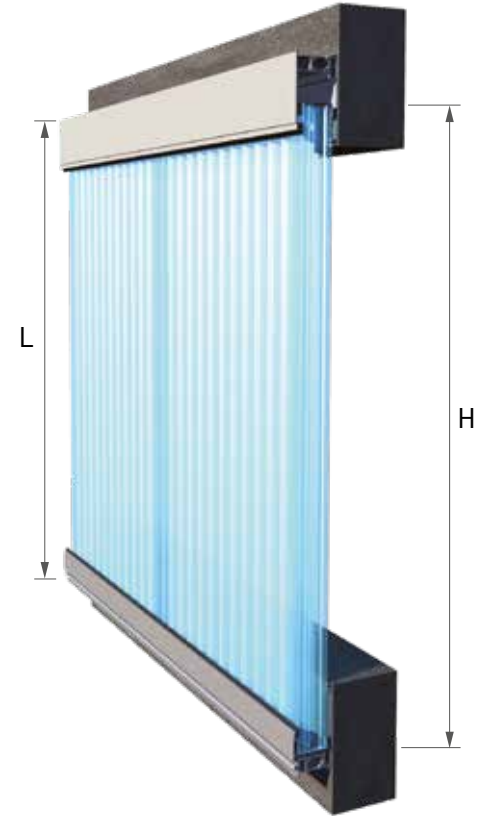
- Installation within supports with bottom sill



- Installation within supports without bottom sill



- External installation without sill



$H = L - 95 \text{ mm}$ (L = distance between aluminum profiles; H = panel height)

- Detail of the upper thermal cut profile



- Detail of the lower thermal cut profile with sill



- Detail of the side thermal cut profile



Modulit® accessories for thickness 40 mm

ACCESSORY	CODE	TECHNICAL DESIGN / RENDERING
Simple profile upper / side aluminium profile*	M987	
Simple profile lower aluminium profile*	M989	
Simple profile "high" upper aluminium profile*	M9S4 M9S6	
Simple profile lower aluminium profile* with sill	M988	
Simple profile side aluminium profile*	M995 M996	
Thermal cut profile upper / side aluminium profile* for 40 mm	M9B2	

* raw or anodized or lacquered: contact our sales offices to find out about standards, surcharges, minimum orders, availability.



Modulit® accessories for thickness 40 mm

ACCESSORY	CODE		TECHNICAL DESIGN / RENDERING	
Thermal cut profile lower aluminium profile* for 40 mm	M9B1	-		
Thermal cut profile side aluminium profiles* for 40 mm	M9C3 M9C4	-		
Aluminium hook for Modulit® 338 LP and 500LP	M9V9	-		
Aluminium hook for Modulit® 511 LP	M9V6	-		
Aluminium adhesive tape (50 m roll)	M966	height 70 mm		
	M970	height 70 mm perforated		
EPDM gaskets	M998	-		
EPDM gasket	M928	-		
EPDM gasket	M9S3	-		

* raw or anodized or lacquered: contact our sales offices to find out about standards, surcharges, minimum orders, availability.

Modulit® accessories for thickness 50 mm

ACCESSORY	CODE		TECHNICAL DESIGN / RENDERING
Thermal cut profile upper / side aluminium profile* for 50 mm	M9B4	-	
Thermal cut profile lower aluminium profile* for 50 mm	M9B3	-	
Thermal cut profile side aluminium profiles* for 50 mm	M9C3 M9C5	-	
Aluminium hook	M9V6	-	
Aluminium adhesive tape / perforated (50 m roll)	M966	Height 70 mm	
	M970	Height 70 mm perforated	
EPDM gasket	M928	-	
EPDM gasket	M9S3	-	

* raw or anodized or lacquered: contact our sales offices to find out about standards, surcharges, minimum orders, availability.



INDUSTRY

COMMERCIAL BUILDING

PUBLIC CONSTRUCTION

ARCHITECTURE

HOUSING

RURAL

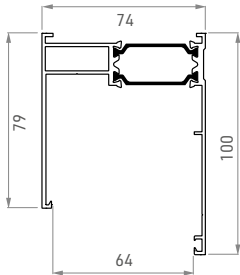

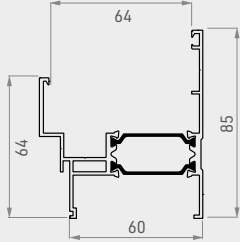

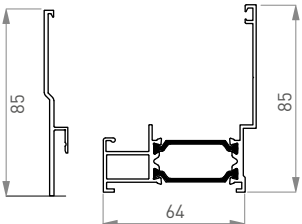

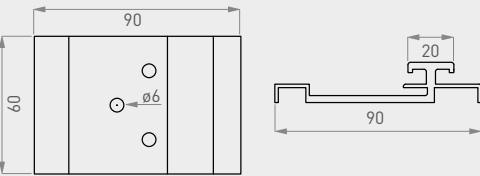
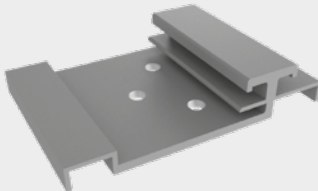
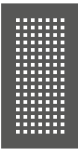
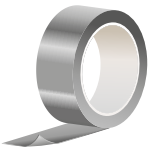

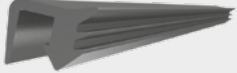

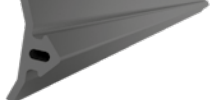
SPORTS FACILITIES

Modulit® accessories for thickness 55 mm

ACCESSORY	CODE		TECHNICAL DESIGN / RENDERING	
Thermal cut profile upper / side aluminium profile* for 55 mm	M9B6	-		
Thermal cut profile lower aluminium profile* for 55 mm	M9B5	-		
Thermal cut profile side aluminium profiles* for 55 mm	M9C3 M9C6	-		
Aluminium hook	M9V6	-		
Perforated aluminium adhesive tape (50 m roll)	MXA8	Height 90 mm perforated		
EPDM gasket	M928	-		
EPDM gasket	M9S3	-		

* raw or anodized or lacquered: contact our sales offices to find out about standards, surcharges, minimum orders, availability.

Modulit® accessories for thickness 60 mm

ACCESSORY	CODE		TECHNICAL DESIGN / RENDERING	
Thermal cut profile upper / side aluminium profile* for 60 mm	M9B8	-		
Thermal cut profile lower aluminium profile* for 60 mm	M9B7	-		
Thermal cut profile side aluminium profiles* for 60 mm	M9C3 M9C7	-		
Aluminium hook	M9V6	-		
Perforated aluminium adhesive tape (50 m roll)	MXA8	Height 90 mm perforated		
EPDM gasket	M928	-		
EPDM gasket	M9S3	-		

* raw or anodized or lacquered: contact our sales offices to find out about standards, surcharges, minimum orders, availability.



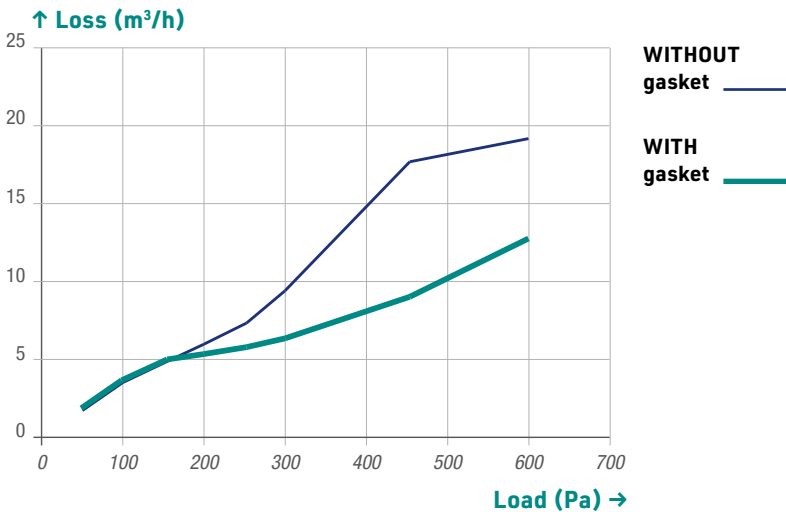
Integrated gasket

Modulit® 338 LP and 500 LP panels can be equipped by integrated transparent gasket. This element, which doesn't limit the light transmission of the panel and doesn't create unsightly lines of different colours, adapts to different shapes of the product to which it is applied, improving the performances of air and water resistance.

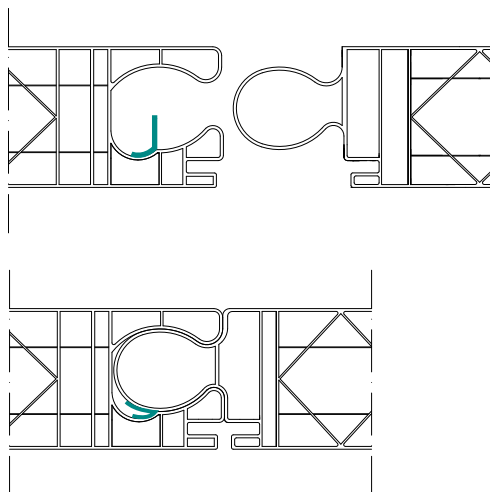


Air penetration test (EN 12153)

• Under pressure



- **Excellent transparency that renders the gasket indistinguishable from the panel**
- **Improved air and water tightness**
- **Flexibility**
- **UV Resistant**
- **Perfect integration provided by "male / female" joint**



Water penetration test (EN 12155)

After joining the panels, the gasket is deformed by adhering optimally to the walls of the joint, thereby preventing the water to pass the line of sealing. Furthermore, the lower air permeability significantly decreases the effect of build-up of the droplets that are substantially stationary inside the joint.

Independent tests proved that the gasket increases the air resistance performances of at least 35% with pressure load and at least 10% with suction load.

Modulit® opening window

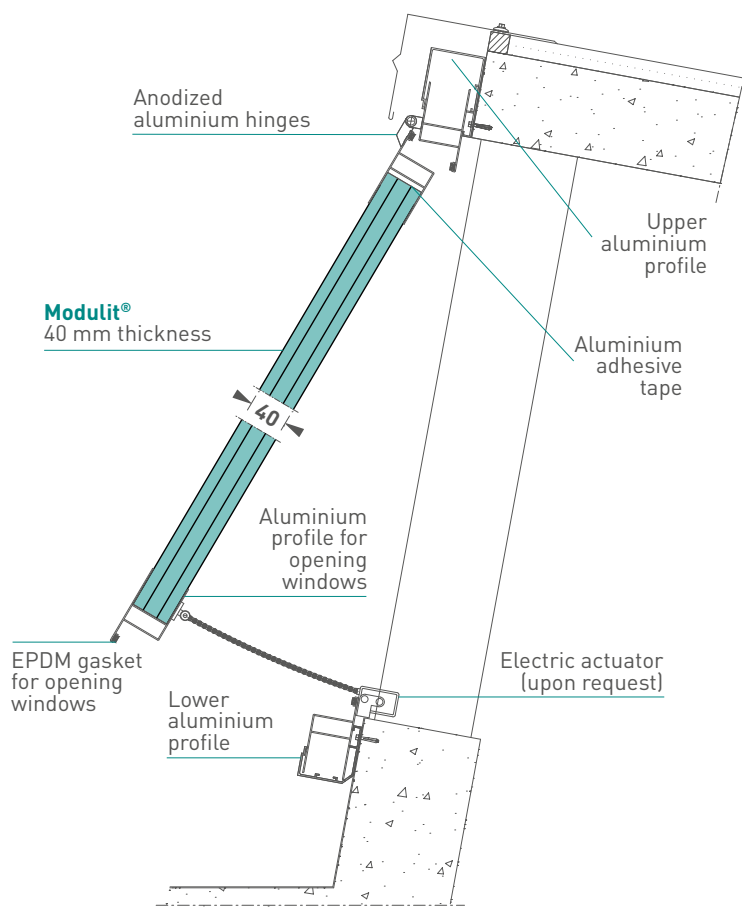
All Modulit® systems can be provided with opening windows to allow the perfect ventilation of the building. The opening system is composed of upper and lower aluminum profiles, provided with EPDM rubber gaskets for complete closure, and anodized aluminium top hinges. The opening can be electrical, by means of installation of an actuator.

Benefits

- Perfectly integrated into the system
- Ease and economical installation
- Thermal insulation
- Electric opening
- Aluminium hinges
- Closure gaskets in EPDM

Modulit® opening window scheme

- Vertical section - sloped shed - 40 mm thickness





INDUSTRY



COMMERCIAL BUILDING



PUBLIC CONSTRUCTION



ARCHITECTURE



HOUSING

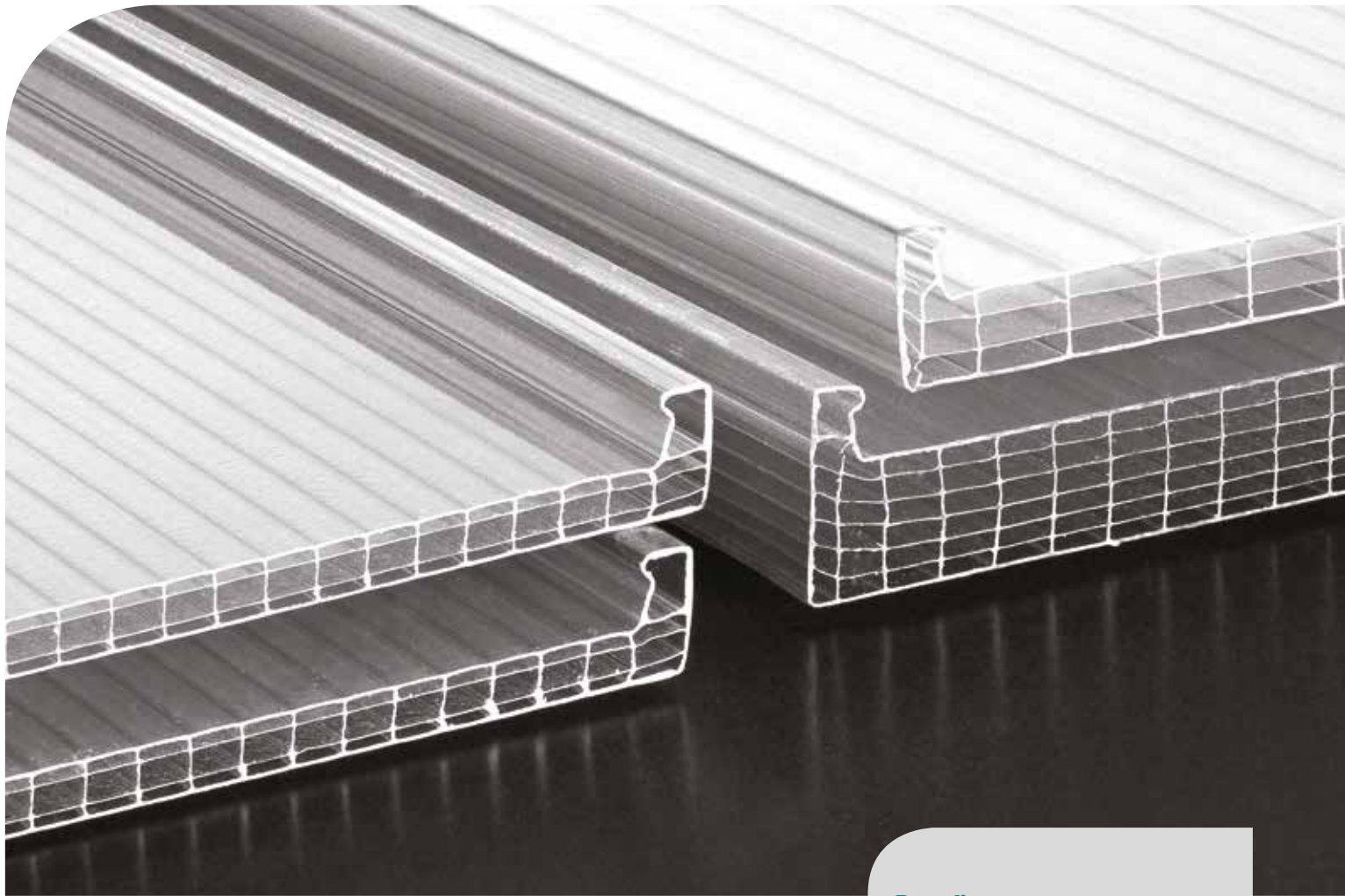


RURAL



SPORTS FACILITIES





BDL

10

16

25

BDL is the ideal solution for the creation of skylights or transparent roofs, both flat and curved. The system, consisting of a polycarbonate multiwall panel in extruded polycarbonate, provides good thermal insulation and excellent optical and mechanical properties. The union between the panels is obtained in a simple and effective manner through the use of specific polycarbonate snap-on profiles (or aluminium ones if the structural loading of the project requires). The particular click fixing system doesn't foreseen holes in the polycarbonate panel, thus allowing the creation of roofs of long lengths, facilitating easy installation of the product and a stable sealing against water infiltration.



XL



XL PLUS



ANTIGLARE

Benefits

- Quick and easy to assemble
- High thermal insulation
- Excellent impact resistance
- Good light transmission
- Good fire performance
- Certified quality guarantee
- UV protection on both sides

WARRANTY
G10
10 YEARS



INDUSTRY



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SPORTS FACILITIES

Main advantages of BDL system



Impact resistance

Polycarbonate's mechanical properties make this the technopolymer with the highest impact resistance, allowing it to provide optimum protection against accidental damage and weather-related damage. These qualities mean polycarbonate significantly outperforms other materials (glass, acrylic, PET, etc.) commonly used in applications where transparency is a key requirement. Impact resistance remains constant across a particularly wide temperature range.



Thermal expansion

Thermal expansion is a characteristic property of materials that consists in their tendency to change in size as temperature increases and decreases. This expansion is quantified via a coefficient that, in the case of polycarbonate, equates to $6,5 \times 10^{-5} 1/K$ (0.065 mm/m°C). The fact that this coefficient value is much higher than the values associated with materials usually used for roofing and joinery (aluminium, steel, etc.) generates the need for solutions that compensate for this difference in thermal expansion, which thus needs to be factored in at the design stage and in all building applications.



Light transmission

Proper lighting design entails ensuring that the building interior receives the required amount of light. So it is clearly important to use sheets that let enough light through. The **BDL** product range gives you plenty of choice at the design stage of your project, with an array of colour options to meet your every need.



Warranty

Sheets with UV protection offer a 10-year warranty against yellowing, loss of light transmission and hail damage. Our sales department will be happy to provide you the exact warranty terms.



Fire behaviour

Fire safety is a fundamental necessity. **BDL** panels are tested in independent qualified laboratories on the basis of current applicable regulations in the construction industry. Our offices are at your disposal to provide you with details regarding the available certificates.



Thermal transmittance

Thermal transmittance, or U-value, is the mean flow of heat per m² that passes through a structure (the polycarbonate panel) separating two environments with different temperatures (usually separating a heated or air-conditioned room from outdoors). The lower this value, the more effective the insulation offered by the panel. With a view to reducing heating/air-conditioning costs - with a consequent reduction in harmful emissions into the atmosphere - international standards require both building materials and fenestration systems to meet ever-stricter thermal transmittance requirements. With its extensive range of multiwall panels, **Stabilit Suisse** is at the cutting edge when it comes to providing its customers with the most appropriate solutions in compliance with current standards.



UV protection

Our co-extruded UV-protected layer blocks damaging UV rays that would lead to rapid degradation that causes yellowing and undermines the strength of the exposed surface. UV protection is applied using co-extrusion technology, whereby an even shielding layer can be produced to screen the polycarbonate from the UV component of the solar radiation. With this technology, the UV protection is made resistant to weathering and is not prone to damage by incorrect maintenance.

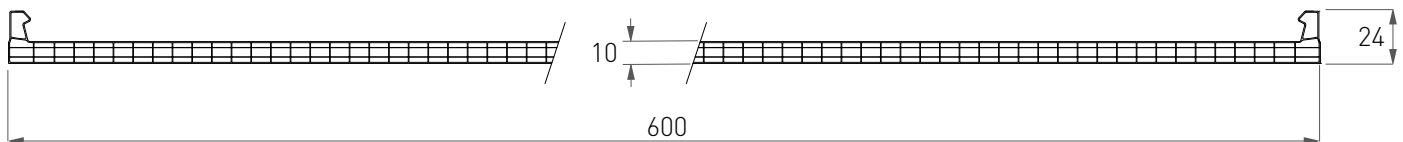
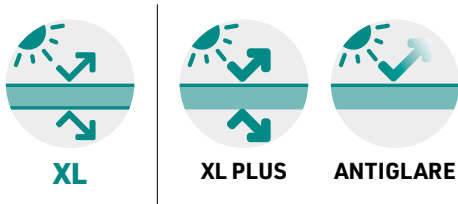
BDL 4W 10 mm

The system **BDL 4W 10 mm** is ideal for the construction of flat and curved roofs. It is characterized by the ease and speed of installation thanks to the complete range of accessories supplied (polycarbonate or aluminium snap-on profiles, specific fixing hooks, EPDM closure gaskets, aluminium fixing profiles, and other completion accessories). The 600 mm width allows easy handling of the panel during the stages of installation, while the 4 walls inner structure combines lightness and transparency. The frosted finishing allows a good diffusion of light even without the use of opal colours. The panel is coextruded on both sides, giving ultraviolet protection which ensures the durability and weather resistance of the product over time.



Thickness
(mm)

10



BDL 4W 10 mm technical data			
Thickness	10 mm		
Number of walls	4		
Module width	600 mm		
Length	upon request		
Minimum cold bending	2200 mm		
Thermal transmittance	2,6 W/m ² K		
Colours		LT*	G Value**
	Clear (8005)	76%	68%
	Opal (8121)	48%	51%
UV protection	coextruded on both sides		
Warranty	10-year warranty against hail damage, yellowing, loss of light transmission		
Service temperature	-40°C / +120°C		
Thermal expansion coefficient	0,065 mm/m°C (6,5 x 10 ⁻⁵ 1/K)		
Fire certification	EUROCLASS B s1 d0		

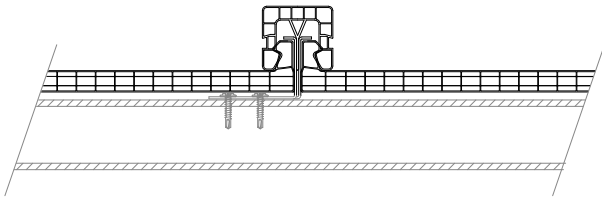
* Values calculated according to ASTM standard.

** Values calculated according to internal method.

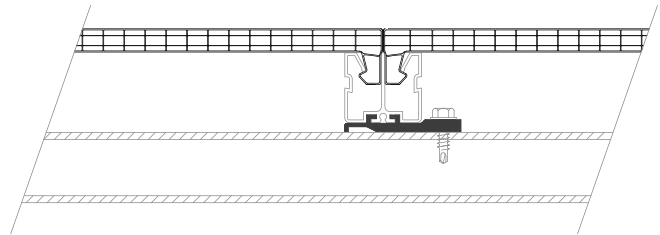


BDL 4W 10 mm joining scheme

• Section panels joining with polycarbonate snap-on profile

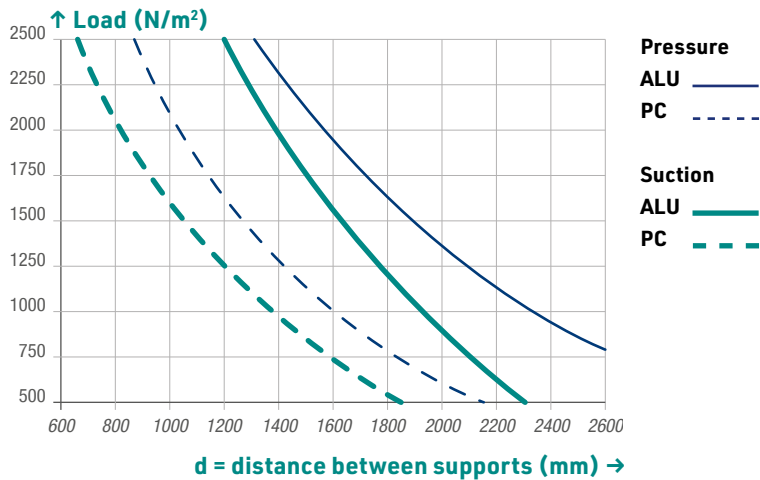


• Section panels joining with aluminium snap-on profile

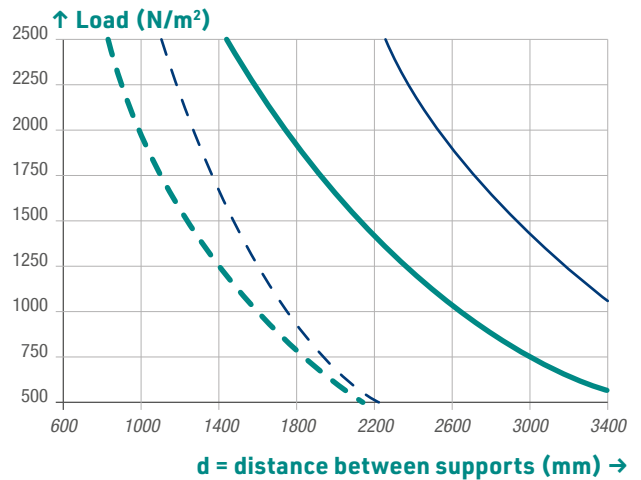


BDL 4W 10 mm load charts

• Load charts for FLAT solution



• Load charts for self-supporting CURVE solution



The load tables refer to the breakage load value of the system, i.e. the lowest value between: the collapse of the panel, failure of the frame or the panel springing out of its housing. The designer will check the actual loads acting on the system as well as the coefficients of amplification and safety to be applied in consideration of both the climatic conditions of the site, both the general and particular characteristics of the structure in which the polycarbonate is inserted. For these evaluations, refer to the specific regulations in force in each country. For detailed technical data, or for more information, refer to the Technical Manual or to the Stabilit Suisse Office.

