Modulit®

Macrolux® Systems

POLYCARBONATE SYSTEMS

More light for a better life

Stabilit
EUROPA

Stabilit Europa was created in 2000 as a subsidiary in Spain of Stabilit S.A. belonging to the Verzatec Group, one of the most important companies worldwide in the manufacture and marketing of plastic laminates, with more than 50 years of experience.

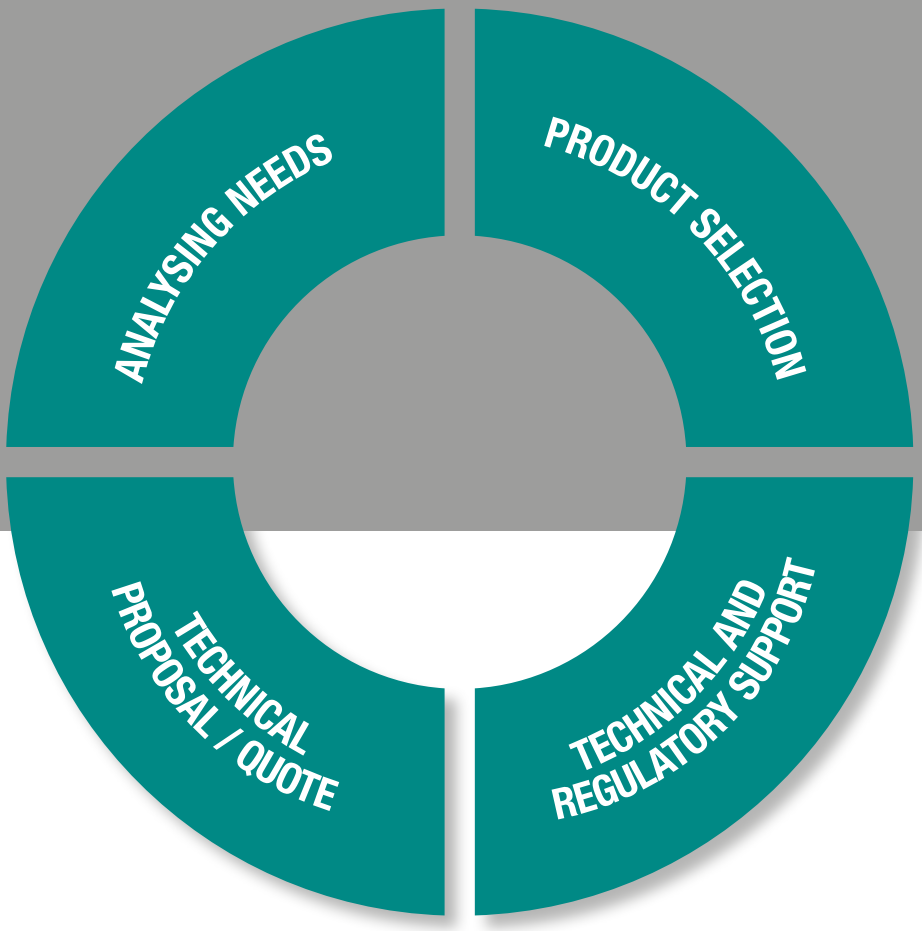
Stabilit Europa produces a wide range of translucent and opaque laminates, translucent to take advantage of natural light in all kind of buildings, and opaque for industrial coatings and for the automotive industry.

Stabilit Europa is a company that is distinguished by a philosophy of continuous improvement. Its leadership is based on the use of advanced technology in its equipment and production processes, as well as the high quality and variety of its products.

Stabilit Europa has been created to attend, provide service and provide the needs of the European market in this type of products.

Customer focus

Stabilit is a leader in promoting innovative solutions that anticipate customer demands and market trends, predicting future needs and staying at the cutting edge. **Stabilit Europa, s.l.u.** is the go-to partner for customers looking for a company who will be with them every step of the way, from the drawing board through to installation of the finished product.



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

step 1

ANALYSING NEEDS

The brief is the most delicate stage of the process. This is where initial ideas are bounced around to come up with possible solutions that will create the base of the project.

step 2

PRODUCT SELECTION

During this stage, customers draw on our team's expertise to decide on one or more potential solutions. Samples, technical data sheets and drawings make for creative, instructive sessions.

step 3

TECHNICAL AND REGULATORY SUPPORT

Every project has its technical and environmental restrictions. With our experience, we can help you choose the safest, most reliable solutions. It is common knowledge that regulations can dictate both technical and financial choices and hence require careful evaluation.

step 4

TECHNICAL PROPOSAL / QUOTE

This is the final stage of a joint process at which both the supplier and purchaser see the fruits of their efforts, rewarded by the mutual knowledge that this is the best solution. Stabilit's support doesn't end here: we are there to help you through the subsequent installation stages, too.

Assistance to ensure correct installation

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

We also provide assistance at the construction site, making sure the chosen products are installed correctly so you get the most out of them.

Our main objective is to achieve end customer satisfaction and see that each application stands as a showcase for everyone involved.