BDL 4W 10 mm specifications

Production of translucent roof (flat, curved or curved self-supporting) with BDL 4W 10 mm system consisting of:

Multiwall polycarbonate panel, coextruded UV-protection on both sides, 4 wall structure, 10 mm thickness, thermal transmittance 2,6 W/m² K, clear colour (other colours available on request), adhesive aluminium tape or thermowelded end closures; dimensions: module width 600 mm, length upon request; 10-year warranty.

Polycarbonate snap-on profile with coextruded UV protection on the exposed sides or, alternatively, anodized aluminium snap-on profile silver finish (minimum 15 microns).

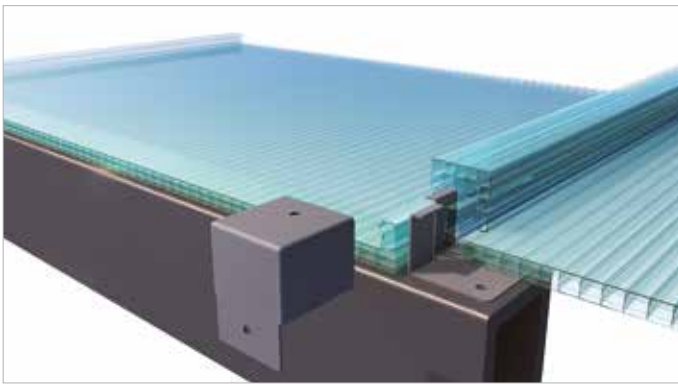
Steel hook or, alternatively, aluminium hook.

Closure caps for polycarbonate snap-on profiles (in nylon or steel).

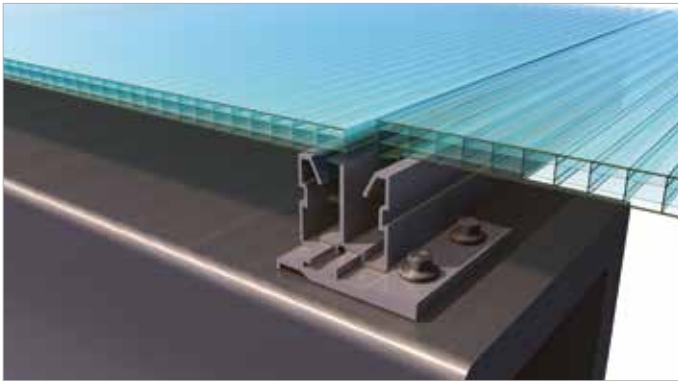
Finishing aluminum profiles*

* raw or anodized or lacquered: contact our sales offices to find out about standards, surcharges, minimum orders, availability.

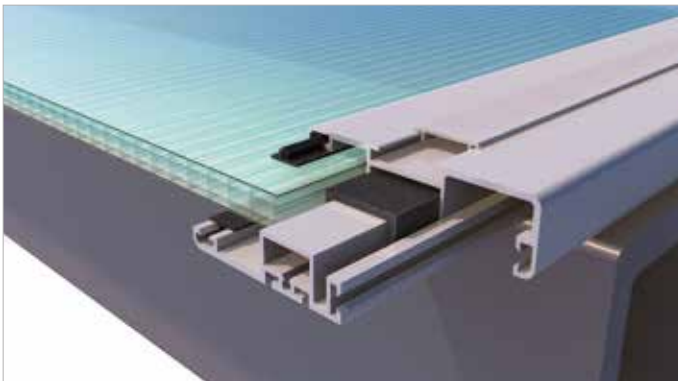
FLAT installation options for BDL 4W 10 mm



- Detail of panels fixing with steel fixing hook, polycarbonate snap-on profile and nylon end cap.



- Detail of panels fixing with aluminium snap-on profile and aluminium fixing hook.



- Detail of aluminium profile for the finishing of the starting and end point of the roof.



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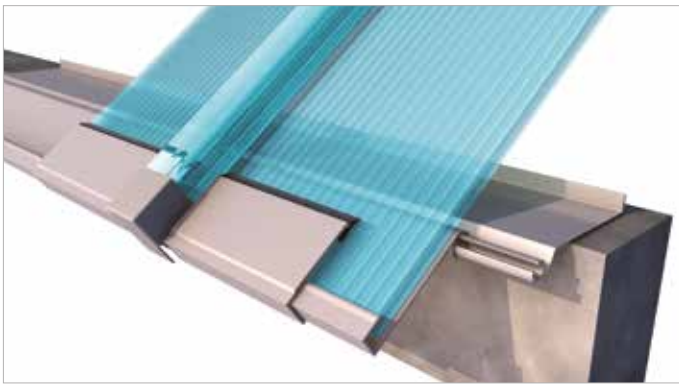


RURAL

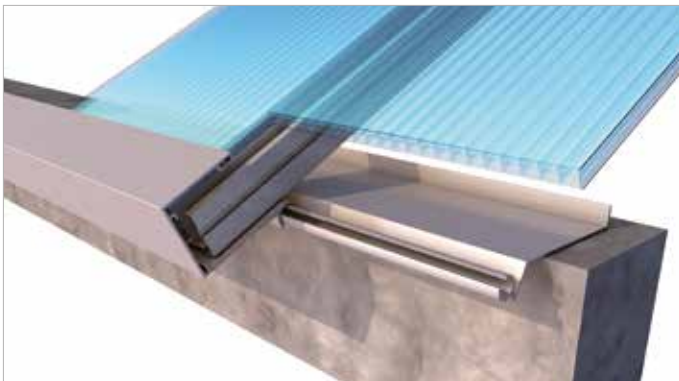


SPORTS FACILITIES

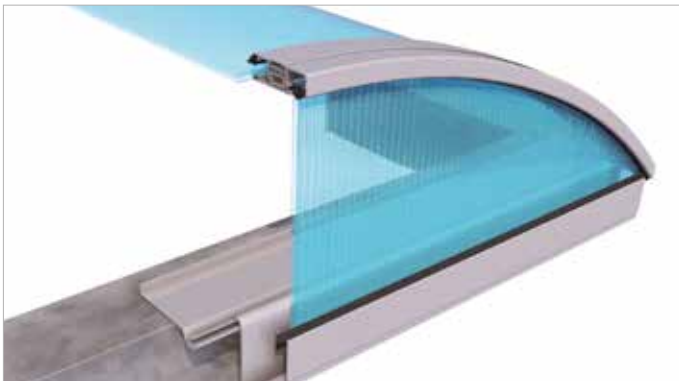
CURVED installation options for - BDL 4W 10 mm



- Detail of self-supporting roof with polycarbonate snap-on profiles.



- Detail of self-supporting roof with aluminium snap-on profiles.



- Detail of the gable for self-supporting roof.

BDL 4W 10 mm accessories

ACCESSORY	CODE	TECHNICAL DESIGN / RENDERING
Polycarbonate snap-on profile	J443	
Aluminium snap-on profile	M9RA	
Stainless steel hook for J443 profile	M9S2	
Aluminium hook for M9RA profile	M9VH	

ACCESSORY - CODE


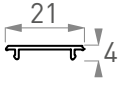
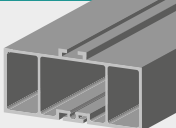
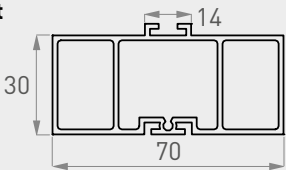
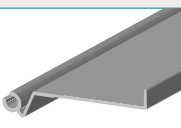
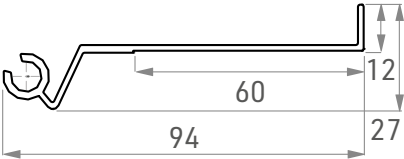

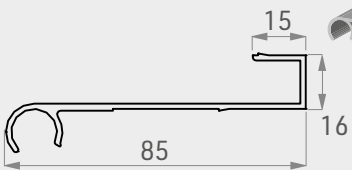
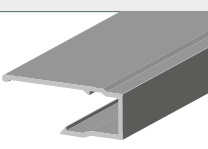
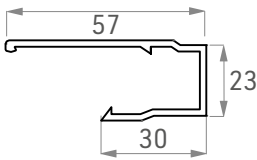
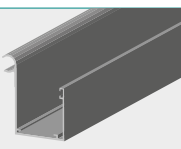
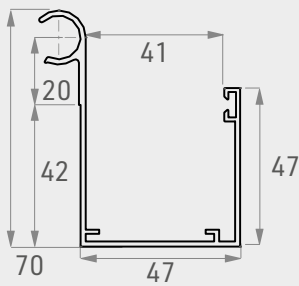
Aluminium upper profile* for gable
M9S9


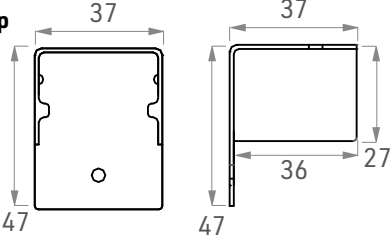
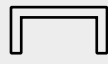


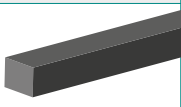

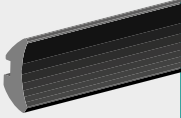

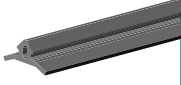

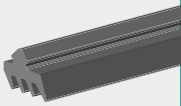




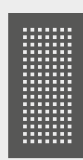
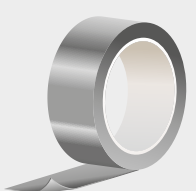
ACCESSORY - CODE

Aluminium lower profile* for gable
M9T0



BDL 4W 10 mm accessories

ACCESSORY - CODE	
Aluminium cap profile* M9T1  	
Aluminium reinforcement profile* M9T2  	
Aluminium fixed sill profile* M9R6  	
Aluminium revolving sill profile* M9R7  	
10 mm aluminium panel stop* M9R4  	
Aluminium revolving sill profile* M9R8  	

ACCESSORY - CODE	
Nylon end cap M9TA  	
EPDM thermal cut gasket M9T5  	
PE adhesive spacer M9G8 (35x40 mm)  	
EPDM gasket M926  	
1 mm EPDM gasket M9S3  	
3 mm EPDM gasket M9S5  	
Screw MS01 4,2 x 13 mm 	
Rubber seal MS04 	
Massive aluminium adhesive tape height 38 mm (50 m roll) M965  	
Perforated aluminium adhesive tape height 38 mm (50 m roll) M968  	

* raw or anodized or lacquered: contact our sales offices to find out about standards, surcharges, minimum orders, availability.

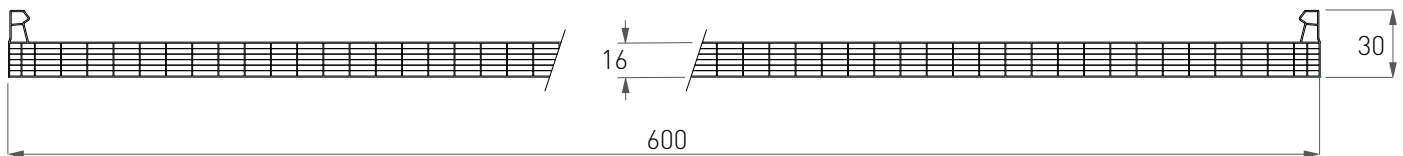
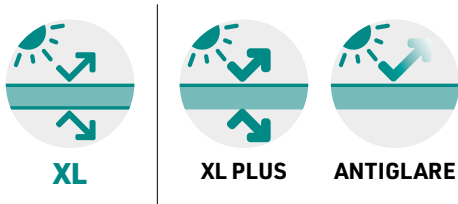
BDL 7W 16 mm

The system **BDL 7W 16 mm** is ideal for the construction of flat and curved roofs. It is characterized by the ease and speed of installation thanks to the complete range of accessories supplied (polycarbonate or aluminium snap-on profiles, specific fixing hooks, EPDM closure gaskets, aluminium fixing profiles, and other completion accessories). The 600 mm width allows easy handling of the panel during the stages of installation, while the 7 walls inner structure combines lightness and transparency. The frosted finishing allows a good diffusion of light even without the use of opal colours. The panel is coextruded on both sides, giving ultraviolet protection which ensures the durability and weather resistance of the product over time.



Thickness
(mm)

16



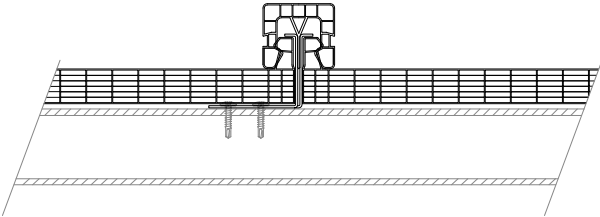
BDL 7W 16 mm technical data			
Thickness	16 mm		
Number of walls	7		
Module width	600 mm		
Length	upon request		
Minimum cold bending	3200 mm		
Thermal transmittance	1,9 W/m ² K		
Colours		LT*	G Value**
	Clear (8005)	59%	66%
	Opal (8121)	37%	50%
UV protection	Coextruded on both sides (upon request on one side)		
Warranty	10-year warranty against hail damage, yellowing, loss of light transmission		
Service temperature	-40°C / +120°C		
Thermal expansion coefficient	0,065 mm/m°C (6,5 x 10 ⁻⁵ 1/K)		
Fire certification	EUROCLASS B s1 d0		

* Values calculated according to ASTM standard.

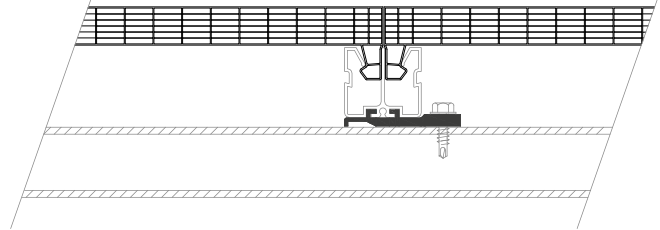
** Values calculated according to internal method.

BDL 7W 16 mm joining scheme

• Section panels joining with polycarbonate snap-on profile

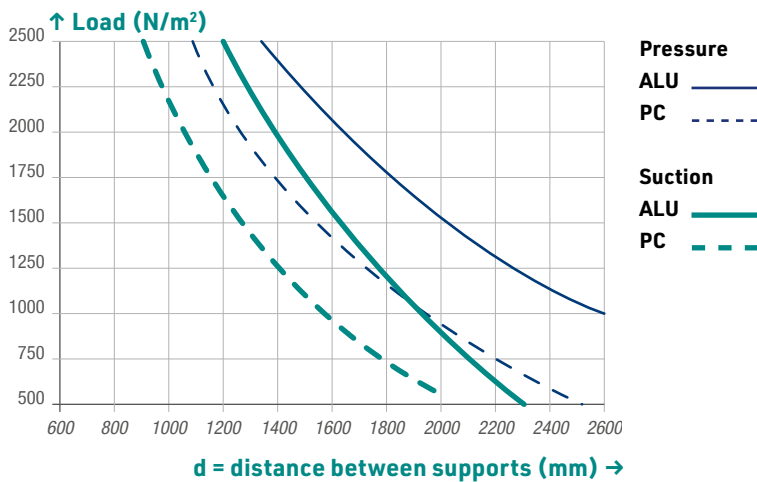


• Section panels joining with aluminium snap-on profile

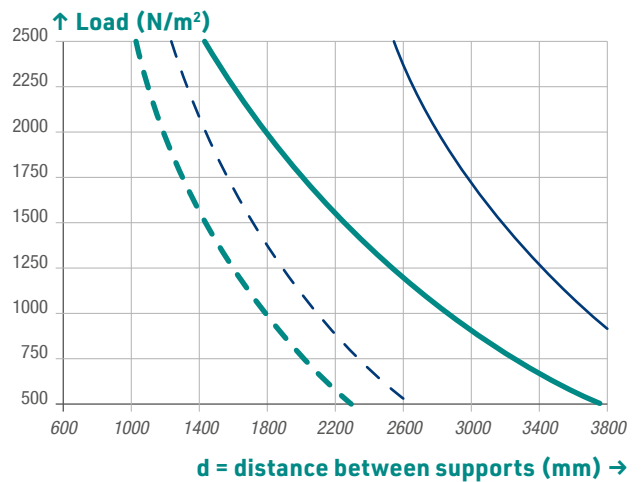


BDL 7W 16 mm load charts

• Load charts for FLAT solution



• Load charts for self-supporting CURVE solution



The load tables refer to the breakage load value of the system, i.e. the lowest value between: the collapse of the panel, failure of the frame or the panel springing out of its housing. The designer will check the actual loads acting on the system as well as the coefficients of amplification and safety to be applied in consideration of both the climatic conditions of the site, both the general and particular characteristics of the structure in which the polycarbonate is inserted. For these evaluations, refer to the specific regulations in force in each country. For detailed technical data, or for more information, refer to the Technical Manual or to the Stabilit Suisse Office.

BDL 7W 16 mm specifications

Production of translucent roof (flat, curved or curved self-supporting) with BDL 7W 16 mm system consisting of:

Multiwall polycarbonate panel, coextruded UV-protection on both sides, 7 wall structure, 16 mm thickness, thermal transmittance $1,9 W/m^2 K$, clear colour (other colours available on request), adhesive aluminium tape or thermowelded end closures; dimensions: module width 600 mm, length upon request; 10-year warranty.

Polycarbonate snap-on profile with coextruded UV protection on the exposed sides or, alternatively, anodized aluminium snap-on profile silver finish (minimum 15 microns).

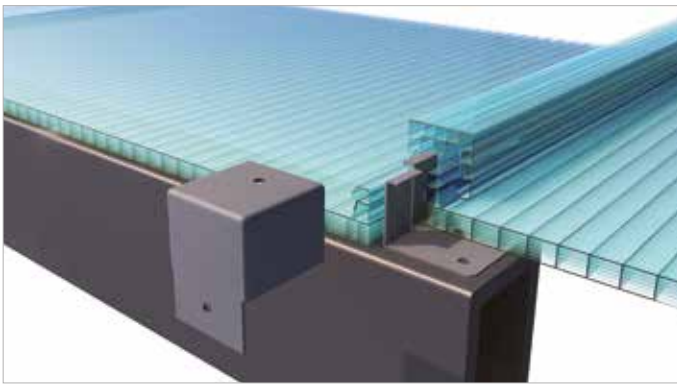
Steel hook or, alternatively, aluminium hook.

Closure caps for polycarbonate snap-on profiles (in nylon or steel).

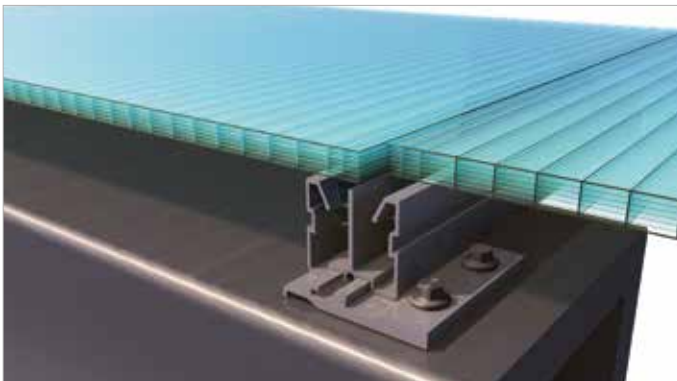
Finishing aluminum profiles*.

* raw or anodized or lacquered: contact our sales offices to find out about standards, surcharges, minimum orders, availability.

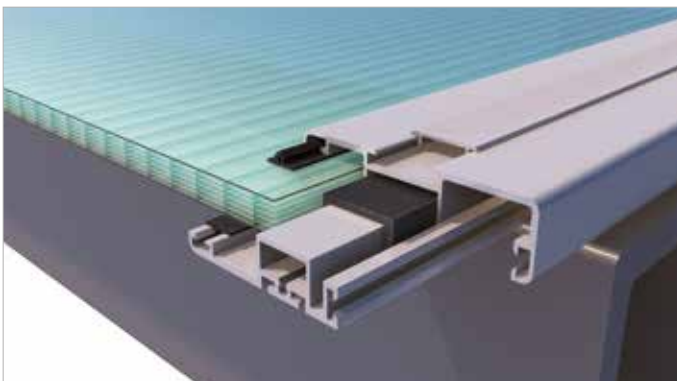
FLAT installation options for BDL 7W 16 mm



- Detail of panels fixing with steel fixing hook, polycarbonate snap-on profile and nylon end cap.



- Detail of panels fixing with aluminium snap-on profile and aluminium fixing hook.



- Detail of aluminium profile for the finishing of the starting and end point of the roof.



INDUSTRY



COMMERCIAL BUILDING



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ARCHITECTURE



HOUSING

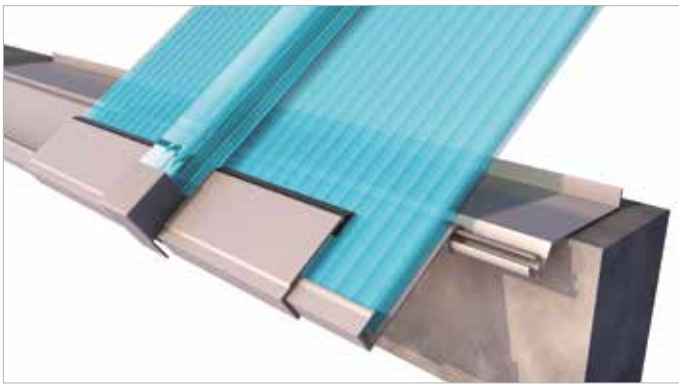
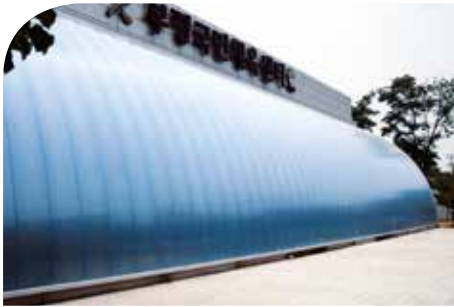


RURAL

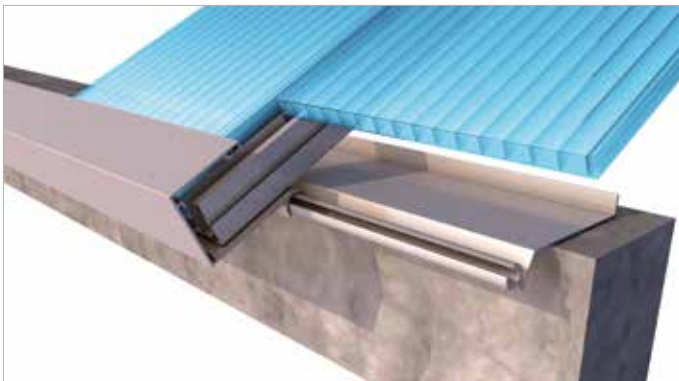


SPORTS FACILITIES

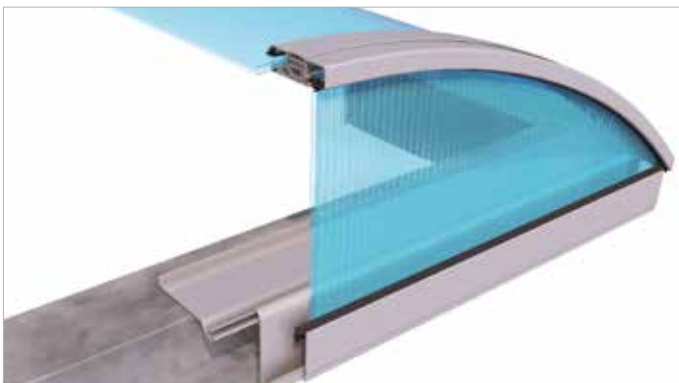
CURVED installation options for BDL 7W 16 mm



- Detail of self-supporting roof with polycarbonate snap-on profiles.



- Detail of self-supporting roof with aluminium snap-on profiles.



- Detail of the gable for self-supporting roof.

BDL 7W 16 mm accessories

ACCESSORY	CODE	TECHNICAL DESIGN / RENDERING
Polycarbonate snap-on profile	J443	
Aluminium snap-on profile	M9RA	
Stainless steel hook for J443 profile	M9U7	
Aluminium hook for M9RA profile	M9VH	

ACCESSORY - CODE

Aluminium upper profile* for gable
M9S9

ACCESSORY - CODE

Aluminium lower profile* for gable
M9T0



BDL 7W 16 mm accessories

ACCESSORY - CODE	
Aluminium cap profile* M9T1	
Aluminium reinforcement profile* M9T2	
Aluminium fixed sill profile* M9R6	
Aluminium revolving sill profile* M9R7	
16 mm aluminium panel stop* M9R5	
Aluminium revolving sill profile* M9T6	
"U" aluminium profile* for 16 mm M9I1	

ACCESSORY - CODE	
Nylon end cap M9TA	
EPDM thermal cut gasket M9T5	
PE adhesive spacer M9G8 (35x40 mm)	
EPDM gasket M926	
1 mm EPDM gasket M9S3	
3 mm EPDM gasket M9S5	
Screw MS02 4,2 x 19 mm	
Rubber seal MS04	
Massive aluminium adhesive tape height 38 mm (50 m roll) M965	
Perforated aluminium adhesive tape height 38 mm (50 m roll) M968	

* raw or anodized or lacquered: contact our sales offices to find out about standards, surcharges, minimum orders, availability.

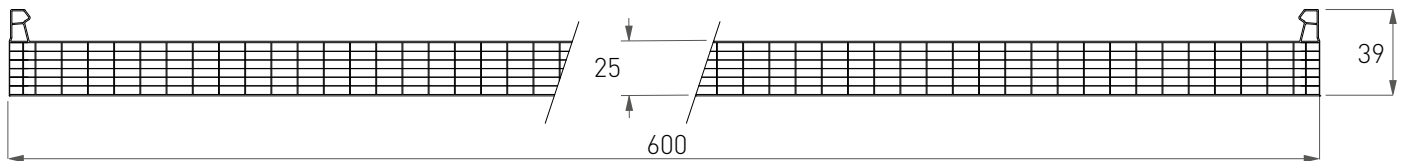
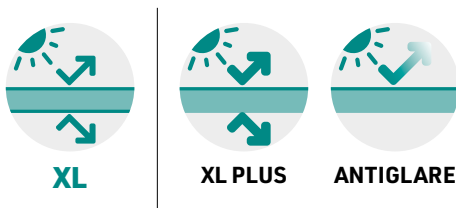
BDL 7W 25 mm

The system **BDL 7W 25 mm** is ideal for the construction of flat and curved roofs as well as translucent vertical walls. It is characterized by the ease and speed of installation thanks to the complete range of accessories supplied (polycarbonate or aluminium snap-on profiles, specific fixing hooks, EPDM closure gaskets, aluminium fixing profiles). The 600 mm width allows easy handling of the panel during the stages of installation, while the 7 walls inner structure and the 25 mm thickness guarantee good thermal insulation and load resistance. The frosted finishing allows a good diffusion of light even without the use of opal colours. The panel is coextruded on both sides, giving ultraviolet protection which ensures the durability and weather resistance of the product over time. The possibility of use for both roofs and walls make it an extremely versatile system and suitable for the most innovative design solutions.



Thickness
(mm)

25



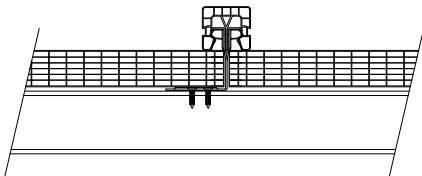
BDL 7W 25 mm technical data			
Thickness	25 mm		
Number of walls	7		
Module width	600 mm		
Length	upon request		
Minimum cold bending	5000 mm		
Thermal transmittance	1,4 W/m ² K		
Colours		LT*	G Value**
	Clear (8005)	52%	59%
	Opal (8121)	35%	48%
UV protection	Coextruded on both sides (upon request on one side)		
Warranty	10-year warranty against hail damage, yellowing, loss of light transmission		
Service temperature	-40°C / +120°C		
Thermal expansion coefficient	0,065 mm/m°C (6,5 x 10 ⁻⁵ 1/K)		
Fire certification	EUROCLASS B s1 d0		

* Values calculated according to EN410 and EN14500 standard in conformity to the indications of the norm EN16153.

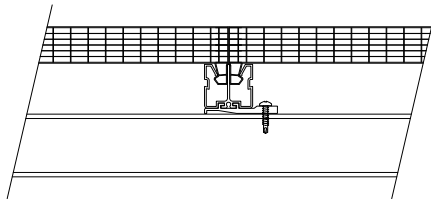
** Values calculated in conformity to the indications of the norm EN16153.

BDL 7W 25 mm joining scheme

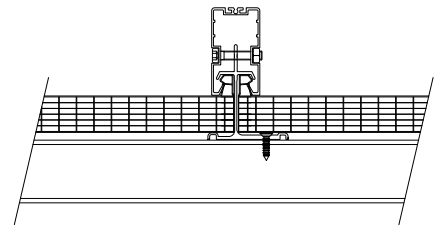
- Section panels joining with polycarbonate snap-on profile



- Section panels joining with inner aluminium snap-on profile

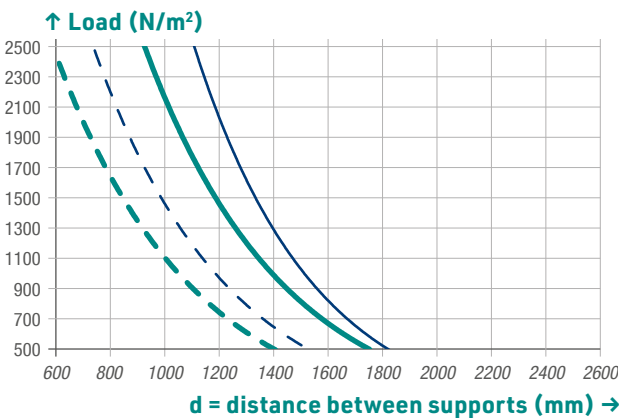


- Section panels joining with outer aluminium snap-on profile H 60 mm

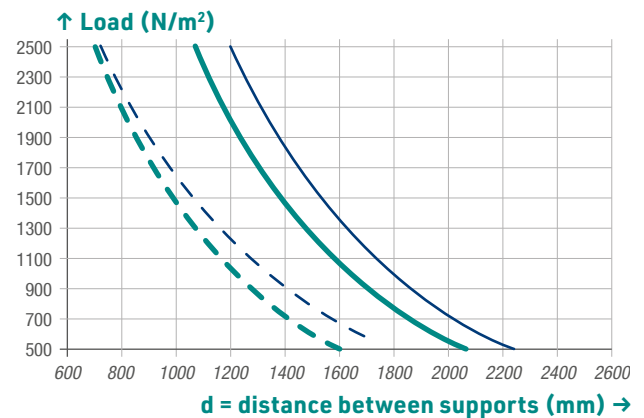


BDL 7W 25 mm load charts

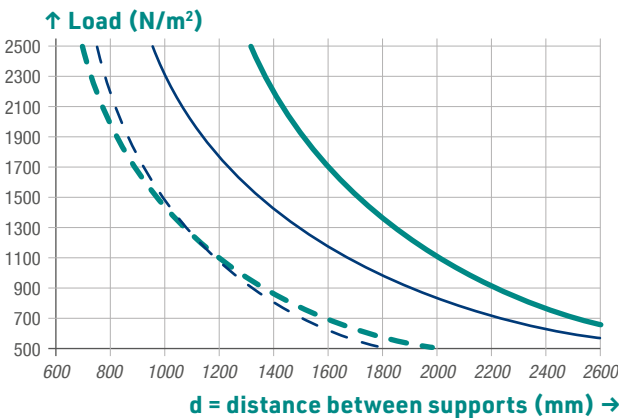
- Load chart for installation on two supports with POLYCARBONATE JOINING PROFILE



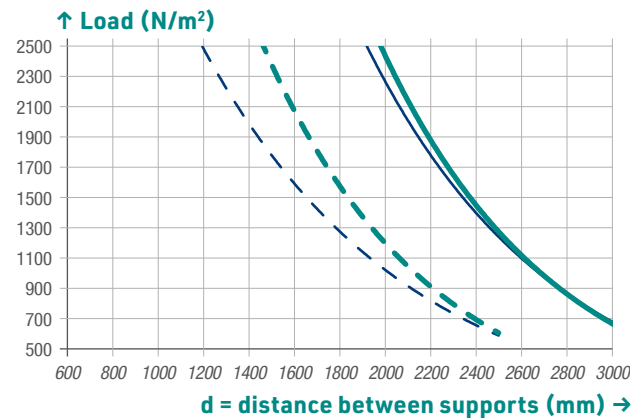
- Load chart for installation on three or more supports with POLYCARBONATE JOINING PROFILE



- Load chart for installation on two supports with ALUMINIUM JOINING PROFILE (M9RA)



- Load chart for installation three or more supports with ALUMINIUM JOINING PROFILE (M9RA)

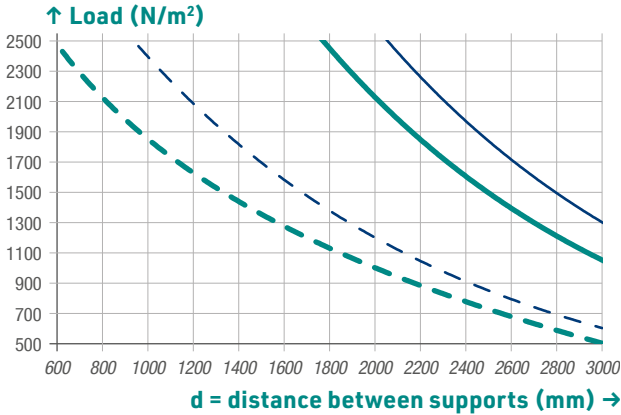


Pressure (max deflection 1/100) - - - -
Suction (max deflection 1/100) - - - -

Pressure (max deflection 1/50) ————
Suction (max deflection 1/50) ————

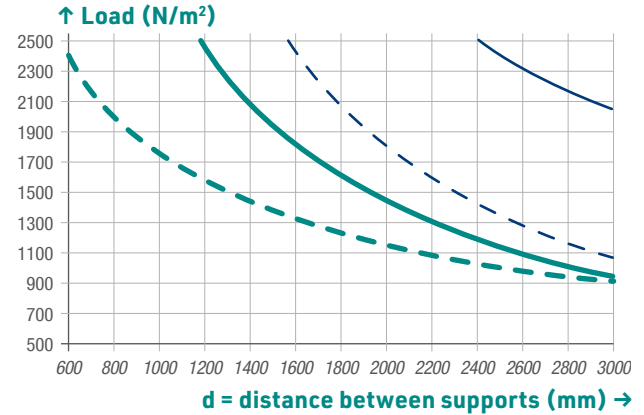
BDL 7W 25 mm load charts

• Load chart for installation on two supports with ALUMINIUM JOINING PROFILE H 60 mm (M9RB)



Pressure (max deflection 1/100) - - - - -
Suction (max deflection 1/100) - - - - -

• Load chart for installation three or more supports with ALUMINIUM JOINING PROFILE H 60 mm (M9RB)



Pressure (max deflection 1/50) ————
Suction (max deflection 1/50) ————

BDL 7W 25 mm specifications

Production of translucent roof (flat, curved or curved self-supporting) with BDL 7W 25 mm system consisting of:

Multiwall polycarbonate panel, coextruded UV-protection on both sides, 7 wall structure, 25 mm thickness, certified thermal transmittance 1,4 W/m² K, clear colour (other colours available on request), adhesive aluminium tape or thermowelded end closures; dimensions: module width 600 mm, length upon request; 10-year warranty.

Polycarbonate snap-on profile with coextruded UV protection on the exposed sides or, alternatively, anodized aluminium snap-on profiles silver finish (minimum 15 microns).

Steel hook or, alternatively, aluminium hooks.

Closure caps for polycarbonate snap-on profiles (in nylon or steel).

Perimeter aluminium profiles*.

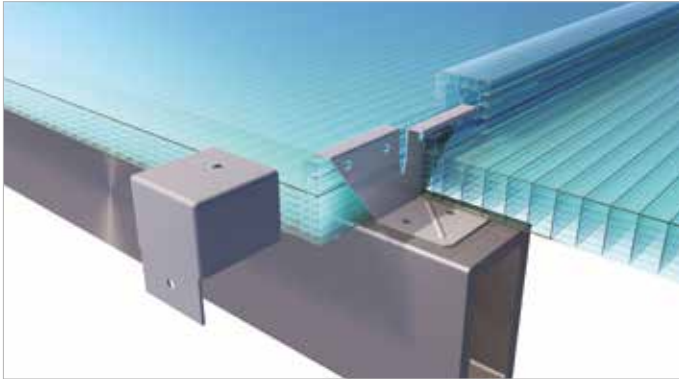
Closure "F" aluminium profile*.

* raw or anodized or lacquered: contact our sales offices to find out about standards, surcharges, minimum orders, availability.

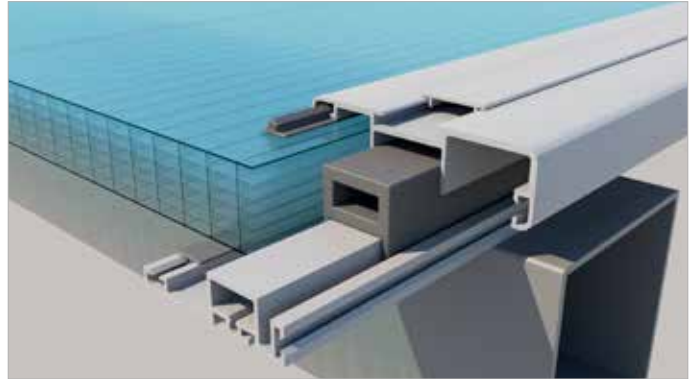
The designer will check the actual loads acting on the system as well as the coefficients of amplification and safety to be applied in consideration of both the climatic conditions of the site, both the general and particular characteristics of the structure in which the polycarbonate is inserted. For these evaluations, refer to the specific regulations in force in each country. For detailed technical data, or for more information, refer to the Technical Manual or to the Stabilit Suisse Office.



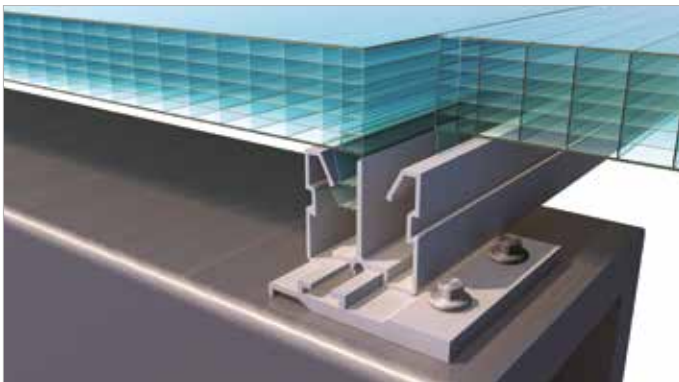
ROOFING installation options for BDL 7W 25 mm



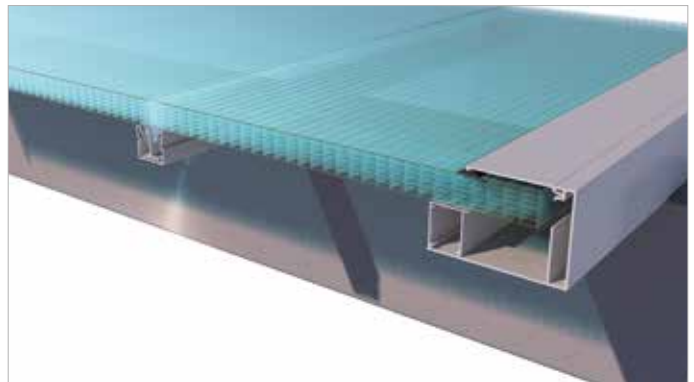
- Detail of panels fixing with steel fixing hook, polycarbonate snap-on profile and nylon end cap.



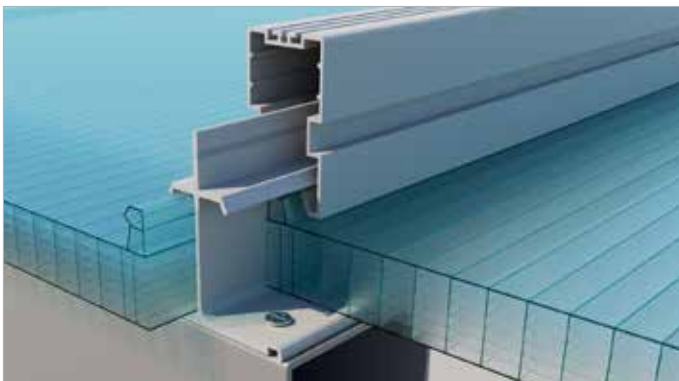
- Detail of aluminium profile for the finishing of the starting and end point of the roof.



- Detail of panels fixing with aluminium snap-on profile and aluminium fixing hook.



- Detail of side finishing of the roofing.

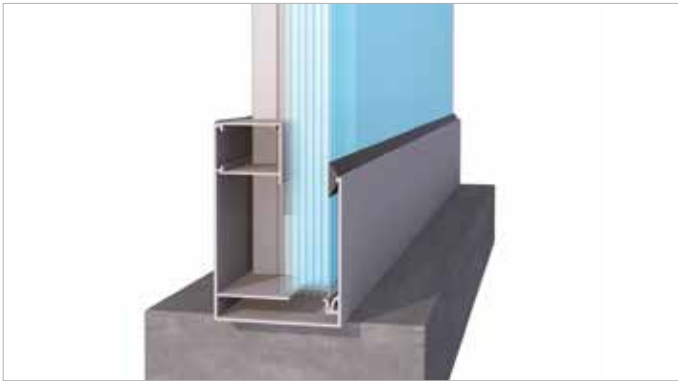


- Detail of panels fixing with aluminium snap-on profile H 60 mm and aluminium fixing hook.

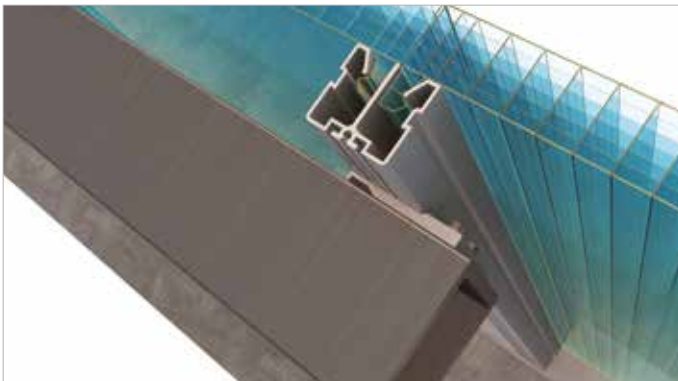
WALL installation options for BDL 7W 25 mm



- Detail of the upper profile for wall solution.



- Detail of the lower profile for wall solution.



- Detail of the middle fixing hook for wall solution.



INDUSTRY

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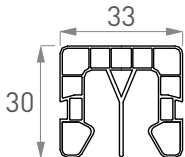

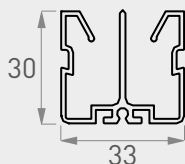

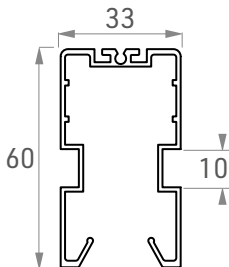
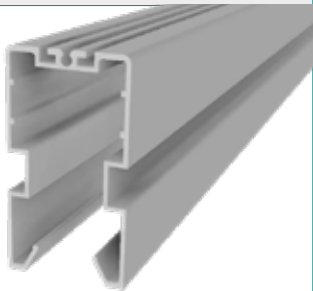
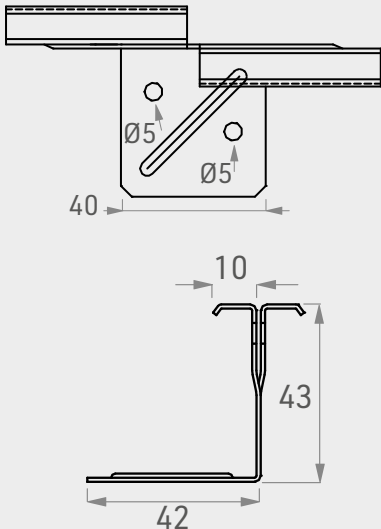
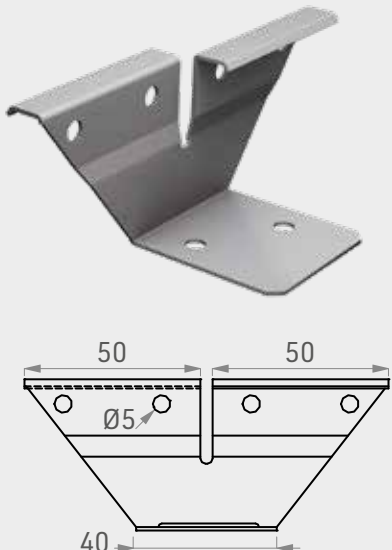
ARCHITECTURE

HOUSING

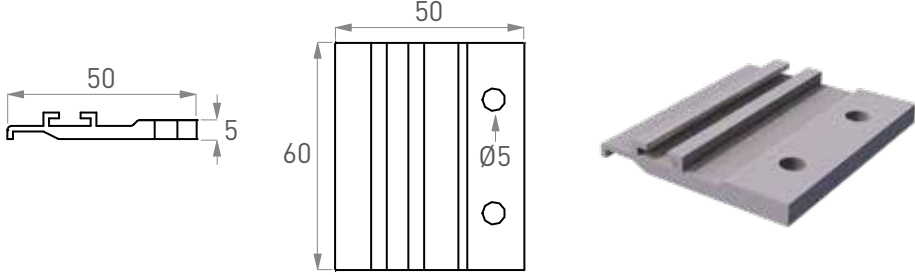
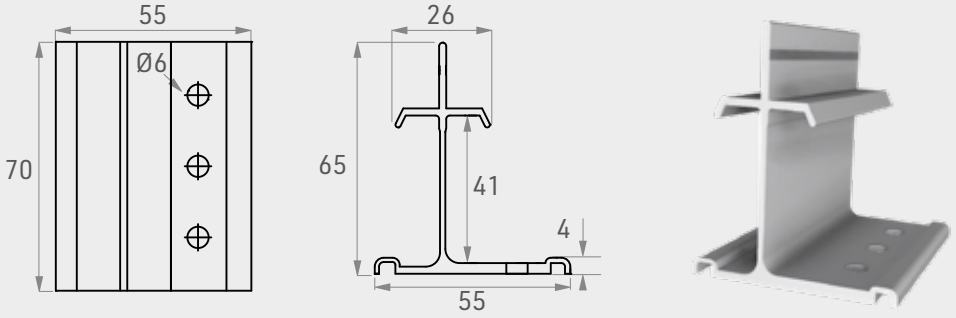
RURAL

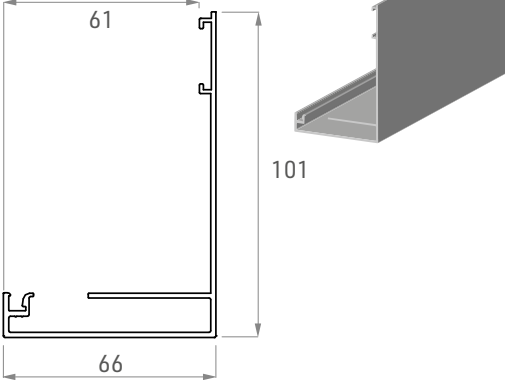
SPORTS FACILITIES

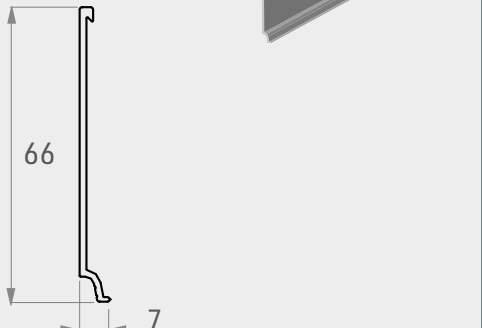
BDL 7W 25 mm accessories

ACCESSORY - CODE	TECHNICAL DESIGN / RENDERING
<p>Polycarbonate snap-on profile J443</p>	 
<p>Aluminium snap-on profile M9RA</p>	 
<p>Aluminium joining profile H 60 mm M9RB</p>	 
<p>Stainless steel hook for J443 profile M9X3</p>	 

BDL 7W 25 mm accessories

ACCESSORY - CODE	TECHNICAL DESIGN / RENDERING
<p>Aluminium hook for M9RA profile M9VH</p>	
<p>Aluminium hook for M9RB profile M9S0</p>	

ACCESSORY - CODE
<p>End aluminium profile* M9VE</p> 

ACCESSORY - CODE
<p>Panel stop aluminium profile* M9VF</p> 

* raw or anodized or lacquered: contact our sales offices to find out about standards, surcharges, minimum orders, availability.