Product certification


ISTITUTO GIORDANO

RAPPORTO DI PROVA N. 235951


ÉMI

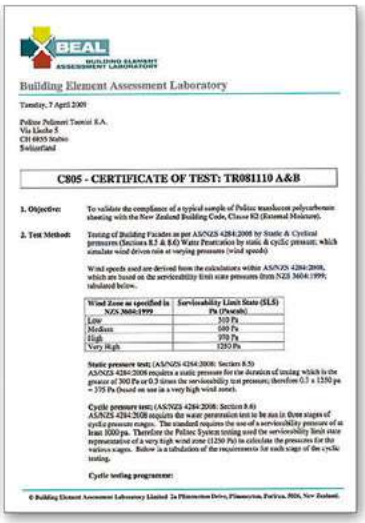
ÉME
ÉPÍTŐIPARI MŰSZAKI ENGEDÉLY


CSI

RAPPORTO DI CLASSIFICAZIONE
CLASSIFICATION REPORT
0412/DC\REA\14


Hoch

PRÜFZEUGNIS
PZ-Hoch-140230
zum Nachweis des Brandverhaltens nach DIN 4102, Teil 1


BEAL

Building Element Assessment Laboratory

C805 - CERTIFICATE OF TEST: TR081110 A&B


Avis Technique 2/12-1500*V1

Modulit 500 LP et
Modulit 338 LP


Applus laboratories

CLASIFICACIÓN

Clasificación de reacción al fuego: CLASE B-s1,d0

Stabilit products are certified by internationally accredited bodies and institutions, such as:

France: CSTB, LNE
Germany: Hoch
Hungary: ÉMI
Italy: CSI, Istituto Giordano
New Zealand: BEAL
Poland: ITB
Switzerland: FPC
USA: Architectural Testing
Spain: Applus + Laboratories

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

Company certification

UNI EN ISO 9001 certification

Our UNI EN ISO 9001 certification provides assurance in terms of quality, service and the testing of the raw materials we use, requiring us to meet stringent production standards and comply with strict control procedures.

Polycarbonate

Transparency 89%

Dimensional stability from -40°C to +130°C

High impact resistance from -20°C to +125°C

Self-extinguishing (oxygen index 28%)

Low creep

Low density (1,21 g/cm³)

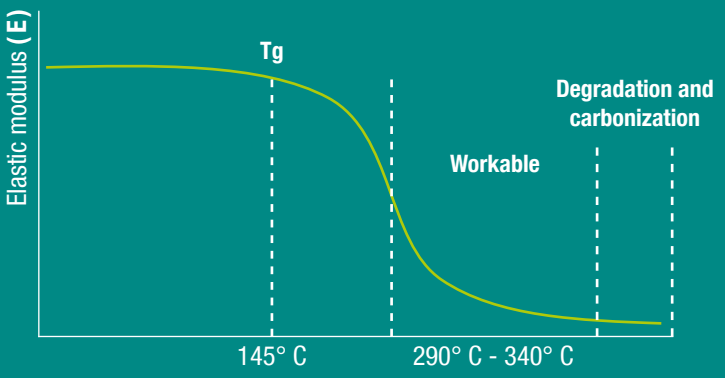
Excellent thermal and electric insulation

Extremely low moisture absorption (0,3%)

Good UV resistance

Morphological structure

Amorphous Aromatic Polymer
Polyester Family
Just one Tg a 138°C ~ 145°C



E_{glass} = *70000 N/mm²* - E_{PC} = *2300 N/mm²* - E_{ALU} = *7200 N/mm²*

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 thermobending
Visual adaptability	option of colouring with increasing degrees
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	flammability, thermal insulation, loads
LCA (Life Cycle Assessment)	favourable and totally recyclable at end of life cycle

■ *Choosing the right solvent is essential to avoid damaging the polymer*

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.

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)		0,65	$10^{-4}/K$	ISO 11359-2
Thermal conductivity		0,20	W/(m K)	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	2.300	3.200	3.200	2.450	6.000	70.000
Linear thermal expansion	1/°C	$6,5 \times 10^{-5}$	$7,5 \times 10^{-5}$	$6,7 \times 10^{-5}$	$5,0 \times 10^{-5}$	$3,2 \times 10^{-5}$	$0,9 \times 10^{-5}$
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	good	good	poor	fireproof
Resistance to weathering	-	good	very good	poor	fair	poor	excellent
Chemical compatibility	-	fair	fair	good	good	good	very good

Modulit®

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Modulit®

Quick and easy to assemble

High temperature insulation

Excellent impact resistance

Good light transmission

Good fire performance

Certified quality guarantee

UV protection

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 anodized aluminium, hooks and gaskets, making the system complete, versatile and secure against outside loads and provides weather resistance.

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.

UV protection

Applying UV Absorber protection stops polycarbonate from absorbing UV rays that would otherwise lead to its rapid degradation and be responsible for subsequent yellowing and for undermining 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.

Warranty

The panels 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, (unit of measure $W/m^2 K$) is the mean flow of heat per m^2 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 Europa, s.l.u.** is at the cutting edge when it comes to providing its customers with the most appropriate solutions in compliance with current standards.

Thermal expansion

Thermal expansion is a characteristic property of materials that consists in their tendency to change in size as temperature increases. This expansion is quantified via a coefficient that, in the case of polycarbonate, equates to 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

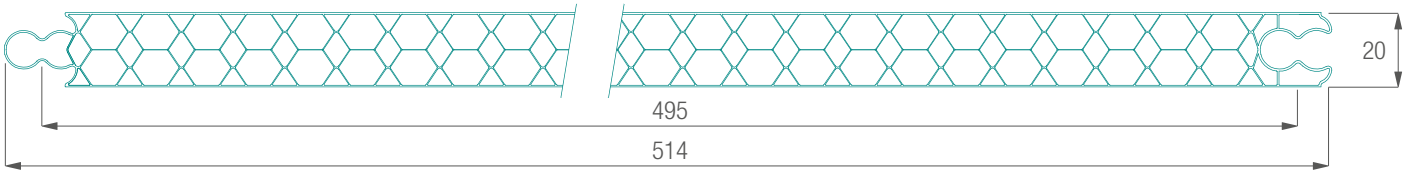
Proper lighting design entails ensuring that the building interior receives the required amount of light. So it is clearly important to use panels that let enough light through. The **Modulit®** product range gives you plenty of choice at the design stage of your project, with an array of colour options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

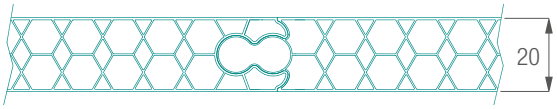
Modulit® 520 HC

Modulit® 520HC 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 in anodized aluminium complete the fixing structure. Easy and economical installation, **Modulit® 520HC** allows excellent light transmission, high load resistance and thermal insulation.