BDL 7W 25 mm accessories

ACCESSORY - CODE	
Spacer aluminium profile* M9VG	
Aluminium U profile* for 25 mm M9RC	
Aluminium upper profile* for gable M9S9	
Aluminium lower profile* for gable M9T0	
Aluminium cap profile* M9T1	
Aluminium reinforcement profile* M9T2	
Nylon end cap M9TA	

ACCESSORY - CODE	
PE adhesive spacer M993 (40x45 mm) M9G9 (30x40 mm)	
EPDM gasket M998	
EPDM gasket 1 mm thick M9S3	
EPDM thermal-break seal M9T9	
Screw MS03 4,2 x 32 mm	
Rubber seal MS04	
Bolt MS05	
Massive aluminium adhesive tape height 50 mm (50 m roll) M957	
Perforated aluminium adhesive tape height 50 mm (50 m roll) M969	

* raw or anodized or lacquered: contact our sales offices to find out about standards, surcharges, minimum orders, availability.



Ondatec

2.5

6

Ondatec panels are recommended for applications which require natural daylighting where the panels will be installed to match metal or fibre cement profiles. The product is supplied with thermowelded ends to reduce the condensation and the accumulation of dirt on the inside of the structure. It overlaps laterally and longitudinally, thus creating the possibility to realize lengths covering the whole slope. The range of optional accessories which completes the **Ondatec** makes its use very easy and versatile.

Benefits

- **Lightweight**
- **High thermal insulation**
- **Excellent impact resistance**
- **Good light transmission**
- **Good fire performance**
- **Certified quality guarantee**
- **UV protection**



LL



PLUS

WARRANTY
G10
10 YEARS

Main advantages of Ondatec system



Impact resistance

Polycarbonate's mechanical properties make this the technopolymer with the highest impact resistance, allowing it to provide optimum protection against accidental damage and weather-related damage. These qualities mean polycarbonate significantly outperforms other materials (glass, acrylic, PET, etc.) commonly used in applications where transparency is a key requirement. Impact resistance remains constant across a particularly wide temperature range.



Thermal expansion

Thermal expansion is a characteristic property of materials that consists in their tendency to change in size as temperature increases and decreases. This expansion is quantified via a coefficient that, in the case of polycarbonate, equates to $6,5 \times 10^{-5} 1/K$ (0.065 mm/m°C). The fact that this coefficient value is much higher than the values associated with materials usually used for roofing and joinery (aluminium, steel, etc.) generates the need for solutions that compensate for this difference in thermal expansion, which thus needs to be factored in at the design stage and in all building applications.



Light transmission

Proper lighting design entails ensuring that the building interior receives the required amount of light. So it is clearly important to use sheets that let enough light through. The **Ondatec** product range gives you plenty of choice at the design stage of your project, with an array of colour options to meet your every need.



Warranty

Sheets with UV protection offer a 10-year warranty against yellowing, loss of light transmission and hail damage. Our sales department will be happy to provide you the exact warranty terms.



Fire behaviour

Fire safety is a fundamental necessity. **Ondatec** panels are tested in independent qualified laboratories on the basis of current applicable regulations in the construction industry. Our offices are at your disposal to provide you with details regarding the available certificates.



Thermal transmittance

Thermal transmittance, or U-value, is the mean flow of heat per m² that passes through a structure (the polycarbonate panel) separating two environments with different temperatures (usually separating a heated or air-conditioned room from outdoors). The lower this value, the more effective the insulation offered by the panel. With a view to reducing heating/air-conditioning costs - with a consequent reduction in harmful emissions into the atmosphere - international standards require both building materials and fenestration systems to meet ever-stricter thermal transmittance requirements. With its extensive range of multiwall panels, **Stabilit Suisse** is at the cutting edge when it comes to providing its customers with the most appropriate solutions in compliance with current standards.



UV protection

Our co-extruded UV-protected layer blocks damaging UV rays that would lead to rapid degradation that causes yellowing and undermines the strength of the exposed surface. UV protection is applied using co-extrusion technology, whereby an even shielding layer can be produced to screen the polycarbonate from the UV component of the solar radiation. With this technology, the UV protection is made resistant to weathering and is not prone to damage by incorrect maintenance.

Ondatec 76/18/2.5 mm

Ondatec 177/51/6 mm is a Multiwall panel of 2.5 mm thick which enables an easier longitudinal and transversal overlapping. Full-light roofing, even combined with other products of identical shapes, can be realized. This product can be supplied with heat-sealed ends. The simplicity of use and the easy handling of the product make the **Ondatec** sheets ideal for the DIY world. **Ondatec 177/51/6 mm** has a coextruded layer of UV protection.



LL



PLUS



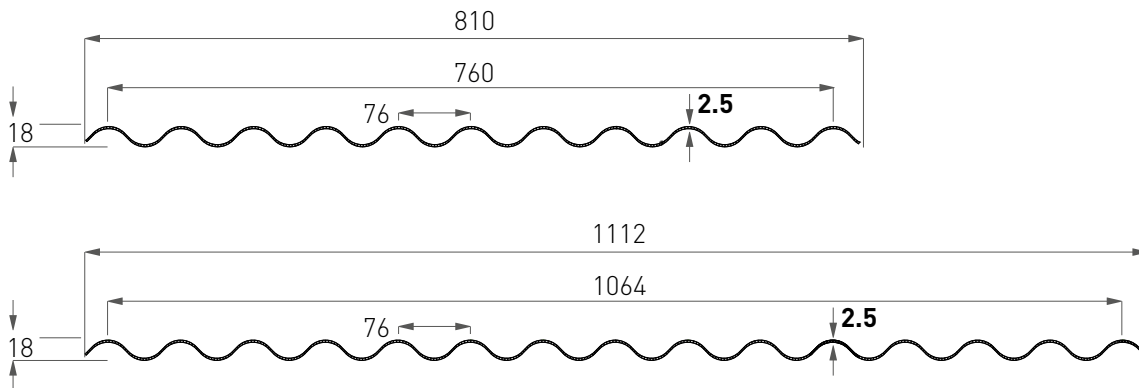
Thickness
(mm)

2.5

Ondatec 76/18/2.5 mm technical data			
Thickness	2.5 mm		
Number of walls	2		
Wave pitch	76 mm		
Height	18 mm		
Width	11 waves: 810 mm (useable width 760 mm) 15 waves: 1112 mm (useable width 1064 mm)		
Length	upon request (maximum recommended length 6 m)		
Thermal transmittance	4,5 W/m ² K		
Colours		LT*	G Value
	Clear (8005)	79%	-
	Opal (8121)	70%	-
UV protection	Coextruded on the external side		
Warranty	10-year warranty against hail damage, yellowing, loss of light transmission		
Service temperature	-40°C / +120°C		
Thermal expansion coefficient	0,065 mm/m°C (6,5 x 10 ⁻⁵ 1/K)		
Fire certification	EUROCLASS B s1 d0		

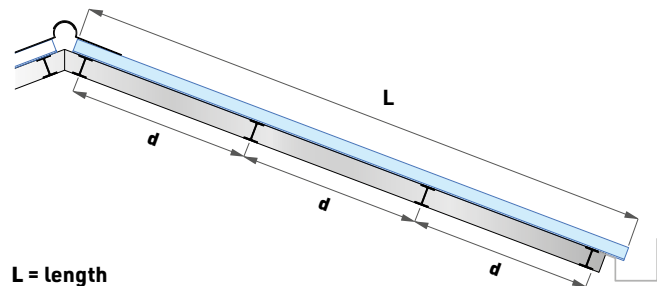
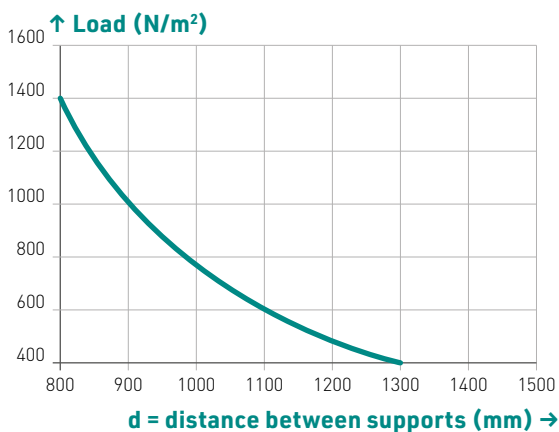
* Values calculated according to ASTM standard.

Ondatec 76/18/2.5 mm



Ondatec 76/18/2.5 mm load charts

• Load chart with 3 or more supports for FLAT solution



L = length
d = distance between supports

Uniform distributed load **on 3 or more supports**

The load tables refer to the breakage load value of the system. The designer will check the actual loads acting on the system as well as the coefficients of amplification and safety to be applied in consideration of both the climatic conditions of the site, both the general and particular characteristics of the structure in which the polycarbonate is inserted. For these evaluations, refer to the specific regulations in force in each country. For detailed technical data, or for more information, refer to the Technical Manual or to the Stabilit Suisse Office.

Ondatec 76/18/2.5 mm specifications

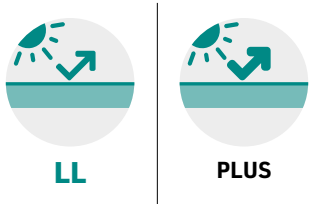
Construction of a flat translucent roof and / or skylight consisting of:

Ondatec 76/18/2.5 mm corrugated multiwall panel, external co-extruded UV protection, 2 walls structure, 2.5 mm thickness, wave height 18 mm, thermal transmittance 4,5 W/m² K, clear or opal colours, thermowelded ends; dimensions: panel width 1112 mm or 810 mm (usable width 1064 mm or 760 mm), length upon request, 10-year warranty.

Spacer in PE foam to be positioned between Ondatec panel and support.

Ondatec 177/51/6 mm

Ondatec 177/51/6 mm is a corrugated multiwall panel designed to be used for roofs and vertical walls in industrial buildings. Ondatec panels perfectly match the fibre cement roof panels: this enables the creation of both ridge-to-gutter skylights and spot lights in the middle of pitched roofs, as well as continuous roofs thanks to the perfect possibility of longitudinal and transversal overlapping. The panel can be supplied with a UV-resistant coextruded transparent gasket, able to increase the air and water tightness performance. Ondatec **Ondatec 177/51/6 mm** can be personalized with optional work processing for special uses (i.e. cutting of side corners).

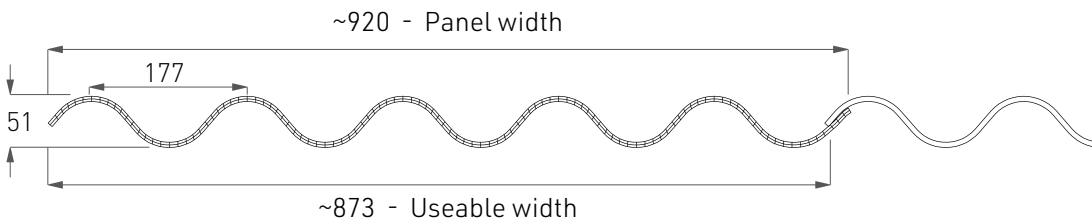


Thickness
(mm)

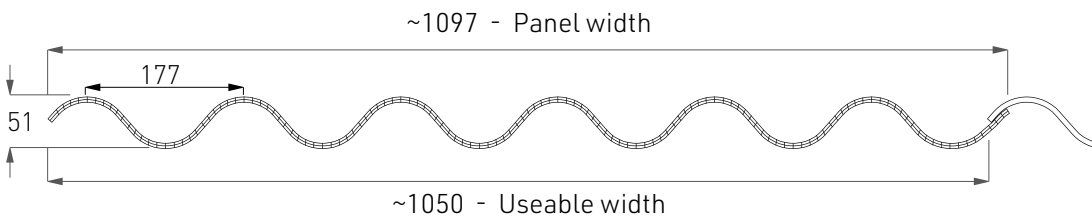
6

Ondatec 177/51/6 mm technical data			
Thickness	6 mm		
Number of walls	3		
Wave pitch	177 mm		
Height	51 mm		
Width	5½ waves: 920 mm (useable width 873 mm) 6½ waves: 1097 mm (useable width 1050 mm) 7 waves: 1180 mm (useable width 1062 mm)		
Length	upon request (maximum recommended length 6 m)		
Thermal transmittance	3,3 W/m² K		
Colours		LT*	G Value**
	Clear (8005)	72%	65%
	Opal (8121)	60%	46%
UV protection	Coextruded on the external side		
Warranty	10-year warranty against hail damage, yellowing, loss of light transmission		
Service temperature	-40°C / +120°C		
Thermal expansion coefficient	0,065 mm/m°C (6,5 x 10 ⁻⁵ 1/K)		
Fire certification	EUROCLASS B s1 d0		
*Values calculated according to ASTM standard.		* Values calculated according to internal method.	

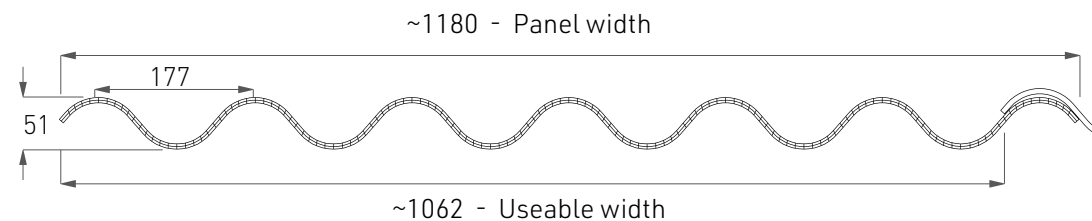
Ondatec 177/51/6 mm - 5½ waves



Ondatec 177/51/6 mm - 6½ waves



Ondatec 177/51/6 mm - 7 waves



Ondatec 177/51/6 mm specifications

Construction of a flat translucent roof and / or skylight consisting of:

Ondatec 177/51/6 mm corrugated multiwall panel, co-extruded UV protection on the external side, 3 walls structure, 6 mm thickness, wave height 51 mm, thermal transmittance 3,3 W/m² K, clear or opal colours, thermowelded ends; dimensions: panel width 920 mm, 1097 mm or 1180 mm (useable width 873 mm, 1050 mm or 1062 mm), length upon request; 10-year warranty.

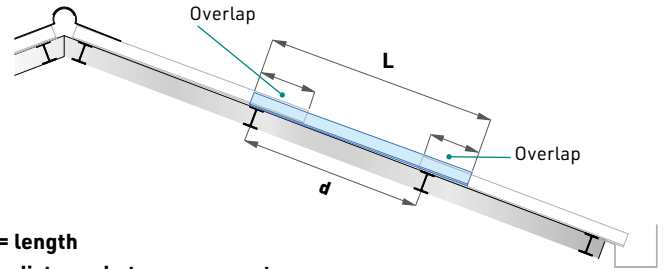
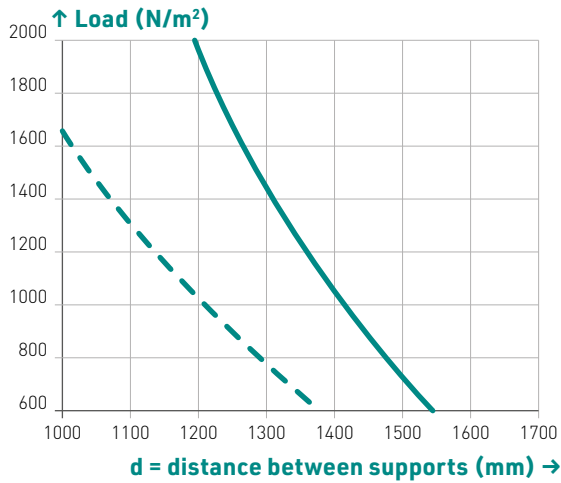
The panel can be supplied with UV-resistant coextruded transparent gasket, to increase the performance of air and water tightness.

Spacer in PE foam to be positioned between Ondatec panel and support.

Metal half-ridge cover (upon request).

Ondatec 177/51/6 mm load charts

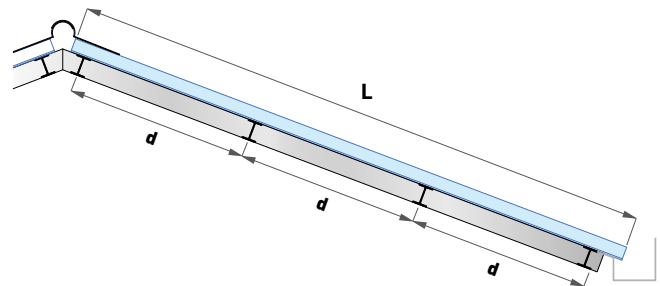
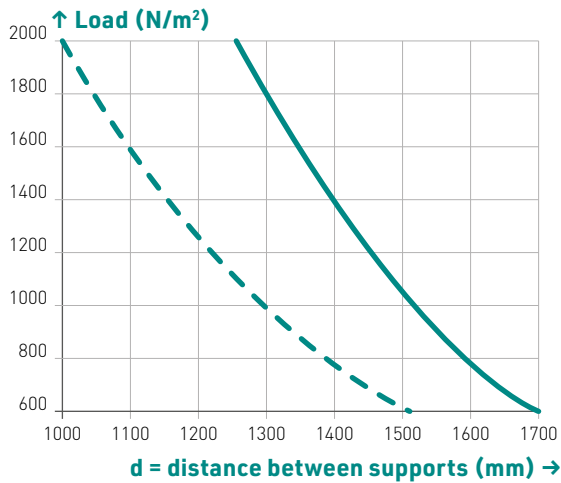
• Load chart for FLAT option - 2 supports



L = length
d = distance between supports

Deflection limit D/50 - - - -
Deflection limit 50 mm ————

• Load chart with 3 or more supports for FLAT solution

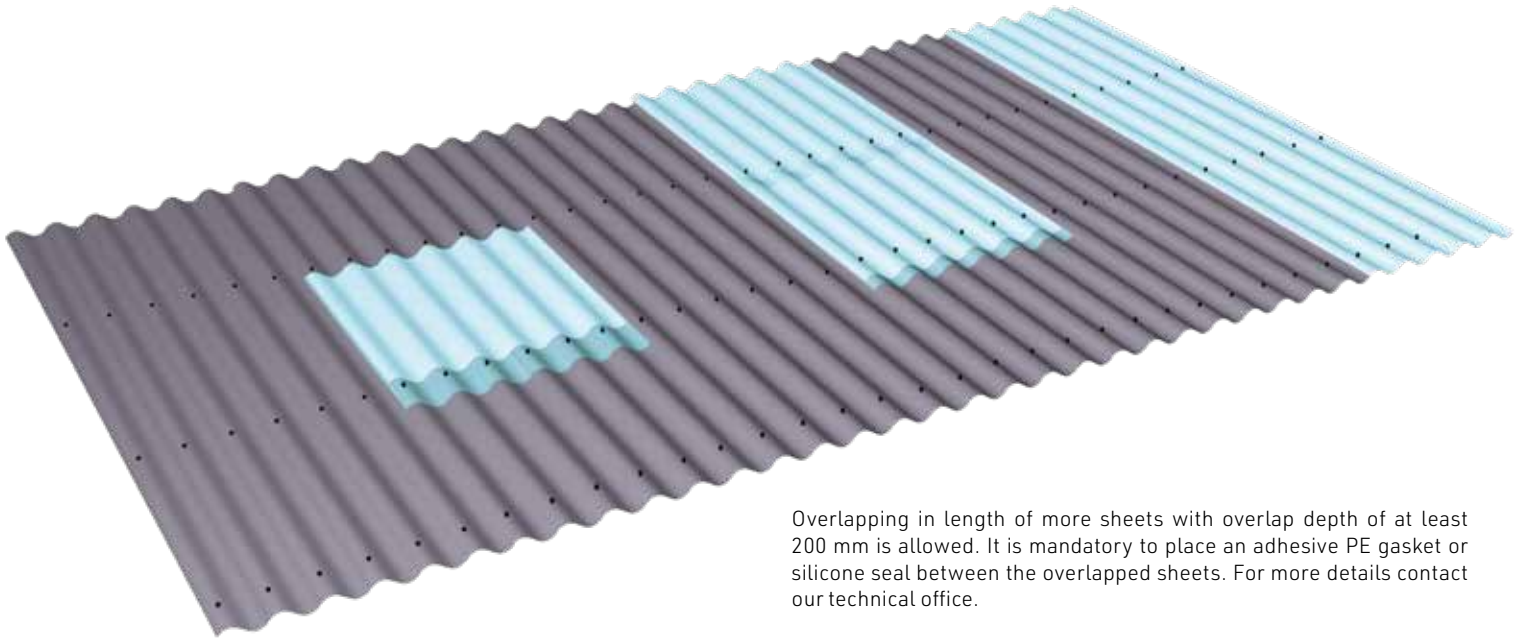


L = length
d = distance between supports

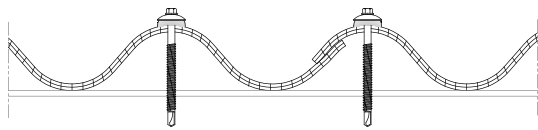
Deflection limit D/50 - - - -
Deflection limit 50 mm ————

The designer will check the actual loads acting on the system as well as the coefficients of amplification and safety to be applied in consideration of both the climatic conditions of the site, both the general and particular characteristics of the structure in which the polycarbonate is inserted. For these evaluations, refer to the specific regulations in force in each country. For detailed technical data, or for more information, refer to the Technical Manual or to the Stabilit Suisse Office.

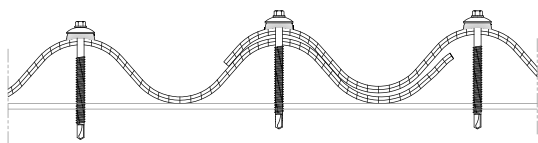
FLAT covering installation solution - Ondatec 177/51/6 mm



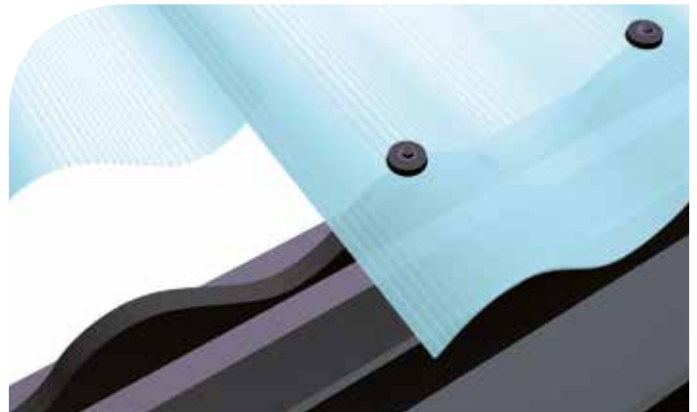
Overlapping in length of more sheets with overlap depth of at least 200 mm is allowed. It is mandatory to place an adhesive PE gasket or silicone seal between the overlapped sheets. For more details contact our technical office.



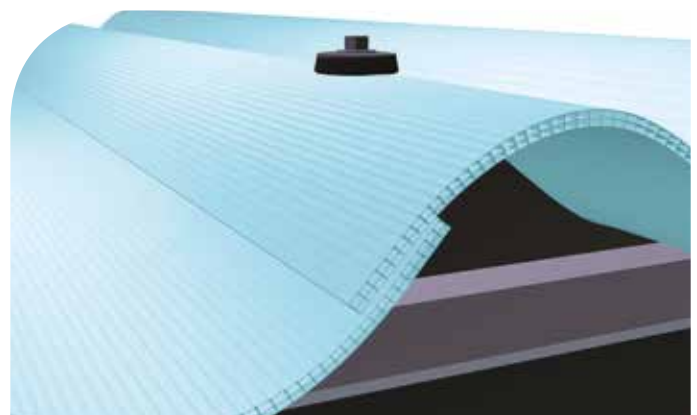
• Standard overlap



• Overlap for areas exposed to high winds



• Detail with PE spacer



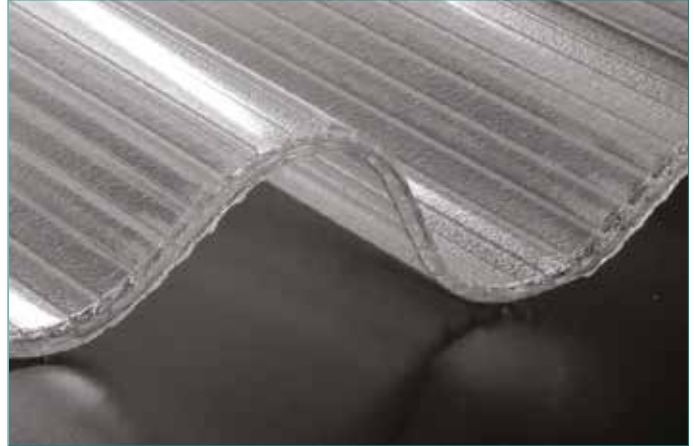
• Detail for fixing and overlapping

Ondatec 177/51 finishings

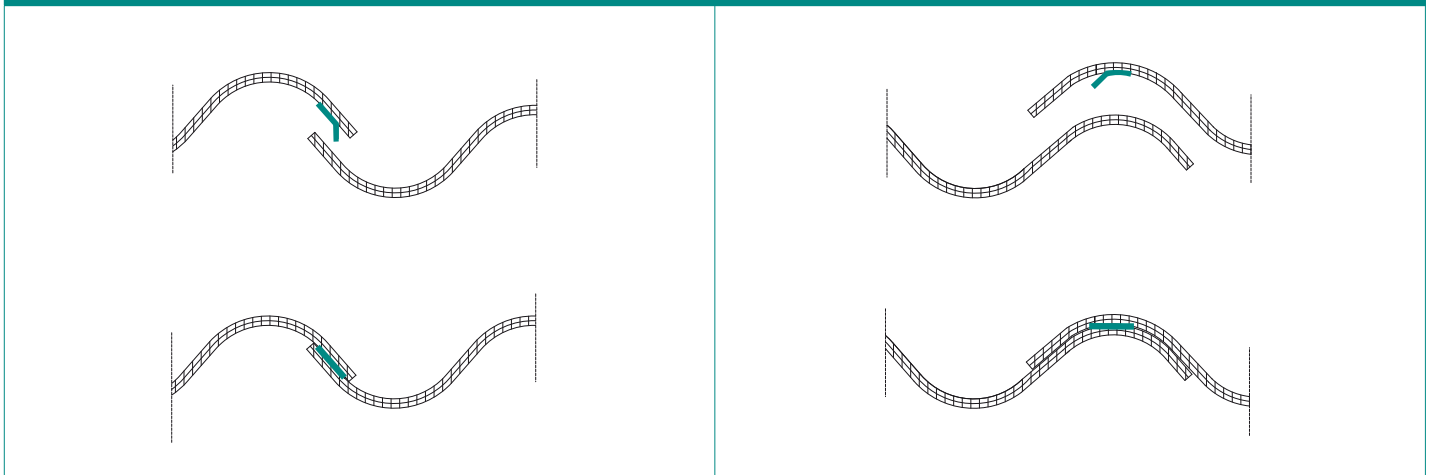
CORNER CUTTING




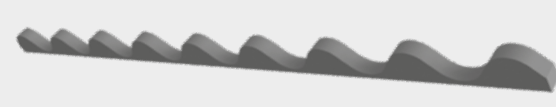
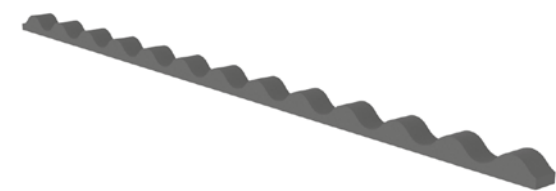
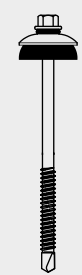
THERMOWELDING



INTEGRATED GASKET

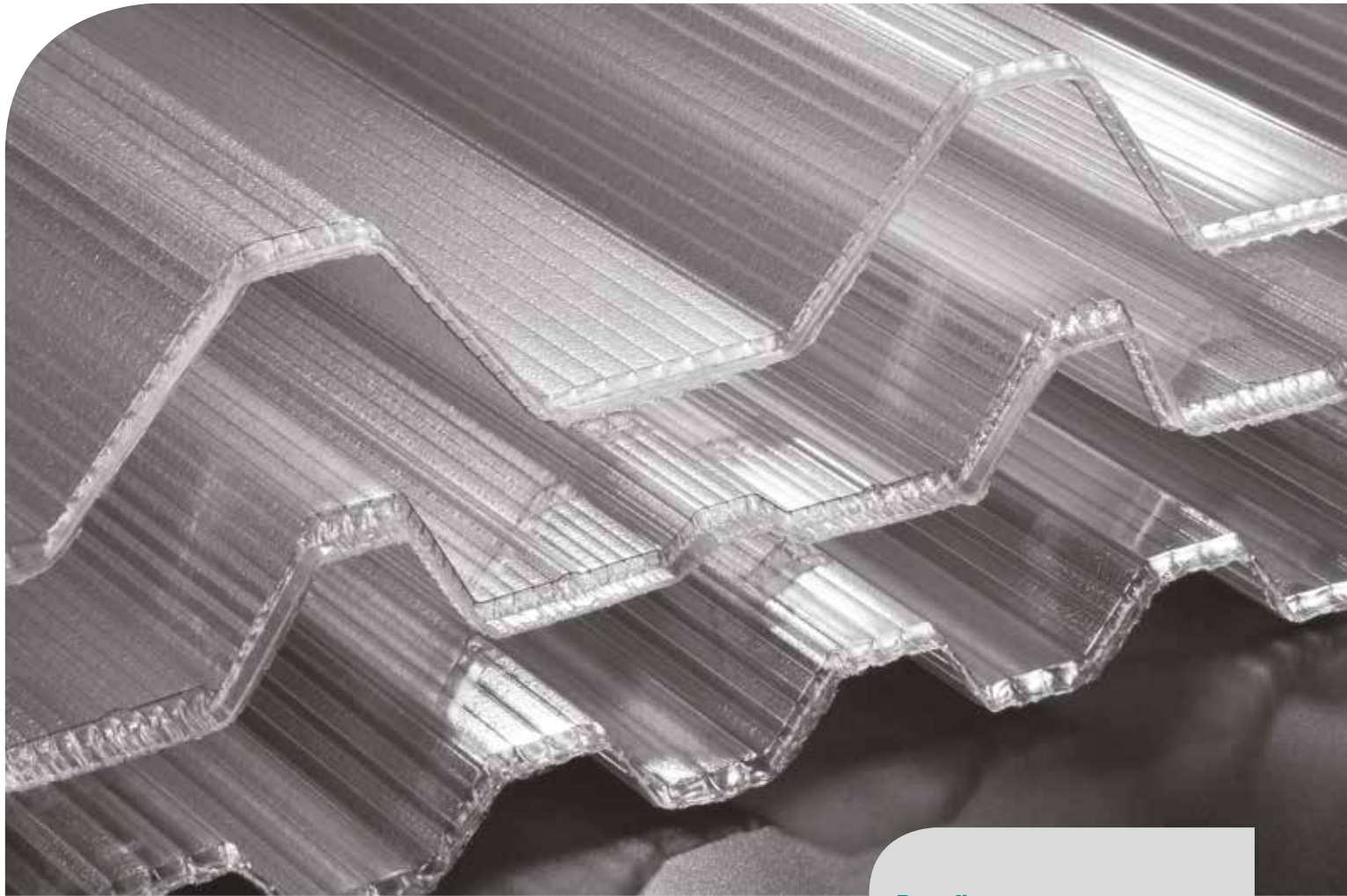


Ondatec accessories

ACCESSORY	CODE	TECHNICAL DESIGN / RENDERING
Metal half-ridge cover for Ondatec 177/51/6 mm, length 1130 mm (upon request)	M9A3	
PE spacer for Ondatec 177/51/6 mm length 2000 mm	M9N7	
PE spacer for Ondatec 76/18/2.5 mm length 988 mm	M9N5	
Fixing screw with EPDM gasket	M9N0 - 6.3 x 45 mm	
	M9N1 - 6.3 x 60 mm	
	M9N3 - 6.3 x 100 mm	

Contact our sales offices to find out about standards, surcharges, minimum orders, availability.





GrecaTec®

2.5

6

10

12

16

25

GrecaTec® panels are recommended for applications in combination with sandwich panels of the major manufacturers, where it is necessary to create daylighting. They are especially suitable in replacement or refurbishment of ridge/gutter roofing applications for the production of large surfaces. Most of the GrecaTec® panels are available in flat version in different thicknesses. The product is supplied with thermowelded ends to reduce the condensation and the accumulation of dirt on the inside of the structure. It overlaps laterally and longitudinally, thus creating the possibility to realize lengths covering the whole slope. The range of optional accessories which completes GrecaTec® installation making its use very easy and versatile.



LL



PLUS

Benefits

- Lightweight
- High thermal insulation
- Excellent impact resistance
- Good light transmission
- Good fire performance
- Certified quality warranty
- UV protection

WARRANTY
G10
10 YEARS

Main advantages of Grecatec® system



Impact resistance

Polycarbonate's mechanical properties make this the technopolymer with the highest impact resistance, allowing it to provide optimum protection against accidental damage and weather-related damage. These qualities mean polycarbonate significantly outperforms other materials (glass, acrylic, PET, etc.) commonly used in applications where transparency is a key requirement. Impact resistance remains constant across a particularly wide temperature range.



Thermal expansion

Thermal expansion is a characteristic property of materials that consists in their tendency to change in size as temperature increases and decreases. This expansion is quantified via a coefficient that, in the case of polycarbonate, equates to $6,5 \times 10^{-5} \text{ 1/K}$ (0.065 mm/m°C). The fact that this coefficient value is much higher than the values associated with materials usually used for roofing and joinery (aluminium, steel, etc.) generates the need for solutions that compensate for this difference in thermal expansion, which thus needs to be factored in at the design stage and in all building applications.



Light transmission

Proper lighting design entails ensuring that the building interior receives the required amount of light. So it is clearly important to use sheets that let enough light through. The Grecatec® product range gives you plenty of choice at the design stage of your project, with an array of colour options to meet your every need.



Warranty

Sheets with UV protection offer a 10-year warranty against yellowing, loss of light transmission and hail damage. Our sales department will be happy to provide you the exact warranty terms.



Fire behaviour

Fire safety is a fundamental necessity. Grecatec® panels are tested in independent qualified laboratories on the basis of current applicable regulations in the construction industry. Our offices are at your disposal to provide you with details regarding the available certificates.



Thermal transmittance

Thermal transmittance, or U-value, is the mean flow of heat per m² that passes through a structure (the polycarbonate panel) separating two environments with different temperatures (usually separating a heated or air-conditioned room from outdoors). The lower this value, the more effective the insulation offered by the panel. With a view to reducing heating/air-conditioning costs - with a consequent reduction in harmful emissions into the atmosphere - international standards require both building materials and fenestration systems to meet ever-stricter thermal transmittance requirements. With its extensive range of multiwall panels, Stabilit Suisse is at the cutting edge when it comes to providing its customers with the most appropriate solutions in compliance with current standards.

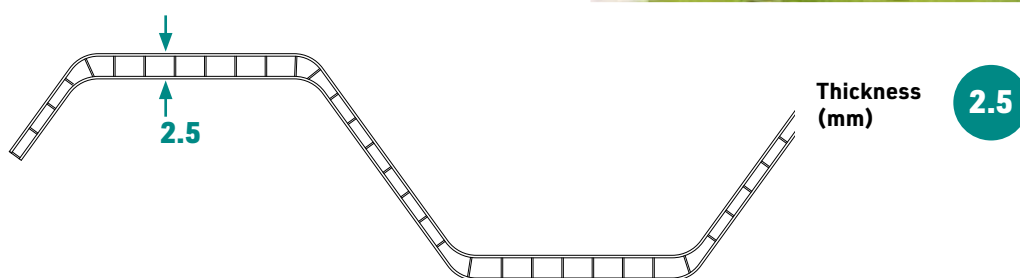


UV protection

Our co-extruded UV-protected layer blocks damaging UV rays that would lead to rapid degradation that causes yellowing and undermines the strength of the exposed surface. UV protection is applied using co-extrusion technology, whereby an even shielding layer can be produced to screen the polycarbonate from the UV component of the solar radiation. With this technology, the UV protection is made resistant to weathering and is not prone to damage by incorrect maintenance.

Greccatec® 2.5 mm

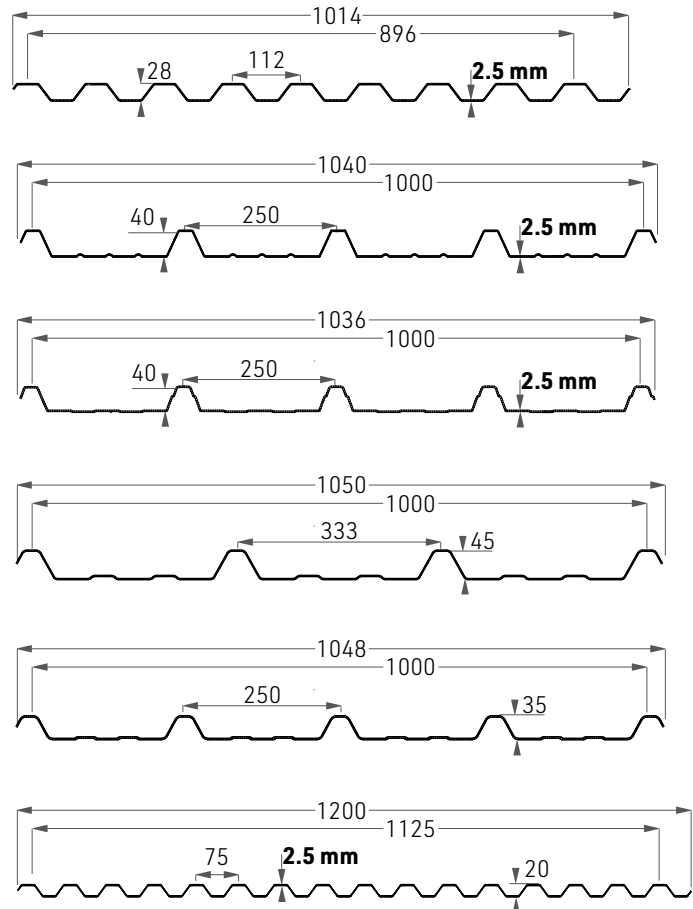
Greccatec® 2.5 mm is available in different shapes with micro-Multiwall structure of 2.5 mm thick. Full-light roofing, even combined with other products of identical shapes, can be realized. This product can be supplied with heat-sealed ends. Greccatec® 2.5 mm is UV protected in coextrusion.



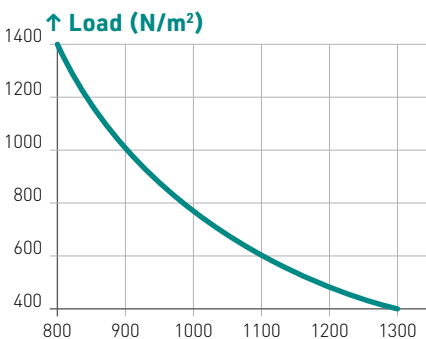
Greccatec® 2.5 mm technical data			
Thickness	2.5 mm		
Number of walls	2		
Trapez pitch	depending on the shape		
Height	depending on the shape		
Width	Compatible with ALUBEL 28 : 1014 mm (usable width 896 mm) Compatible with ISOLPACK DELTA 5A : 1040 mm (usable width 1000 mm) Compatible with ITALPANNELLI PENTA : 1036 mm (usable width 1000 mm) Compatible with NERVESCO 3.45.1000 TS : 1050 mm (usable width 1000 mm) Compatible with ISOMETALL 33.250.1000 : 1048 mm (usable width 1000 mm) Compatible with GRECOR 20/52 : 1200 mm (usable width 1125 mm)		
Length	upon request (maximum recommended length 6 m)		
Thermal transmittance	4,5 W/m ² K		
Colours		LT*	G Value
	Clear (8005)	79%	-
	Opal (8121)	70%	-
UV protection	Coextruded on the external side		
Warranty	10-years warranty against hail damage, yellowing, loss of light transmission		
Service temperature	-40°C / +120°C		
Thermal expansion coefficient	0,065 mm/m°C (6,5 x 10 ⁻⁵ 1/K)		
Fire certification	EUROCLASS B s1 d0		
* Values calculated according to ASTM standard.			

Grecatec® 2.5 mm

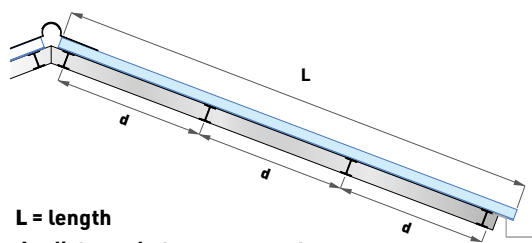
- **Grecatec® 112/28/2.5 mm**
compatible with Alubel 28
- **Grecatec® 250/40/2.5 mm**
compatible with Isolpack Delta 5A
- **Grecatec® 250/40/2.5 mm**
compatible with Italpanelli PENTA
- **Grecatec® 333/45**
compatible with Nervesco 3.45.1000 TS
- **Grecatec® 250/35/2.5 mm**
compatible with Isometall 33.250.1000
- **Grecatec® 75/20/2.5 mm**
compatible with Grecor 20/52



Grecatec® 2.5 mm load charts - Load charts with 3 or more supports for FLAT solution



d = distance between supports (mm) →



L = length
d = distance between supports
Deflection limit d/50

The designer will check the actual loads acting on the system as well as the coefficients of amplification and safety to be applied in consideration of both the climatic conditions of the site, both the general and particular characteristics of the structure in which the polycarbonate is inserted. For these evaluations, refer to the specific regulations in force in each country. For detailed technical data, or for more information, refer to the Technical Manual or to the Stabilit Suisse Office.

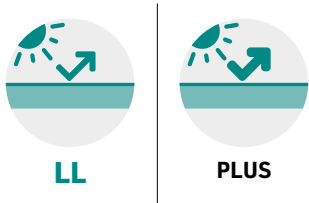
Grecatec® 2.5 mm specifications

Construction of a flat translucent roof and / or skylight consisting of:

Grecatec® 2.5 mm multiwall polycarbonate panel, co-extruded UV-protection on the external side, 2 walls structure, 2.5 mm thickness, trapez height ... mm, thermal transmittance 4.5 W/m² K, clear or opal colours, thermowelded ends; dimensions: width ... (useable width ... mm), length upon request; 10-year warranty.

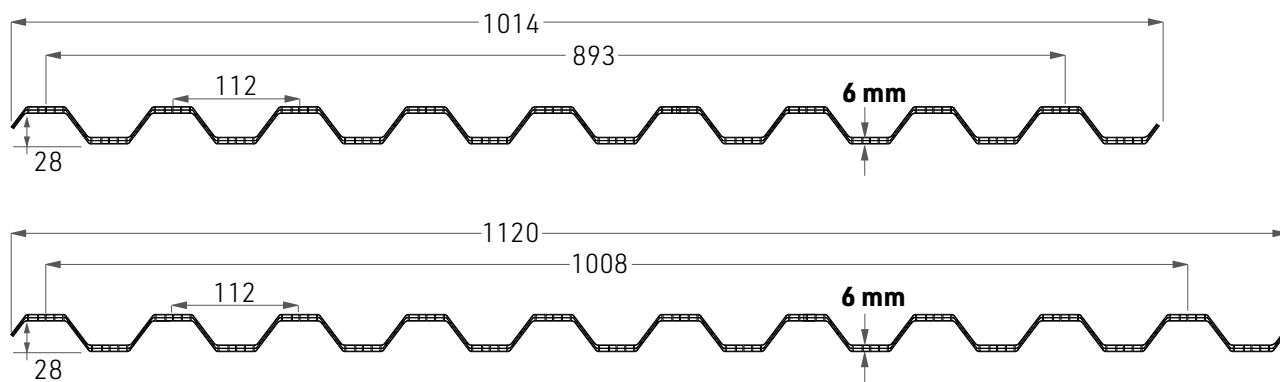
Grecatec® 112/28/6 mm

Grecatec® 112/28/6 mm is a corrugated multiwall panel designed for use in combination with sandwich panels and corrugated metal profiles, where it is necessary to create a single or continuous transparent roof. It can be used in new builds and / or restructured roofing, installing the panels from the ridge to the gutter or in the centre of the slope thanks to the perfect match on all 4 sides (only with metal corrugated sheets with the same shape).



Thickness
(mm)

6

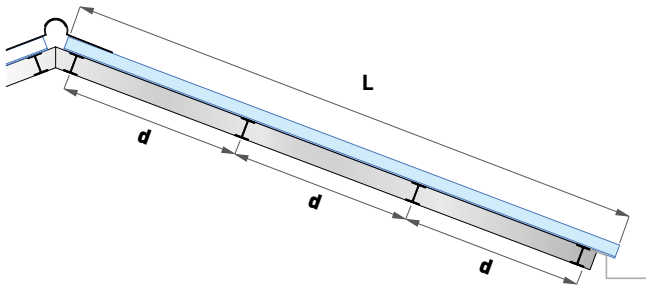


Grecatec® 112/28/6 mm technical data

Thickness	6 mm		
Number of walls	3		
Trapez pitch	112 mm		
Height	28 mm		
Width	9 trapez: 1014 mm (usable width 893 mm) 10 trapez: 1120 mm (usable width 1005 mm)		
Length	upon request (maximum recommended length 6 m)		
Thermal transmittance	3,3 W/m ² K		
Colours		LT*	G Value
	Clear (8005)	80%	-
	Opal (8121)	43%	-
UV protection	Coextruded on the external side		
Warranty	10-years warranty against hail damage, yellowing, loss of light transmission		
Service temperature	-40°C / +120°C		
Thermal expansion coefficient	0,065 mm/m°C (6,5 x 10 ⁻⁵ 1/K)		
Fire certification	EUROCLASS B s1 d0		

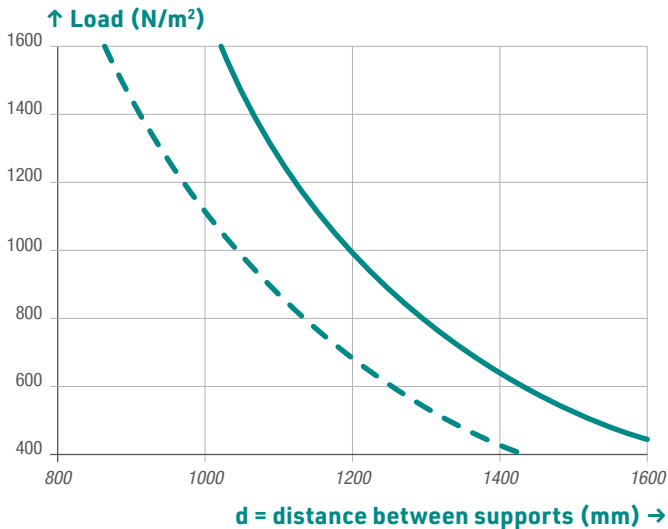
* Values calculated according to ASTM standard.