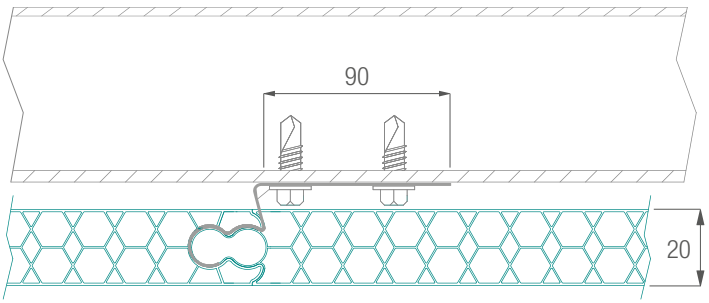
PLUS

UV PROTECTED WALL





section panel / panel joining



section panel /hook / panel joining

Modulit® 520 HC technical data			
Thickness	20 mm		
Structure	Honeycomb		
Module width	495 mm		
Length	Upon request		
Thermal transmittance	2,0 W/m^2 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		

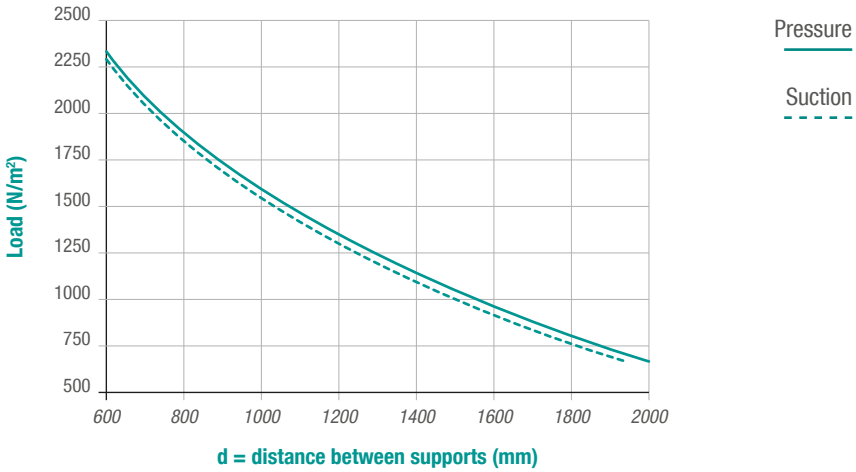
SPECIFICATIONS

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

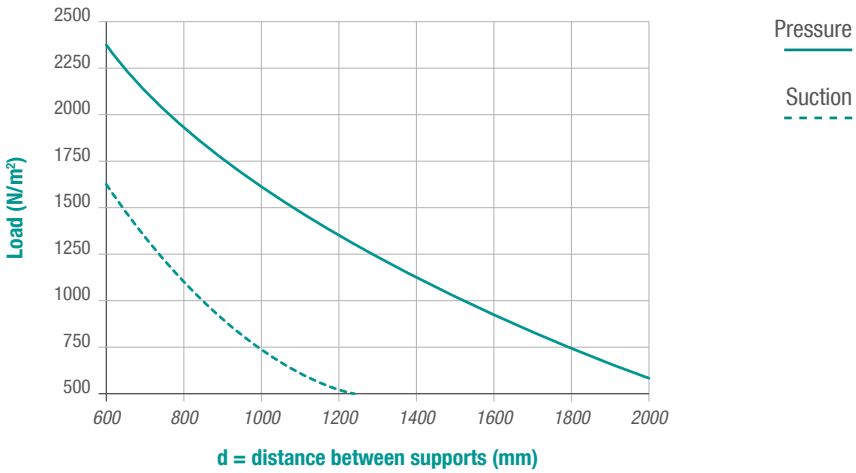
- Multiwall polycarbonate panel, coextruded UV-protection on the outer surface, honeycomb structure 20 mm thickness, certified thermal transmittance 2,0 W/m² K, clear colour (other colours available on request), edges closed with aluminium tape; dimensions: module width 495 mm, length upon request; 10-year warranty.
- Perimeter anodized aluminium profiles, silver finish minimum 15 micron (or raw profiles on request).
- External gasket in EPDM rubber.
- Stainless steel fixing hook (if required).

Modulit® 520 HC load tables

Load chart with 2 supports



Load chart with 3 or more supports

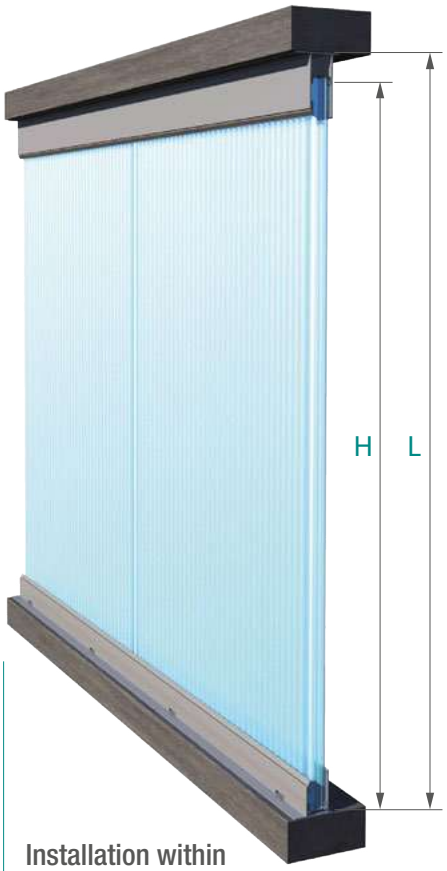


The load tables refer to the breakage load value of the system, i.e. the lowest value between: the collapse of the panel, failure of the frame or the panel springing out of its housing. The designer will check the actual loads acting on the system as well as the coefficients of amplification and safety 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 Technical Office.

Installation options

Installation within supports with bottom sill

H = L - 40 mm
(simple profiles)



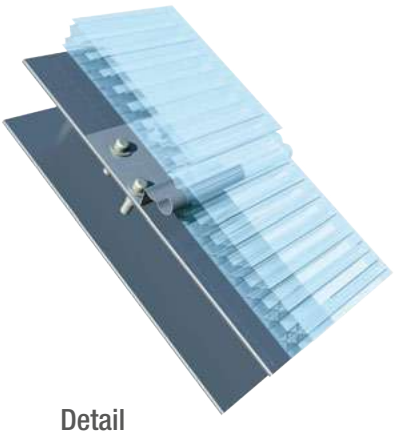
Installation within supports without bottom sill

H = L - 40 mm
(simple profiles)

L = *net space between supports* H = *panel height*

Detail
of the upper profile

Detail
of the lower profile
with sill

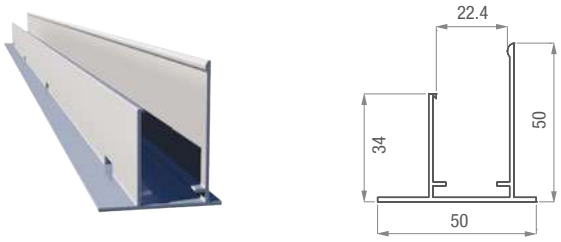


Detail
of the panel fixing
with hook

Modulit® 520 HC accessories

Simple profile
upper / side anodized aluminium profile

cod. M9V1

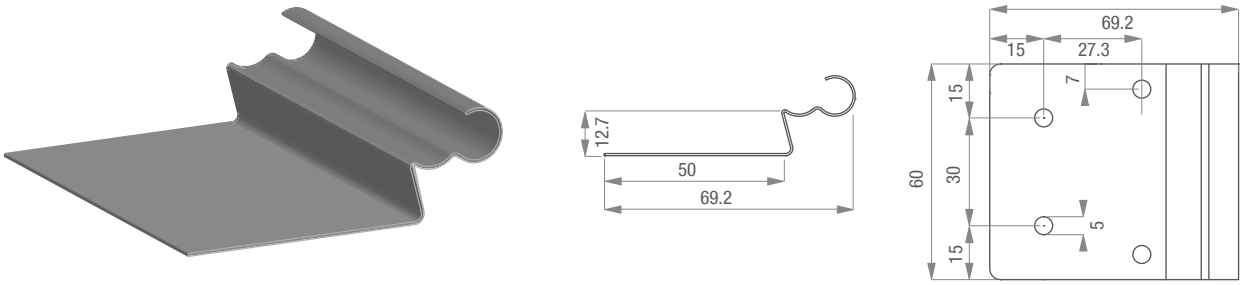


Simple profile
lower anodized aluminium profile

cod. M9V2

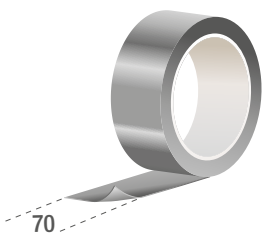
Simple profile
Lower anodized aluminium profile with sill

cod. M9V3



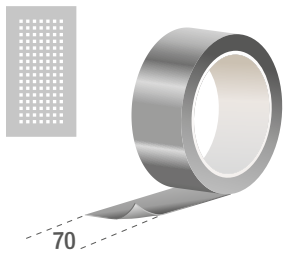
Steel hook

cod. M9V8



Aluminium adhesive tape
(50 m roll)

cod. M966



Perforated aluminium
adhesive tape (50 m roll)

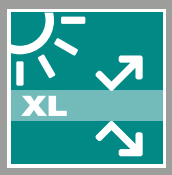
cod. M970

EPDM gasket

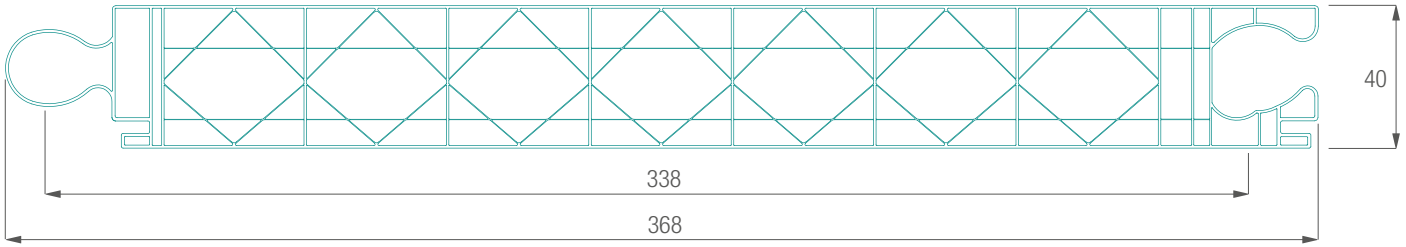
cod. M926

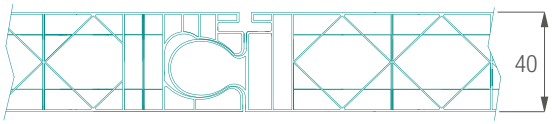
Modulit® 338 LP

Modulit® 338LP 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 for a perfect fit; perimeter profiles in anodized aluminium complete the fixing structure. Easy and economical installation, **Modulit® 338LP** allows excellent light transmission, high load resistance and thermal insulation.