Greccatec® 112/28/6 mm load charts



L = length
d = distance between supports

• Load charts for FLAT application



Uniform distributed load on 2 supports
Deflection limit $d/50$

Uniform distributed load on 3 or more supports
Deflection limit $d/50$

NOTE
minimum recommended slope 5%.

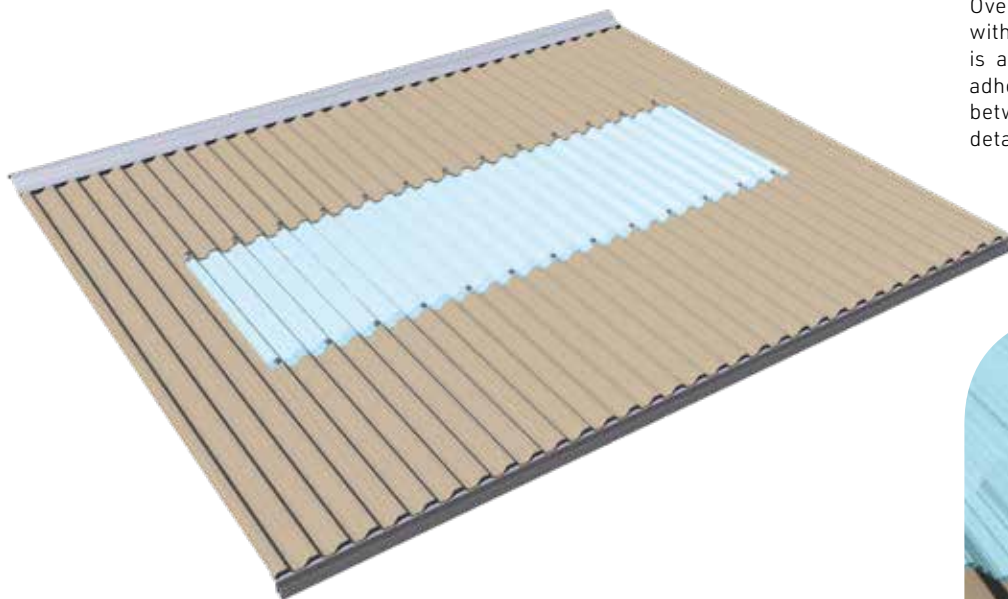
The designer will check the actual loads acting on the system as well as the coefficients of amplification and safety to be applied in consideration of both the climatic conditions of the site, both the general and particular characteristics of the structure in which the polycarbonate is inserted. For these evaluations, refer to the specific regulations in force in each country. For detailed technical data, or for more information, refer to the Technical Manual or to the Stabilit Suisse Office.

Voci di capitolato Greccatec® 112/28/6 mm

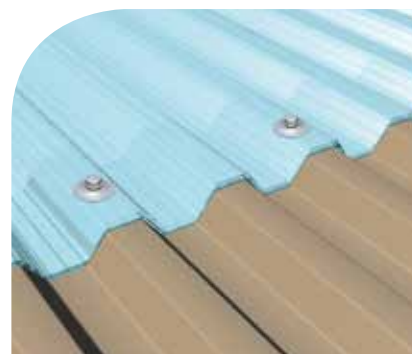
Construction of a flat translucent roof and / or skylight with Greccatec® 112 /28/6 mm system consisting of:

Greccatec® 112/28/6 mm multiwall polycarbonate panel, co-extruded UV-protection on the external side, 3 walls structure, 6 mm thickness, trapez height 28 mm, thermal transmittance 3,3 W/m² K, clear or opal colours, thermowelded ends; dimensions: width 1014 mm or 1120 mm (useable width 893 mm or 1005 mm), length upon request; 10-year warranty.

SINGLE / CONTINUOUS FLAT installation solution - Grecatec® 112/28/6 mm

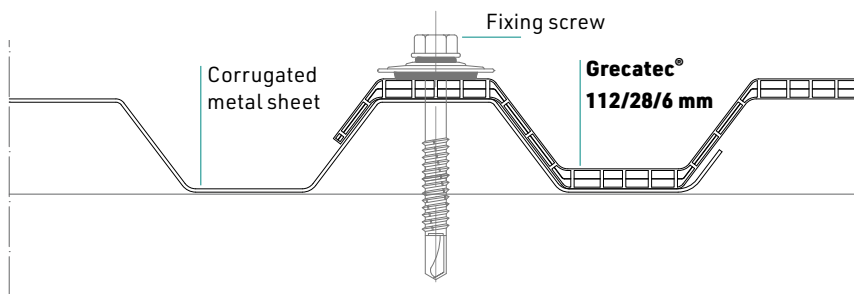


Overlapping in length of more sheets with overlap depth of at least 200 mm is allowed. It is mandatory to place an adhesive PE gasket or silicone seal between the overlapped sheets. For more details contact our technical office.

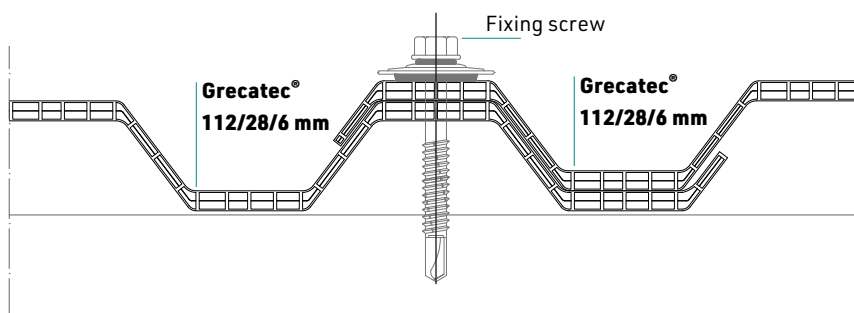
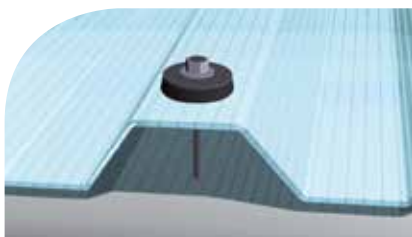


• Detail of Grecatec® 112/28/6 mm fixing and side overlap

Corrugated metal sheet - Grecatec® 112/28/6 mm panel



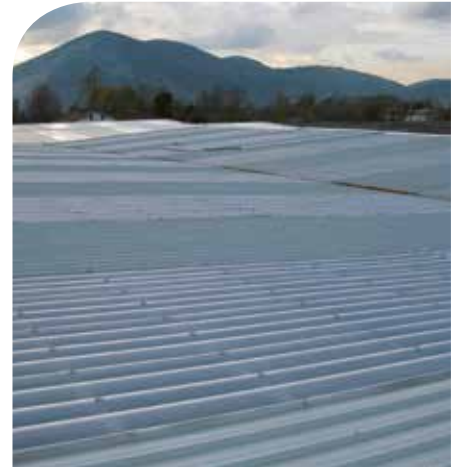
Grecatec® 112/28/6 mm panel - Grecatec® 112/28/6 mm panel





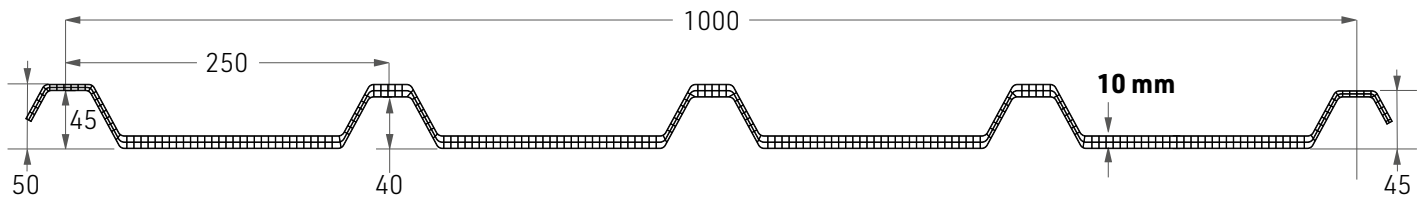
Grecatec® 250/40/10 mm

Grecatec® 250/40/10 mm is a corrugated multiwall panel, designed to be used for roofs and vertical walls in industrial buildings. It is used both in continuous roofing and single skylights (flat and curved) in combination with sandwich panels and corrugated metal profiles in both sheds and vertical curtain walls. The panel can be supplied with UV-resistant transparent coextruded gasket to increase the performance of air and water resistance.



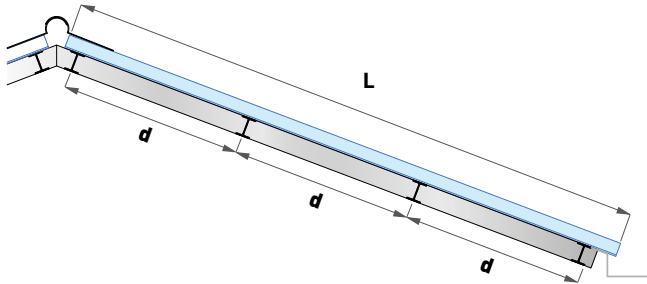
Thickness
(mm)

10



Grecatec® 250/40 10 mm technical data			
Thickness	10 mm		
Number of walls	3		
Trapez pitch	250 mm		
Height	40 mm		
Width	1000 mm		
Length	upon request (maximum recommended length 6 m)		
Thermal transmittance	2,8 W/m ² K		
Colours		LT*	G Value
	Clear (8005)	72%	-
	Opal (8121)	55%	-
UV protection	Coextruded on the external side		
Warranty	10-year warranty against hail damage, yellowing, loss of light transmission		
Service temperature	-40°C / +120°C		
Thermal expansion coefficient	0,065 mm/m°C (6,5 x 10 ⁻⁵ 1/K)		
Fire certification	EUROCLASS B s1 d0		
* Values calculated according to ASTM standard.			

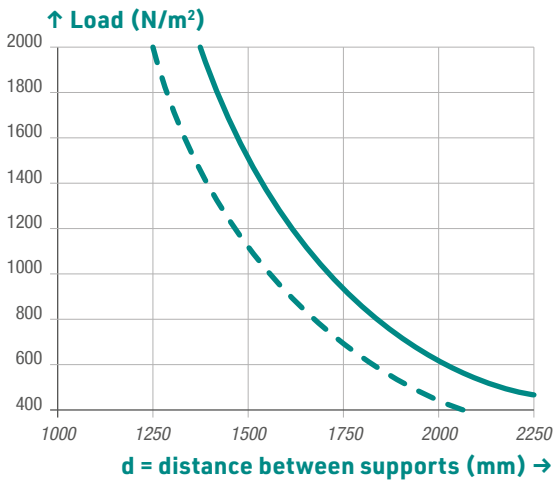
Grecatec® 250/40 10 mm load charts



L = length
d = distance between supports

Load chart with 3 or more supports for FLAT solution

• Skylight

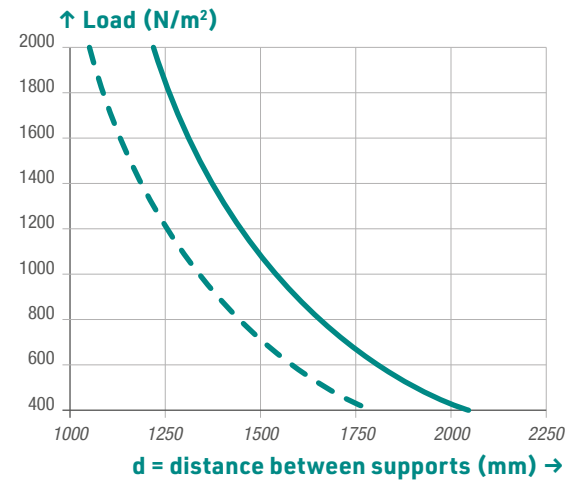


Deflection 1/50 - distance between supports

Maximum deflection limit 50 mm

NOTE
 minimum recommended slope 5%.

• Continuous application



The designer will check the actual loads acting on the system as well as the coefficients of amplification and safety to be applied in consideration of both the climatic conditions of the site, both the general and particular characteristics of the structure in which the polycarbonate is inserted. For these evaluations, refer to the specific regulations in force in each country. For detailed technical data, or for more information, refer to the Technical Manual or to the Stabilit Suisse Office.

Grecatec® 250/40/10 mm specifications

Construction of a flat translucent roof and / or full-brim skylight with Grecatec® 250/40/10 mm system consisting of:

Grecatec® 250/40/10 mm multiwall polycarbonate panel, co-extruded UV-protection on the external side, 3 walls structure, 10 mm thickness, thermal transmittance 2,8 W/m² K, clear or opal colours, thermowelded ends; dimensions: useable width 1000 mm, length upon request; 10-year warranty.

The panel can be supplied with UV-resistant coextruded transparent gasket to increase the performance of air and water tightness.

Spacer in PE foam to be positioned between Grecatec® panel and support.

Metal half-ridge cover (upon request).

Grecatec® 250/40/25 mm

Grecatec® 250/40/25 mm is a corrugated multiwall panel, designed to be used for roofs and vertical walls in industrial buildings. It is used both in continuous roofing and single skylights in combination with sandwich panels and corrugated metal profiles in both sheds and vertical curtain walls. The panel can match various design requirements thanks to the corrugated 6-wall section which gives it a high load resistance. The shape of the overlaps allows side coupling with almost any insulated panel, keeping the fixing distance to 1 m between the panels. The two versions available with different heights of the external ridges have been designed to optimize the option either in combination with sandwich panels or in combination with polycarbonate panels.



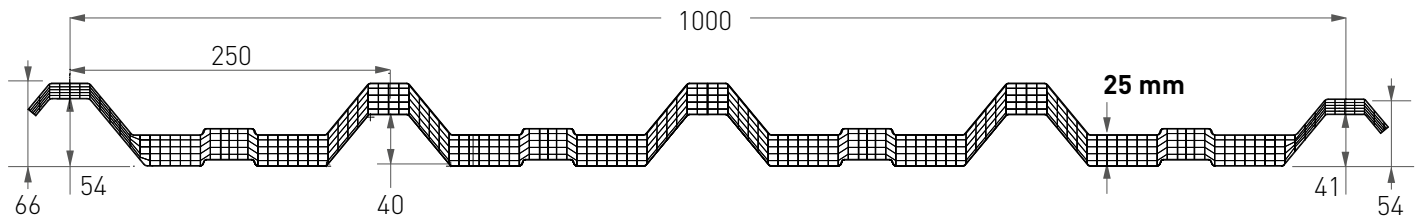
Thickness
(mm)

25

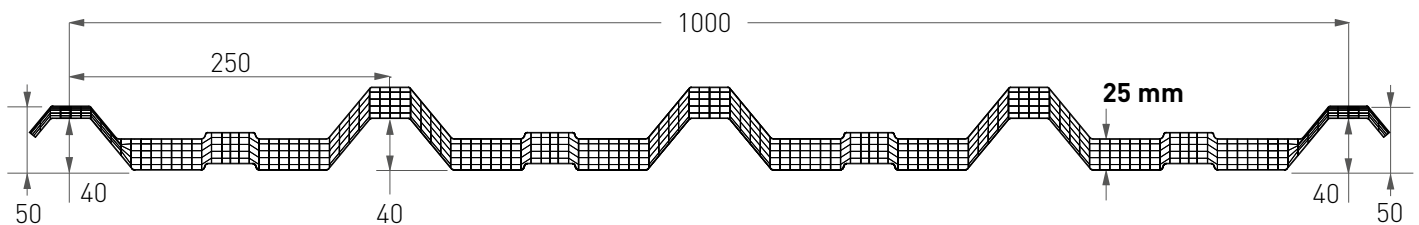


Grecatec® 250/40 25 mm technical data			
Thickness	25 mm		
Number of walls	6		
Trapez pitch	250 mm		
Height	40 mm		
Width	1000 mm		
Length	Upon request (maximum recommended length 6 m)		
Thermal transmittance	1,4 W/m ² K		
Colours		LT*	G Value
	Clear (8005)	45%	-
	Opal (8121)	16%	-
UV protection	Coextruded on the external side		
Warranty	10-year warranty against hail damage, yellowing, loss of light transmission		
Service temperature	-40°C / +120°C		
Thermal expansion coefficient	0,065 mm/m°C (6,5 x 10 ⁻⁵ 1/K)		
Fire certification	EUROCLASS B s1 d0		
* Values calculated according to ASTM standard.			

Grecatex® 250/40/25 mm - Continuous application



Grecatex® 250/40/25 mm - Single application with sandwich panels



Grecatex® 250/40/25 mm specifications

Construction of a flat translucent roof and / or full-brim skylight with Grecatex® 250/40/25 mm system consisting of:

Grecatex® 250/40/25 mm multiwall polycarbonate panel, co-extruded UV-protection on the external side, 6 walls structure, 25 mm thickness, trapez height 40 mm, thermal transmittance 1,4 W/m² K, clear or opal colours, thermowelded ends; dimensions: useable width 1000 mm, length upon request; 10-year warranty.

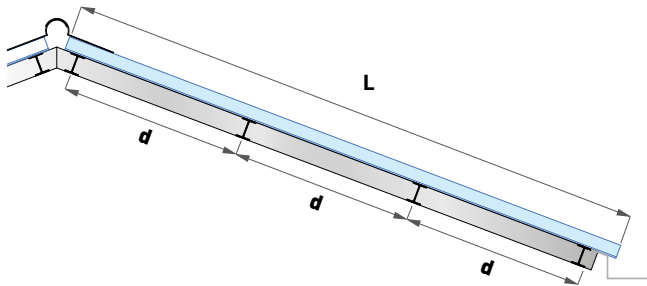
Panel available in two versions: with external trapez at different heights for continuous coupling or with external trapez of the same height for coupling with sandwich panels.

The panel can be supplied with UV-resistant coextruded transparent gasket, to increase the performance of air and water tightness.

Spacer in PE foam to be positioned between Grecatex® panel and support.

Metal half-ridge cover (upon request).

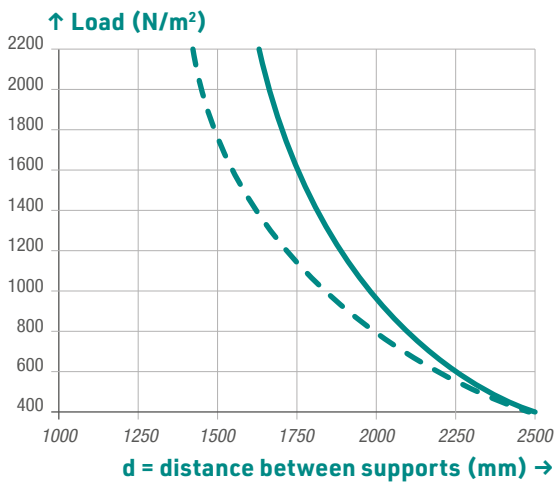
Grecatec® 250/40/25 mm load charts



L = length
d = distance between supports

Load chart with 3 or more supports for FLAT solution

• Skylight

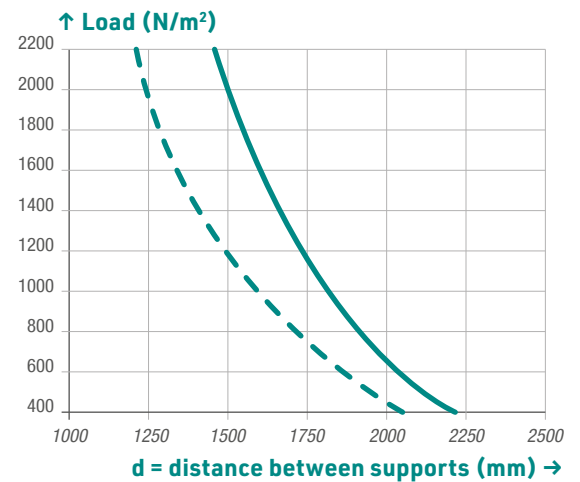


Deflection 1/50 - distance between supports

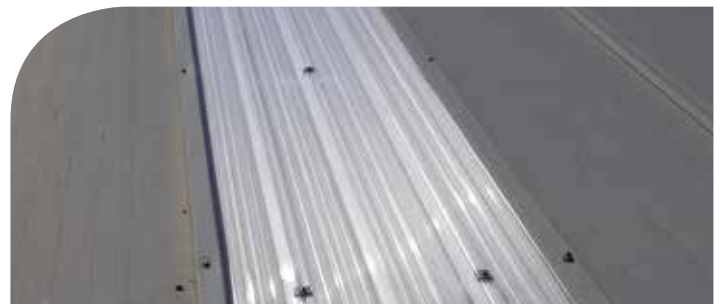
Maximum deflection limit 50 mm

NOTE
minimum recommended slope 5%.

• Continuous application

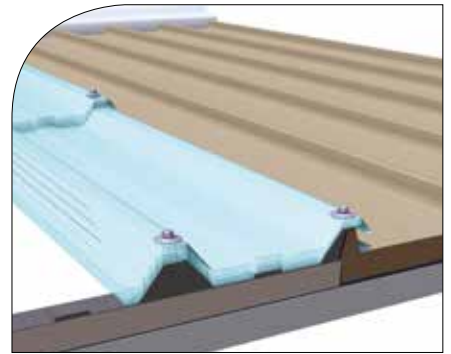
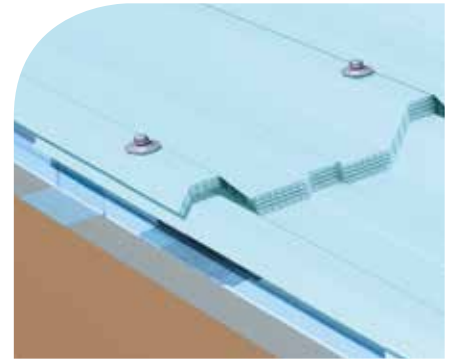


The designer will check the actual loads acting on the system as well as the coefficients of amplification and safety to be applied in consideration of both the climatic conditions of the site, both the general and particular characteristics of the structure in which the polycarbonate is inserted. For these evaluations, refer to the specific regulations in force in each country. For detailed technical data, or for more information, refer to the Technical Manual or to the Stabilit Suisse Office.

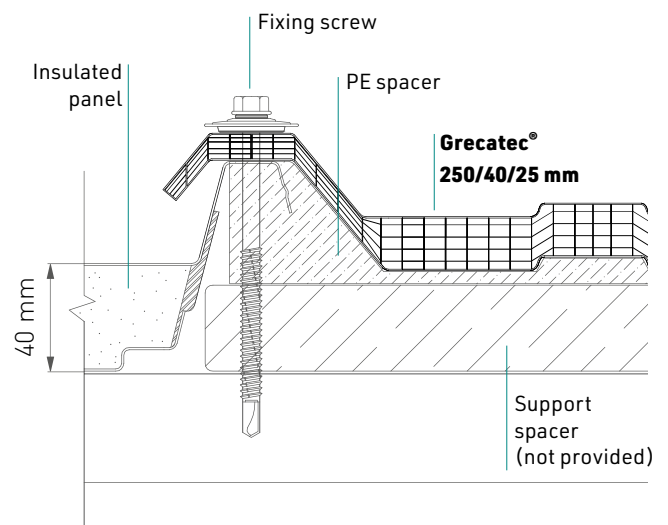
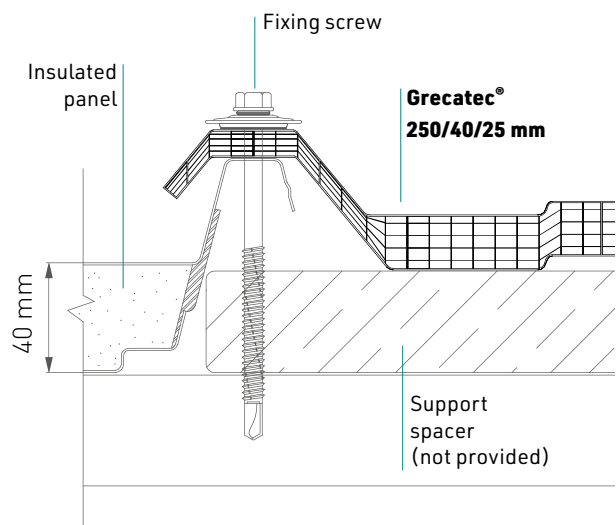


FLAT SINGLE installation option - Grecatec® 250/40/10 mm - Grecatec® 250/40/25 mm

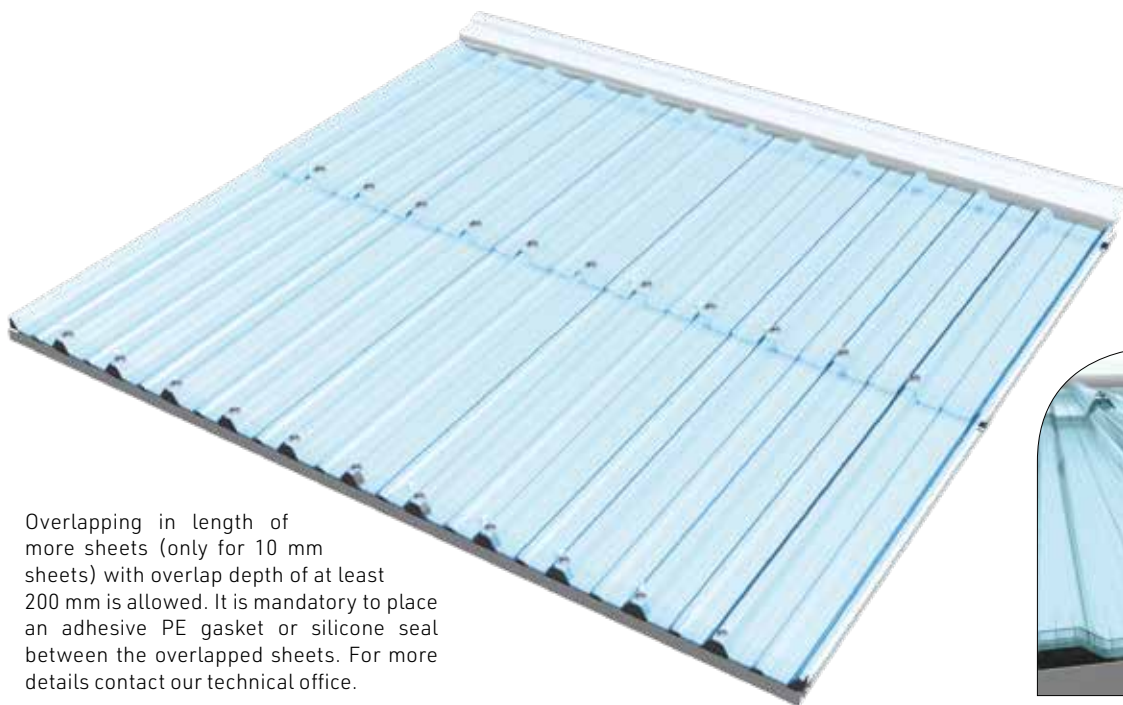
Overlapping in length of more sheets (only for 10 mm sheets) with overlap depth of at least 200 mm is allowed. It is mandatory to place an adhesive PE gasket or silicone seal between the overlapped sheets. For more details contact our technical office.



• Detail for fixing and overlapping with Grecatec® 250/40/25 mm

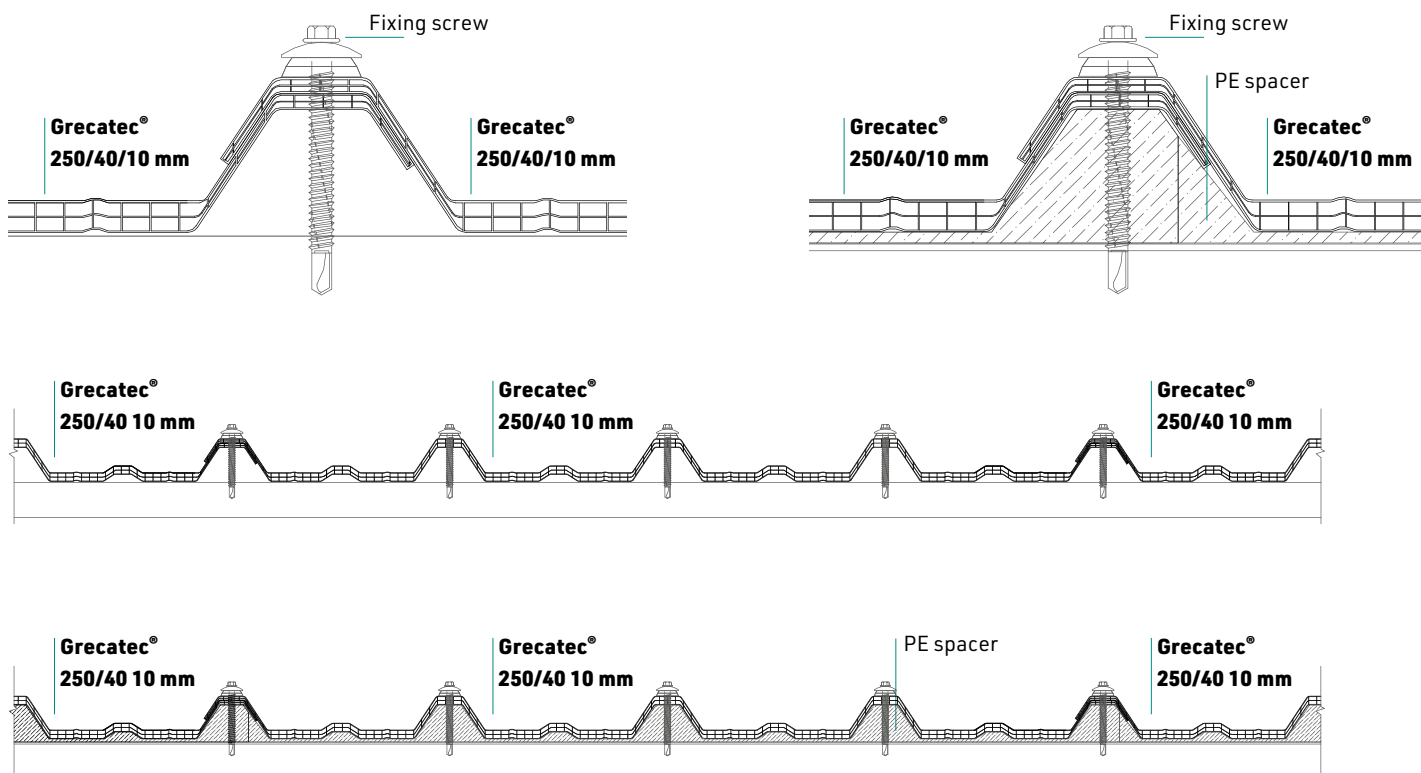


FLAT CONTINUOUS installation option - Grecatec® 250/40/10 mm - Grecatec® 250/40/25 mm



Overlapping in length of more sheets (only for 10 mm sheets) with overlap depth of at least 200 mm is allowed. It is mandatory to place an adhesive PE gasket or silicone seal between the overlapped sheets. For more details contact our technical office.

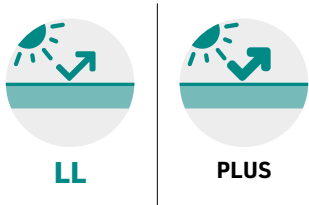
• Detail for fixing and overlapping with Grecatec® 250/40 10 mm





Grecatec® 250/80/10 mm - 12 mm

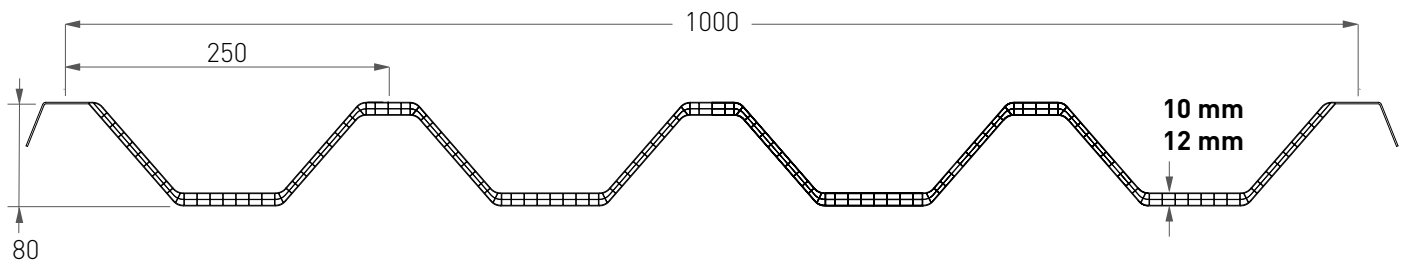
Grecatec® 250/80 10 mm is a corrugated multiwall panel designed for use in coverings and / or walls in the construction industry. It is used both in continuous roofing and single skylights in combination with sandwich panels and corrugated metal profiles for both wall shed and vertical curtain walls. Having a thickness of only 10 mm, the shape with a height of 80 mm ensures an excellent load resistance. Also available 12 mm thickness version.



Thickness
(mm)

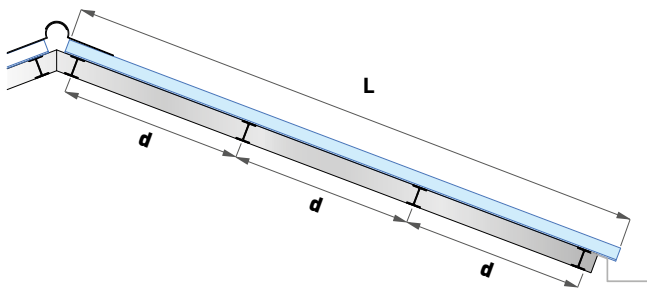
10

12



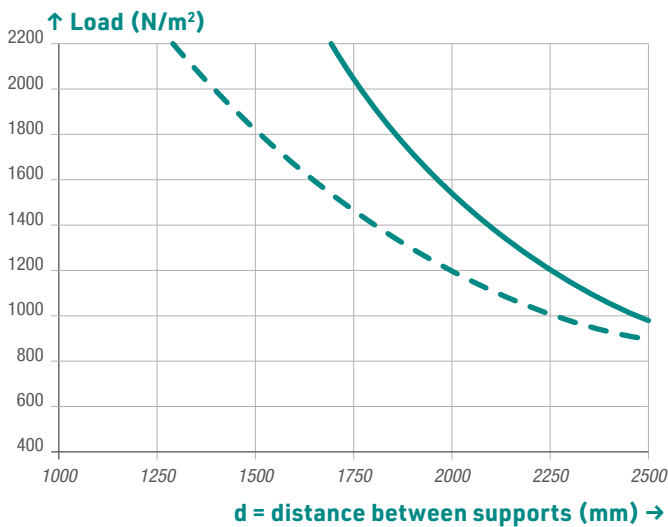
Grecatec® 250/80/10 mm - 250/80/12 mm technical data				
Thickness	10 mm or 12 mm			
Number of walls	3			
Trapez pitch	250 mm			
Height	80 mm			
Width	1000 mm			
Length	upon request (maximum recommended length 6 m)			
Thermal transmittance	2,7 W/m ² K - 10 mm 2,5 W/m ² K - 12 mm			
Colours		LT* - 10 mm	LT* - 12 mm	G Value
	Clear (8005)	66%	64%	-
	Opal (8121)	49%	47%	-
UV protection	Coextruded on the external side			
Warranty	10-years warranty against hail damage, yellowing, loss of light transmission			
Service temperature	-40°C / +120°C			
Thermal expansion coefficient	0,065 mm/m°C (6,5 x 10 ⁻⁵ 1/K)			
Fire certification	EUROCLASS B s1 d0			
* Values calculated according to ASTM standard.				

Greccatec® 250/80 10 mm load charts



L = length
d = distance between supports

• Load charts with 3 or more supports for FLAT solution



Skylight ———
Continuous application - - -

NOTE
minimum recommended slope 5%.

The load tables refer to the breakage load value of the system. The designer will check the actual loads acting on the system as well as the coefficients of amplification and safety to be applied in consideration of both the climatic conditions of the site, both the general and particular characteristics of the structure in which the polycarbonate is inserted. For these evaluations, refer to the specific regulations in force in each country. For detailed technical data, or for more information, refer to the Technical Manual or to the Stabilit Suisse Office.

Greccatec® 250/80/10 mm - 250/80/12 mm specifications

Construction of a flat translucent roof and / or full-brim skylight with Greccatec® 250/80/10 mm or 12 mm system consisting of:

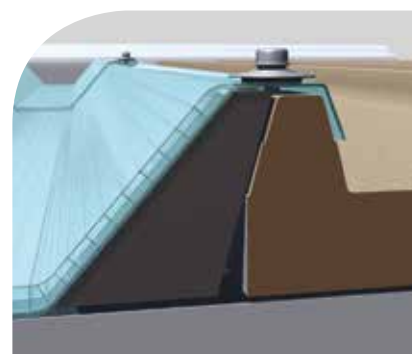
Greccatec® 250/80/10 mm or 12 mm multiwall polycarbonate panel, co-extruded UV-protection on the eternal side, 3 walls structure, 10 mm thickness, trapez height 80 mm, thermal transmittance 2,7 W/m² K (2.5 W/m²K for 12 mm), clear or opal colours, thermowelded ends; dimensions: useable width 1000 mm, upon request lengths; ten-years warranty.

Spacer in PE foam to be positioned between Greccatec® panel and support.

Steel reinforcing hook to be used under the empty trapez of the sandwich panel or under side overlapping between Greccatec® panels (on request).

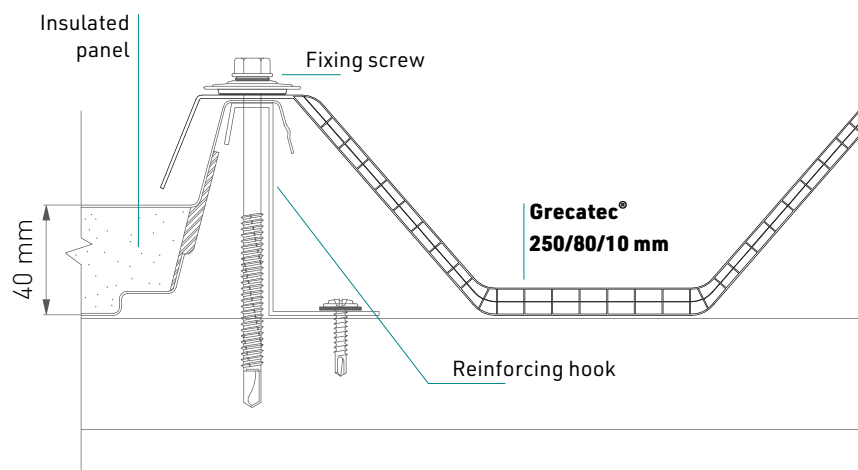
Metal half-ridge cover (upon request).

FLAT SINGLE installation option - Grecatec® 250/80/10 mm - Grecatec® 250/80/12 mm



Overlapping in length of more sheets with overlap depth of at least 200 mm is allowed. It is mandatory to place an adhesive PE gasket or silicone seal between the overlapped sheets. For more details contact our technical office.

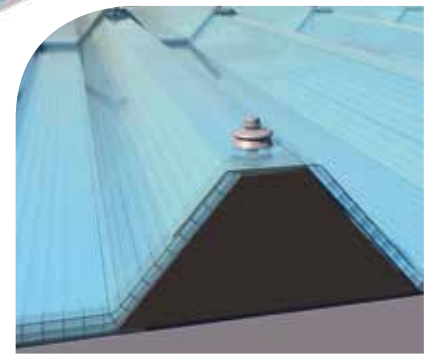
• Detail for fixing and overlapping with Grecatec® 250/80/10 mm



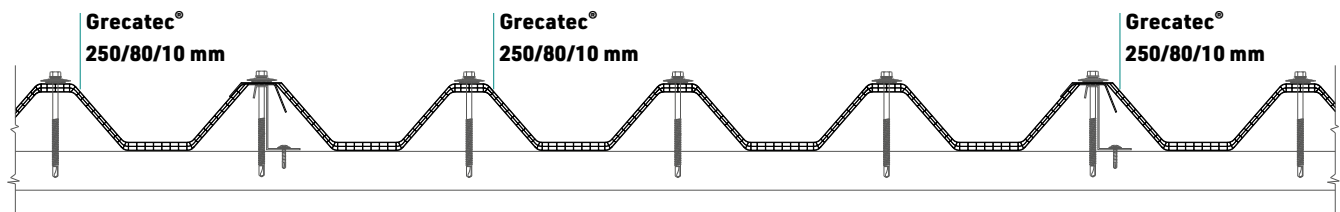
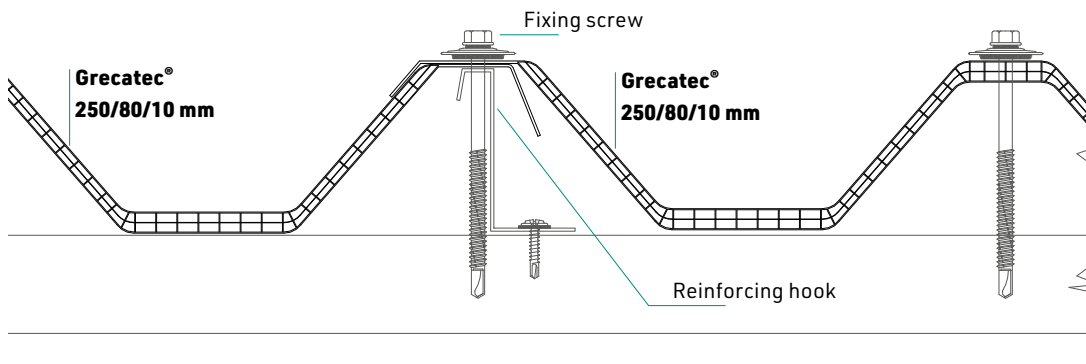
FLAT CONTINUOUS installation option - Grecatec® 250/80/10 mm - Grecatec® 250/80/12 mm



Overlapping in length of more sheets with overlap depth of at least 200 mm is allowed. It is mandatory to place an adhesive PE gasket or silicone seal between the overlapped sheets. For more details contact our technical office.

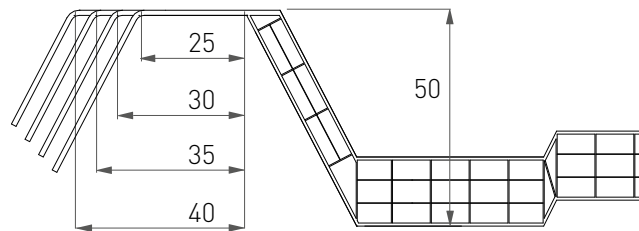
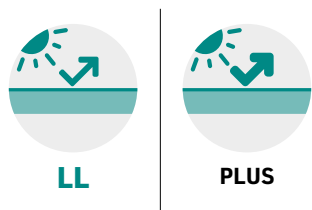


• Detail for fixing and overlapping with Grecatec® 250/40/10 mm



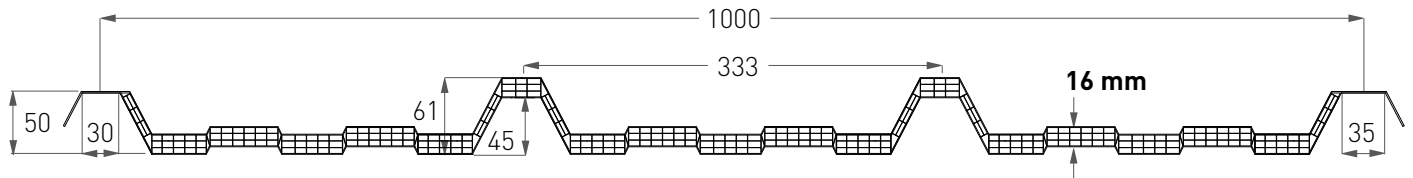
Grecatec® 333/45/16 mm

Grecatec® 333/45/16 mm is a corrugated multiwall panel, designed to be used for roofs and vertical walls in industrial buildings. It is used both in continuous flat roofing and single flat skylights in combination with sandwich panels and corrugated metal profiles. The panel can match various design requirements thanks to the corrugated 3-wall section which gives it a high load resistance, and the possibility to vary the width of the lateral overlapping wings (upon request). The shape of the overlaps allows side coupling with almost any insulated panel, keeping the fixing distance to 1 m between the panels.



Thickness
(mm)

16

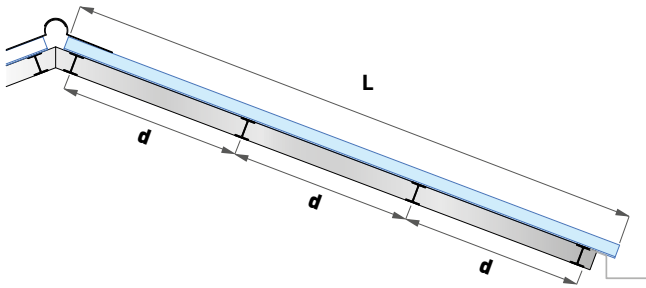


Grecatec® 333/45/16 mm technical data

Thickness	16 mm		
Number of walls	4		
Trapez pitch	333 mm		
Height	45 mm		
Width	1000 mm		
Length	upon request (maximum recommended length 6 m)		
Thermal transmittance	2,0 W/m ² K		
Colours		LT*	G Value
	Clear (8005)	67%	-
	Opal (8121)	-	-
UV protection	Coextruded on the external side		
Warranty	10-year warranty against hail damage, yellowing, loss of light transmission		
Service temperature	-40°C / +120°C		
Thermal expansion coefficient	0,065 mm/m°C (6,5 x 10 ⁻⁵ 1/K)		
Fire certification	-		

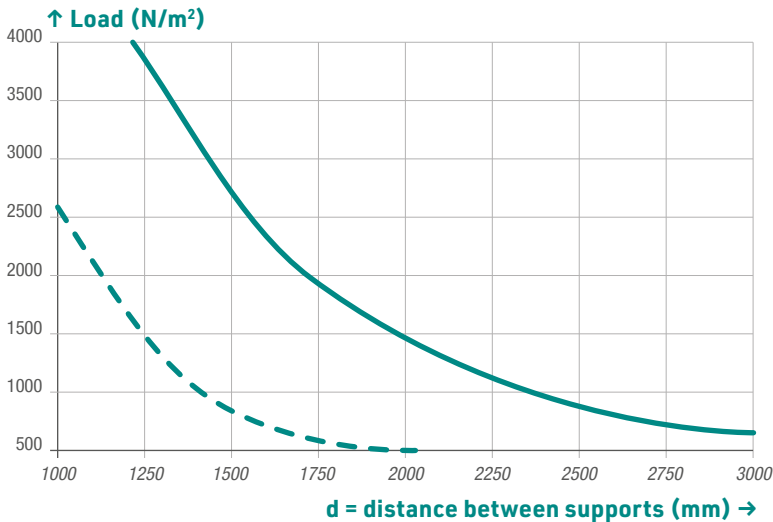
* Values calculated according to ASTM standard.

Grecatec® 333/45/16 mm load charts



L = length
d = distance between supports

• Load chart with 3 or more supports for FLAT solution



Skylight ———
Continuous application - - -

NOTE
minimum recommended slope 5%.

Deflection equal to 1/30 of the span between supports, max 50 mm. The designer will check the actual loads acting on the system as well as the coefficients of amplification and safety to be applied in consideration of both the climatic conditions of the site, both the general and particular characteristics of the structure in which the polycarbonate is inserted. For these evaluations, refer to the specific regulations in force in each country. For detailed technical data, or for more information, refer to the Technical Manual or to the Stabilit Suisse Office.