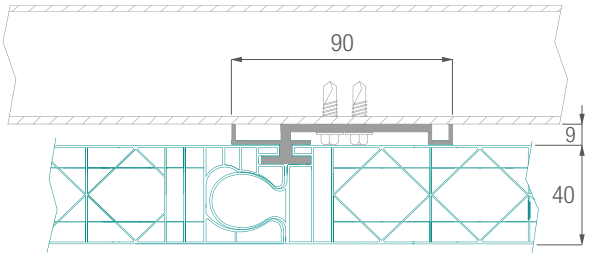


UV PROTECTED WALL





section panel / panel joining



section panel / hook / panel joining

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)	68%	61%
	Opal (8121)	47%	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		

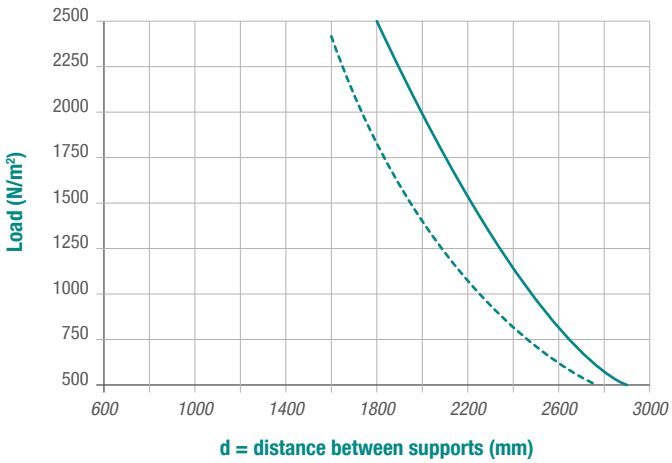
SPECIFICATIONS

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

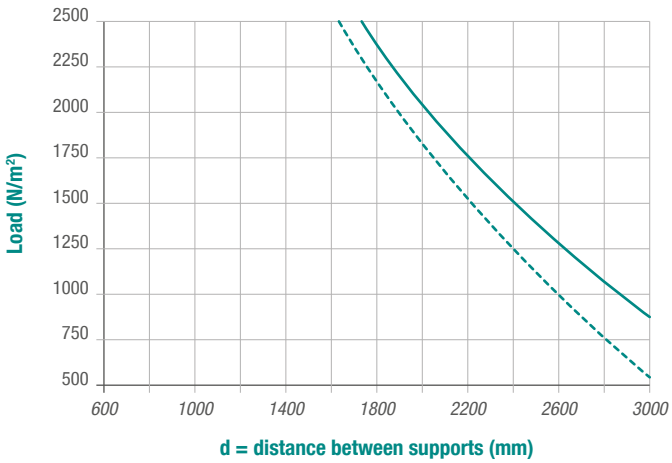
- Polycarbonate multiwall panel, external co-extruded UV-protection, diagonal 6 wall structure, 40 mm thickness, certified thermal transmittance 1,3 W/m² K, clear colour (other colours available on request), edges closed with aluminium tape; dimensions: module width 338 mm, length upon request; 10-year warranty.
- Perimeter anodized aluminium profiles, silver finish minimum 15 micron (or raw profiles on request) or alternatively thermal cut anodized aluminium perimeter profiles, silver finish minimum 15 micron (or raw profiles on request).
- External gaskets in EPDM rubber.
- Aluminium hook (if required).

Modulit® 338 LP load charts

Load chart with 2 supports



Load chart with 3 or more supports



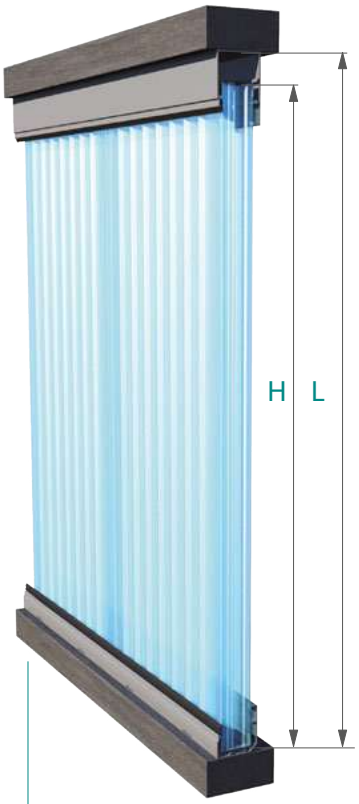
The load tables refer to the breakage load value of the system, i.e. the lowest value between: the collapse of the panel, failure of the frame or the panel springing out of its housing. The designer will check the actual loads acting on the system as well as the coefficients of amplification and safety 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 Technical Office.

Installation options

Installation within
supports with bottom sill

H = L - 40 mm
(simple profiles)

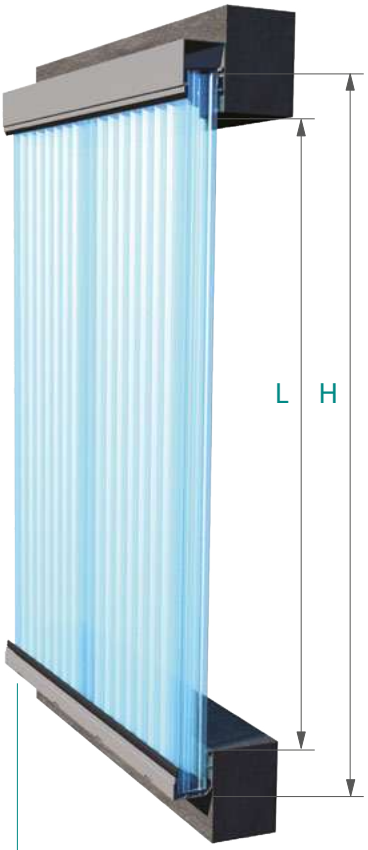
H = L - 95 mm
(thermal cut profiles)



Installation within
supports without bottom sill

H = L - 35 mm
(simple profiles)

H = L - 95 mm
(thermal cut profiles)



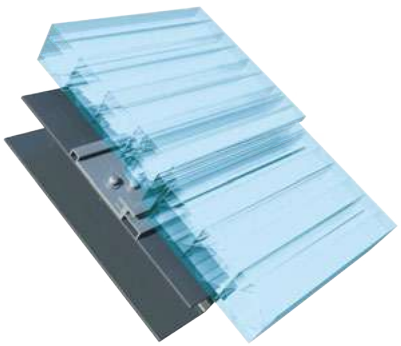
External installation
without sill

H = L + 108 mm
(simple profiles)

H = L + 135 mm
(thermal cut profiles)

L = *net space between supports* H = *panel height*

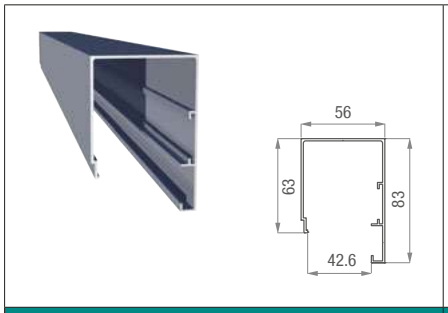
Detail
of the lower profile
with sill



Detail
of the panel fixing
with hook

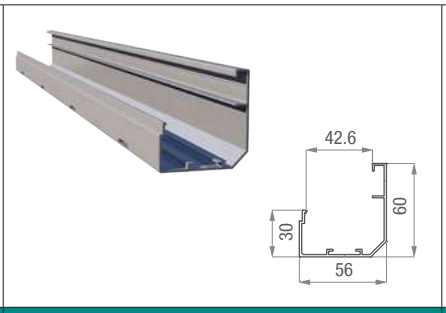
Detail
of the upper profile

Modulit® 338 LP accessories



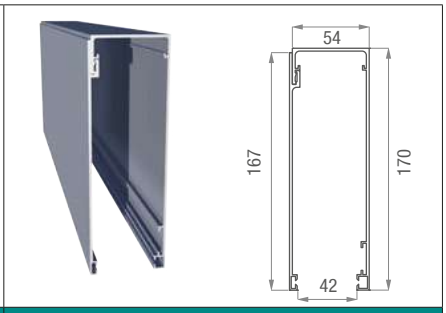
Simple profile
upper / side anodized aluminium profile

cod. M987



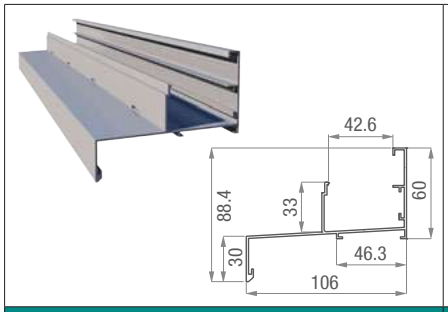
Simple profile
lower anodized aluminium profile

cod. M989



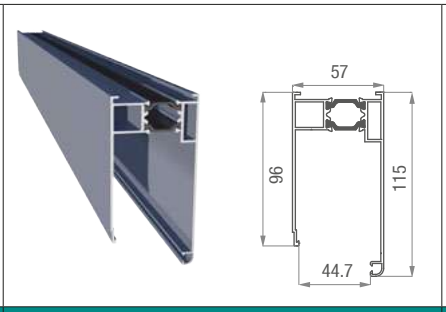
Simple profile
"high" upper anodized aluminium profile

cod. M9S4 + M9S6



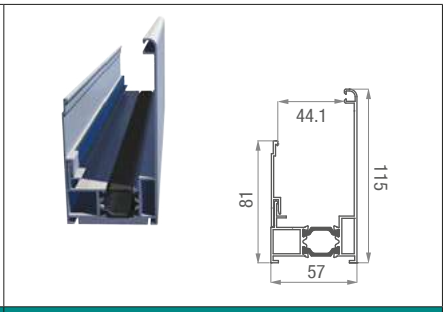
Simple profile
lower anodized aluminium profile with sill