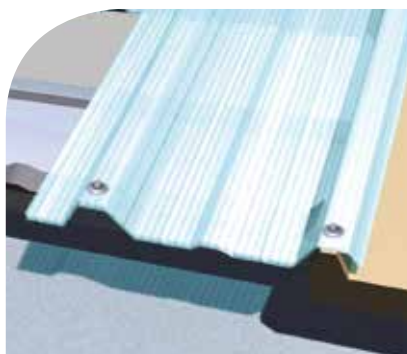
Voci di capitolato Grecatec® 333/45/16 mm

Construction of a flat translucent roof and / or full-brim skylight with Grecatec® 333/45/16 mm system consisting of:

Greocatec® 333/45/16 mm multiwall polycarbonate panel, co-extruded UV-protection on the external side, 3 walls structure, 16 mm thickness, trapez height 45 mm, thermal transmittance 2,0 W/m² K, clear or opal colours, thermowelded ends; dimensions: useable width 1000 mm, length upon request; 10-year warranty.

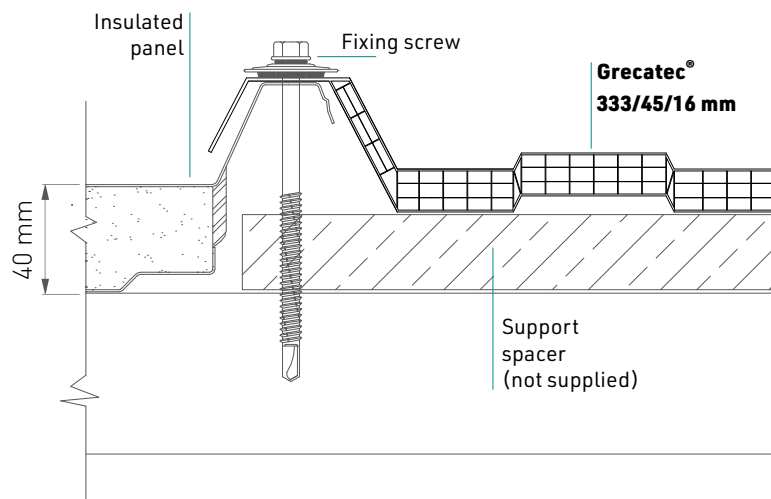
Spacer in PE foam to be positioned between Greocatec® panel and support.

FLAT SINGLE and CONTINUOUS installation option - Grecatec® 333/45/16 mm



Overlapping in length not possible for this sheet.

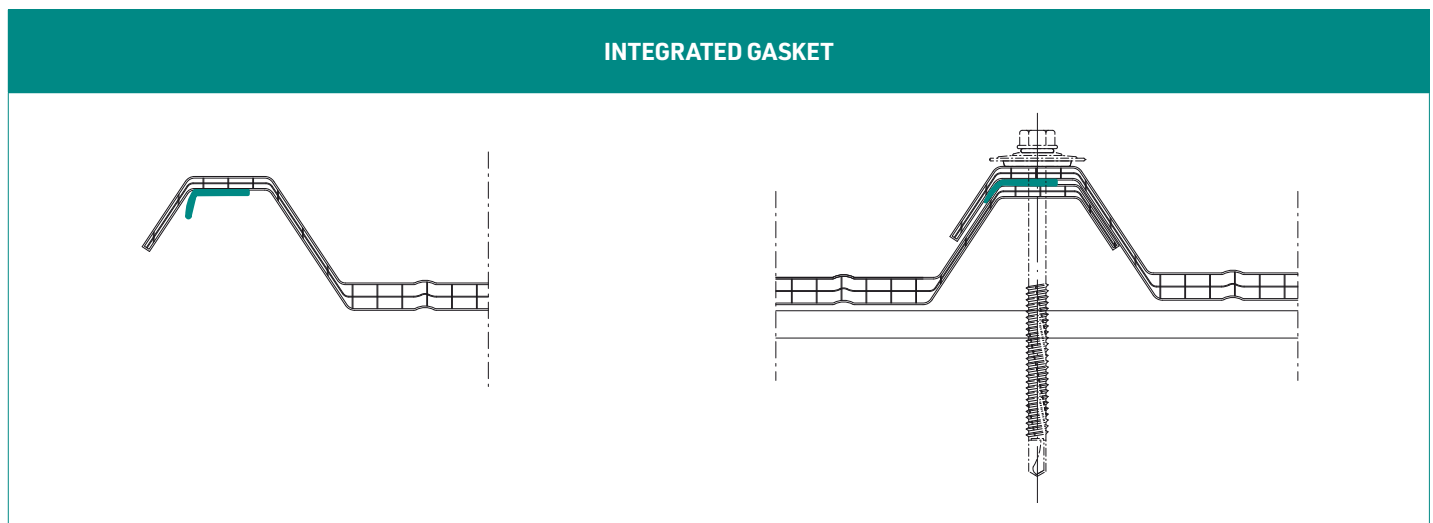
• Detail of Grecatec® 333/45/16 mm fixing and side overlap

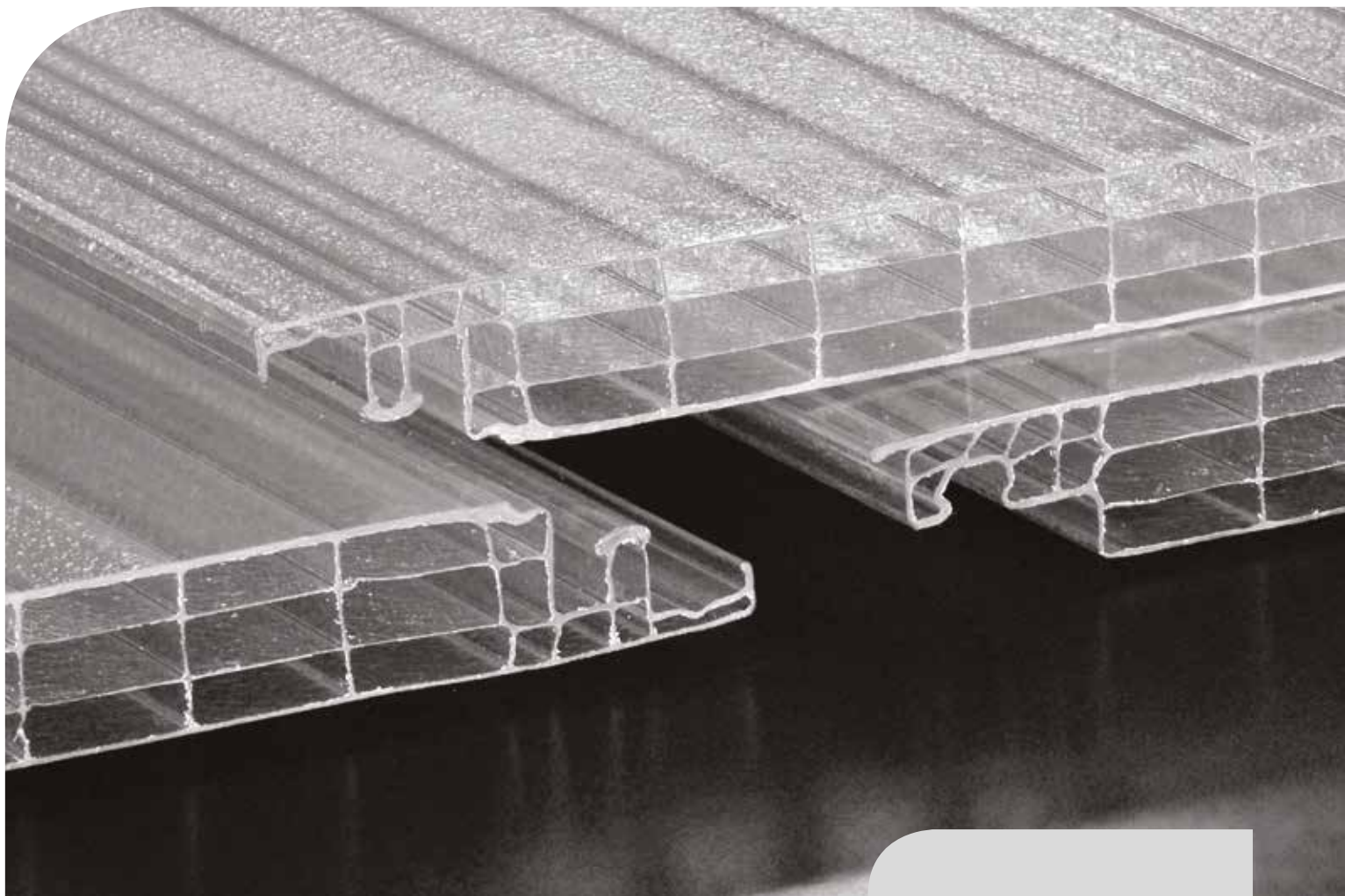


Greccatec® accessories

ACCESSORY	CODE	TECHNICAL DESIGN / RENDERING
Metal half-ridge cover (upon request)	M9X4 - Metal half-ridge cover for Greccatec® 250/80/10 mm	
	M9A2 - Metal half-ridge cover for Greccatec® 250/40/10 mm	
	M9A1 - Metal half-ridge cover for Greccatec® 250/40/25 mm	
PE spacer	MZZ5 - Upper and lower PE spacer for Greccatec® 250/80/10 mm	
	MZZ8 - Lower PE spacer for Greccatec® 250/80/10 mm	
	M9A5 - Upper and lower PE spacer for Greccatec® 250/40/10 mm	
	M9A4 - Upper and lower PE spacer for Greccatec® 250/40/25 mm	
	MZZ3 - Upper and lower PE spacer for Greccatec® 333/45/16 mm	
Fixing screw with washer and EPDM gasket	M9N0 - 6.3 x 45 mm	
	M9N1 - 6.3 x 60 mm	
	M9N2 - 6.3 x 80 mm	
	M9N3 - 6.3 x 100 mm	
	M9T8 - 6.3 x 120 mm	
Reinforcing hook height 80 mm	M9X2	

Contact our sales offices to find out about standards, surcharges, minimum orders, availability.





Click 16

16

Easy, fast and secure, the **Click 16** system for roofs and walls is ideal for the construction of flat roofs and small areas such as carports, canopies, verandas and greenhouses. The simple assembly even allows the installation by unskilled hands: it is an ideal product for "do it yourself", indeed the specific side overlap of the Click 16 panel allows an easy fitting of the panels without the need for profile joints offering a very low cost solution and with an high aesthetic design. The coextruded gasket guarantee a high performance of air and water tightness.



PLUS

Benefits

- **Quick and easy to assemble**
- **High thermal insulation**
- **Excellent impact resistance**
- **Good light transmission**
- **Good fire performance**
- **Certified quality guarantee**
- **UV protection**

WARRANTY
G10
10 YEARS



DIY



HOUSING



COMMERCIAL BUILDING



PUBLIC CONSTRUCTION



ARCHITECTURE



RURAL

Main advantages of Click 16 system



Impact resistance

Polycarbonate's mechanical properties make this the technopolymer with the highest impact resistance, allowing it to provide optimum protection against accidental damage and weather-related damage. These qualities mean polycarbonate significantly outperforms other materials (glass, acrylic, PET, etc.) commonly used in applications where transparency is a key requirement. Impact resistance remains constant across a particularly wide temperature range.



Thermal expansion

Thermal expansion is a characteristic property of materials that consists in their tendency to change in size as temperature increases and decreases. This expansion is quantified via a coefficient that, in the case of polycarbonate, equates to $6,5 \times 10^{-5} 1/K$ (0.065 mm/m°C). The fact that this coefficient value is much higher than the values associated with materials usually used for roofing and joinery (aluminium, steel, etc.) generates the need for solutions that compensate for this difference in thermal expansion, which thus needs to be factored in at the design stage and in all building applications.



Light transmission

Proper lighting design entails ensuring that the building interior receives the required amount of light. So it is clearly important to use sheets that let enough light through. The **Click 16** product range gives you plenty of choice at the design stage of your project, with an array of colour options to meet your every need.



Warranty

Sheets with UV protection offer a 10-year warranty against yellowing, loss of light transmission and hail damage. Our sales department will be happy to provide you the exact warranty terms.



Fire behaviour

Fire safety is a fundamental necessity. **Click 16** panels are tested in independent qualified laboratories on the basis of current applicable regulations in the construction industry. Our offices are at your disposal to provide you with details regarding the available certificates.



Thermal transmittance

Thermal transmittance, or U-value, is the mean flow of heat per m² that passes through a structure (the polycarbonate panel) separating two environments with different temperatures (usually separating a heated or air-conditioned room from outdoors). The lower this value, the more effective the insulation offered by the panel. With a view to reducing heating/air-conditioning costs - with a consequent reduction in harmful emissions into the atmosphere - international standards require both building materials and fenestration systems to meet ever-stricter thermal transmittance requirements. With its extensive range of multiwall panels, **Stabilit Suisse** is at the cutting edge when it comes to providing its customers with the most appropriate solutions in compliance with current standards.



UV protection

Our co-extruded UV-protected layer blocks damaging UV rays that would lead to rapid degradation that causes yellowing and undermines the strength of the exposed surface. UV protection is applied using co-extrusion technology, whereby an even shielding layer can be produced to screen the polycarbonate from the UV component of the solar radiation. With this technology, the UV protection is made resistant to weathering and is not prone to damage by incorrect maintenance.

Click 16

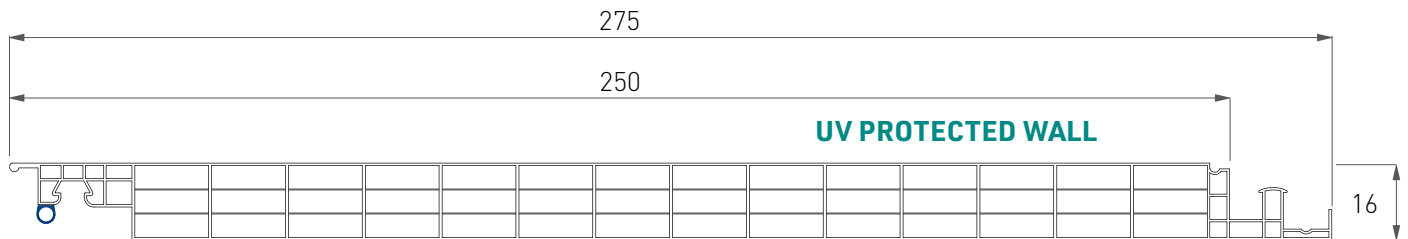
The **Click 16**, system used in roofing applications and mainly for “do it yourself” applications, is made of multiwall polycarbonate panels with a 4 wall structure. The standard thickness of 16mm offers high mechanical performance and adaptability for use in various solutions that require the use of materials easy to handle, to install and transport. It is provided with an integrated gasket, co-extruded during the production, which provides greater protection against water leakage. The product without integrated gaskets is recommended for wall construction.



PLUS

Thickness
(mm)

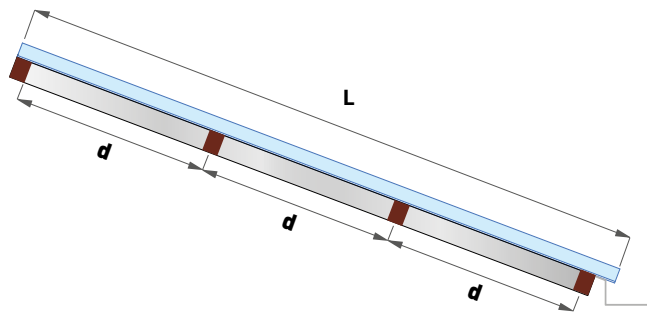
16



Click 16 technical data			
Thickness	16 mm		
Number of walls	4		
Module width	250 mm		
Length	upon request		
Thermal transmittance	2,10 W/m ² K		
Colours		LT*	G Value
	Clear (8005)	65%	-
	Opal (8121)	41%	-
UV protection	coextruded on the external side		
Warranty	10-year warranty against hail damage, yellowing, loss of light transmission		
Service temperature	-40°C / +120°C		
Thermal expansion coefficient	0,065 mm/m°C (6,5 x 10 ⁻⁵ 1/K)		
Fire certification	EUROCLASS B s1 d0		

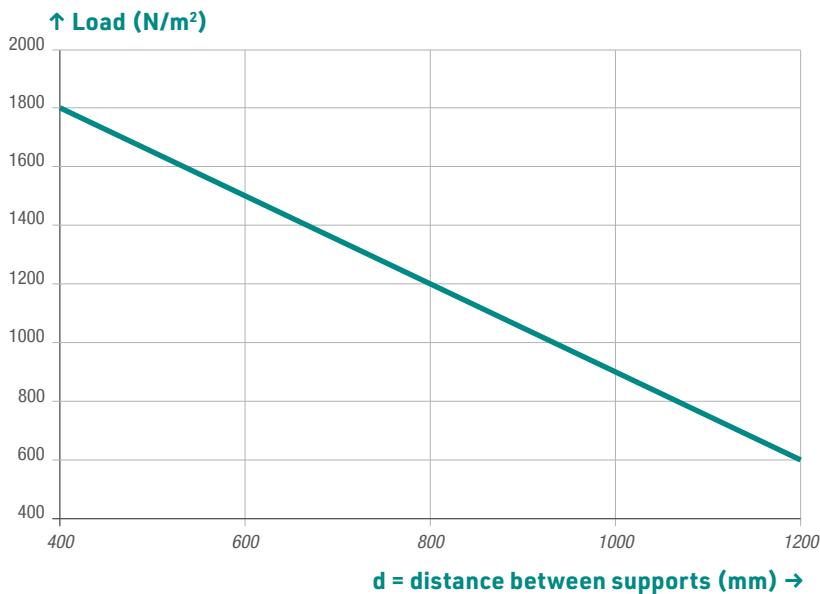
* Values calculated according to ASTM standard.

Click 16 load charts



L = length
d = distance between supports

• Load chart with 3 or more supports for FLAT solution



Pressure 

NOTE
minimum
recommended
slope 15%.

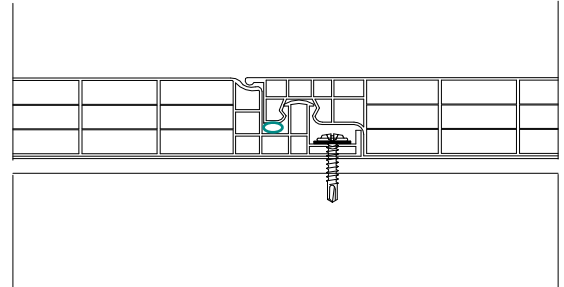
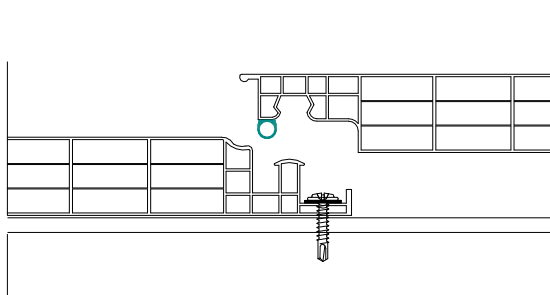
The load tables refer to the breakage load value of the system. The designer will check the actual loads acting on the system as well as the coefficients of amplification and safety to be applied in consideration of both the climatic conditions of the site, both the general and particular characteristics of the structure in which the polycarbonate is inserted. For these evaluations, refer to the specific regulations in force in each country. For detailed technical data, or for more information, refer to the Technical Manual or to the Stabilit Suisse Office.

Click 16 specifications

Construction of a flat translucent roof with Click 16 system consisting of:

Click 16 Multiwall polycarbonate panel, coextruded UV-protection on external side, 4 wall structure, 16 mm thickness, thermal transmittance 2,1 W/m² K, clear colour, adhesive aluminium tape end closures; dimensions: module width 250 mm, length upon request; 10-year warranty.

SHEET / SHEET JOINING SYSTEM installation solution - Click 16



- Sheet / sheet joining

Click 16 accessories

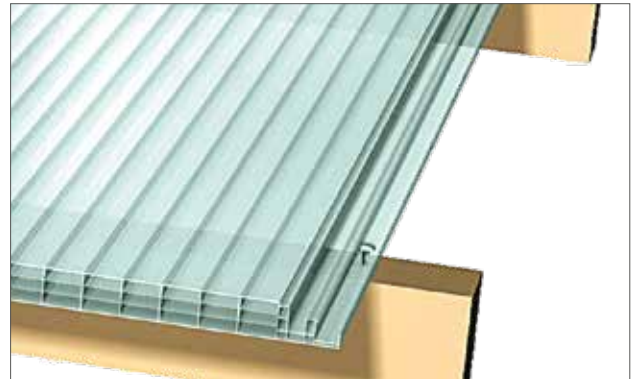
ACCESSORY	CODE	TECHNICAL DESIGN / RENDERING
Massive adhesive aluminium tape, height 38 mm (50 m roll)	M965	
Perforated adhesive aluminium tape, height 38 mm (50 m roll)	M968	



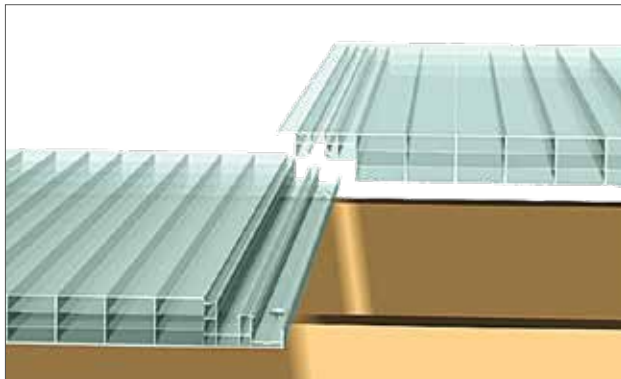
Click 16 assembly sequence



- Close the ends of the Click 16 sheet with the adhesive aluminium tape.



- Fix the panel with a screw on each purlin.



- Join the next panel, taking care to match the male / female profiles before applying pressure. Ensure that the panel is fixed.



- Finish with border trim in aluminium or steel (not supplied).



Storage and handling



KEEP SHEETS OUT OF THE RAIN

Sheets should be stored in a dry area to reduce the risk of condensation forming inside the cells.



KEEP SHEETS OUT OF THE SUN

Whilst storing sheets with the protective film still intact, it is advised to keep material away from direct sunlight, as a build up in temperature can make the protective film difficult to remove.



SHEET HANDLING

Sheets should be handled with care to avoid damage in terms of impact or scratching, which could compromise the performance of the material.



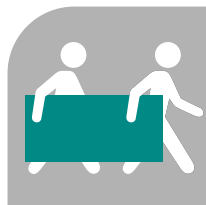
SHEET STORAGE

Up to three pallets or packs can be stored on top of each other. However, in order to avoid the sheets coming into contact with potentially damaging objects, spacers or planks should be placed in between each pallet or pack.



USING LIFT TRUCKS

A forklift truck with forks which can be spaced at least 2m apart is recommended for safe and easy handling of pallets or packs. Exercise caution during handling of the load and avoid sudden movements so to keep the load evenly across the forks.



HANDLING BY HAND

When handling individual sheets manually, two people should carry each sheet on its side. Lifting a sheet cleanly off the pallet and lying it on its side against the pallet is highly recommended, as dragging a sheet against another may cause damage.



TECHNICAL MANUAL

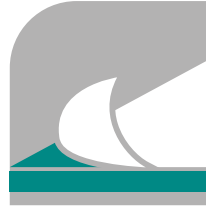
For installation and usage details of the products please refer to our technical manual.

Installation instructions



ALLOW FOR POLYCARBONATE'S THERMAL EXPANSION

At least one whole cell width should be allowed between fixings. An allowance for thermal expansion should be added to this measurement.



REMOVING PROTECTIVE FILM AFTER INSTALLATION

A printed film is applied to the external side of each sheet. Removal of this film is essential after installation of the product.



SHEET SEALING

Where sealing is necessary, only use silicone sealant, gaskets and paints which are strictly compatible with polycarbonate.



SHEET TAPING

It is necessary to seal the ends of each sheet with adhesive aluminium tape, in order to avoid any dirt, moisture or foreign objects entering the cells.



SHEET CUTTING

Sheets can be cut using most conventional machine saws with fine tooth sawblades, such as vertical, horizontal or circular cutters or reciprocating saws.



SHEET DRILLING

Sheets can easily be drilled, provided suitable drill bits are used. However, piercing the sheet with through fixings is not recommended unless suitable allowance for thermal expansion is given.

Maintenance



SHEET CLEANING

Cleaning at least twice per year with a non-alkaline water-based detergent is recommended. Do not use abrasive equipment or solvents which could easily damage the surface of the sheet.



DO NOT WALK ON TOP OF SHEETS

Do not walk directly on top of sheets during installation. A suitable supporting structure placed over the sheets to distribute weight evenly is recommended.

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cod. DC83 0003 / 10-2023