cod. M988



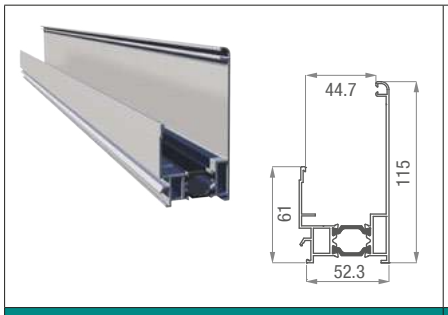
Thermal cut profile
upper in anodized aluminium

cod. M9D2



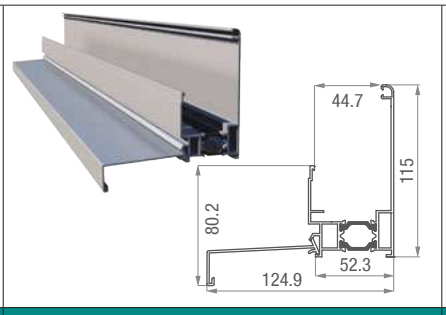
Thermal cut profile
side anodized aluminium profile

cod. M9D3 + M9D4



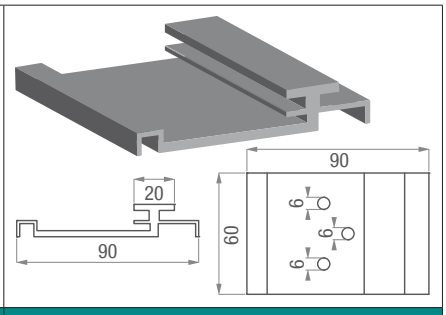
Thermal cut profile
lower anodized aluminium profile

cod. M9D1



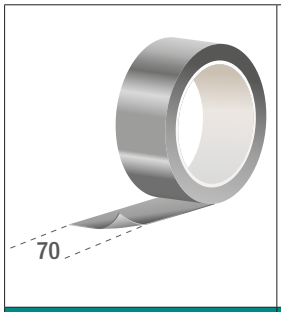
Thermal cut profile
lower anodized aluminium with sill

cod. M9D1 + M9D5



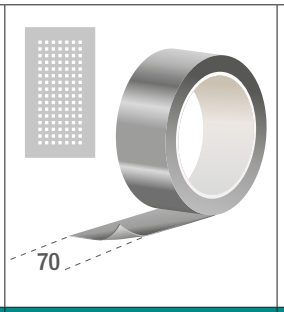
Aluminium hook

cod. M9V9



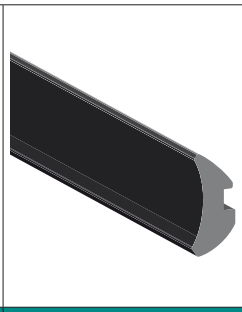
Aluminium adhesive tape
(50 m roll)

cod. M966



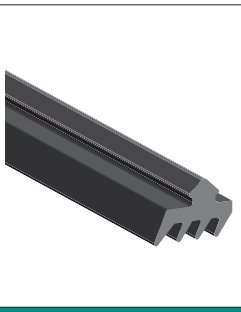
Perforated aluminium
adhesive tape (50 m roll)

cod. M970



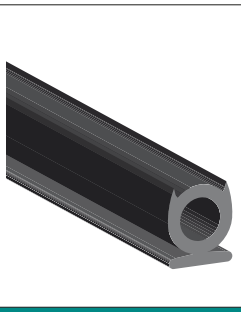
EPDM gasket for simple
and thermal cut profiles

cod. M998 - cod. M926



EPDM gasket
(3 mm thickness)

cod. M9S5

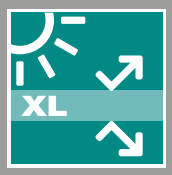


EPDM gasket
for "high" upper profile

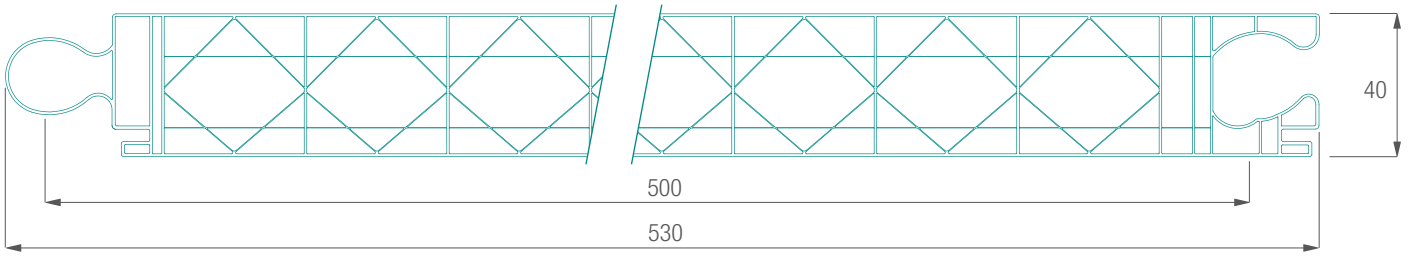
cod. M913

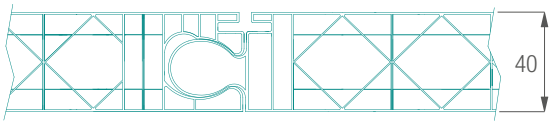
Modulit® 500 LP

Modulit® 500LP 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 for a perfect fit; perimeter profiles in anodized aluminium complete the fixing structure. Easy and economical installation, **Modulit® 500LP** allows excellent light transmission, high load resistance and thermal insulation.

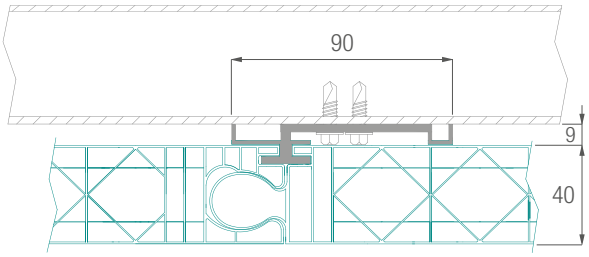


UV PROTECTED WALL





section panel / panel joining



section panel / hook / panel joining

Modulit® 500 LP technical data			
Thickness	40 mm		
Structure	6 walls		
Module width	500 mm		
Length	Upon request		
Thermal transmittance	1,3 W/m² K		
Colours		**LT**	**G Value**
	Clear (8005)	68%	61%
	Opal (8121)	47%	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		

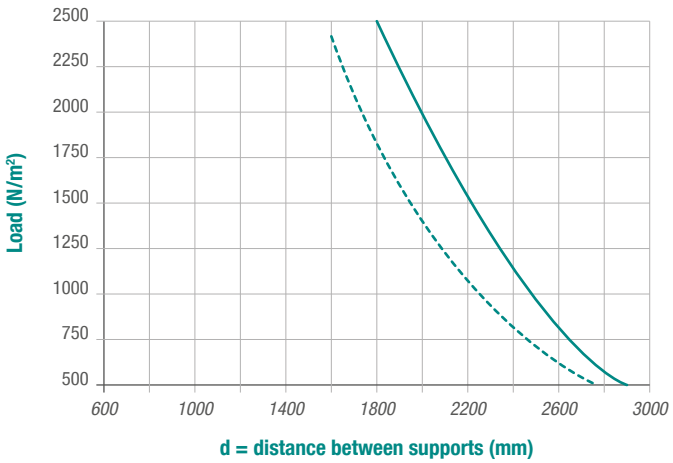
SPECIFICATIONS

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

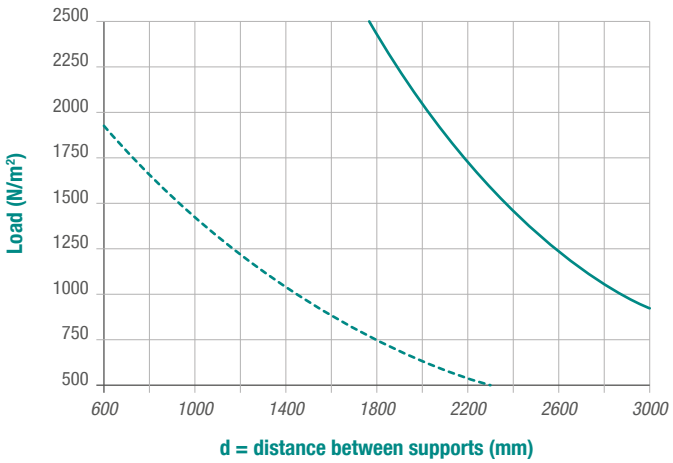
- Polycarbonate multiwall panel, external co-extruded UV-protection, diagonal 6 wall structure, 40 mm thickness, certified thermal transmittance 1,3 W/m² K, clear colour (other colours available on request), edges closed with aluminium tape; dimensions: module width 500 mm, length upon request; 10-year warranty.
- Perimeter anodized aluminium profiles, silver finish minimum 15 micron (or raw profiles on request) or alternatively thermal cut anodized aluminium perimeter profiles, silver finish minimum 15 micron (or raw profiles on request).
- External gaskets in EPDM rubber.
- Aluminium hook (if required).

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 Technical Office.

Installation options

Installation within supports with bottom sill

H = L - 40 mm
(simple profiles)

H = L - 95 mm
(thermal cut profiles)

Installation within supports without bottom sill

H = L - 35 mm
(simple profiles)

H = L - 95 mm
(thermal cut profiles)

External installation without sill

H = L + 108 mm
(simple profiles)

H = L + 135 mm
(thermal cut profiles)

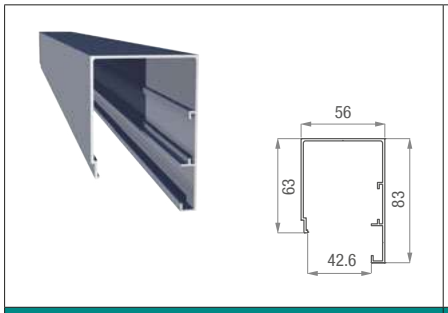
L = *net space between supports* H = *panel height*

Detail
of the upper
thermal cut profile

Detail
of the lower
thermal cut profile with sill

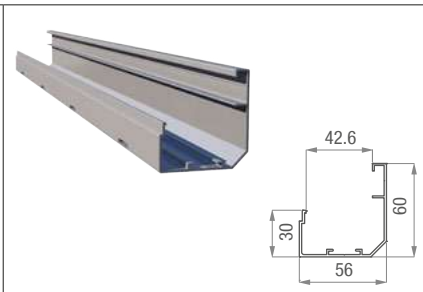
Detail
of the side
thermal cut profile

Modulit® 500 LP accessories



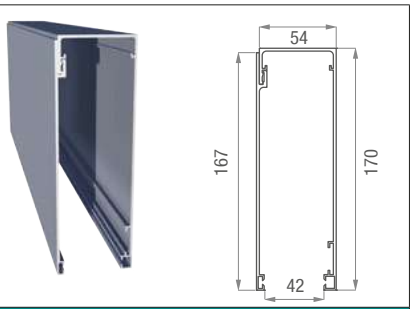
Simple profile
upper / side anodized aluminium profile

cod. M987



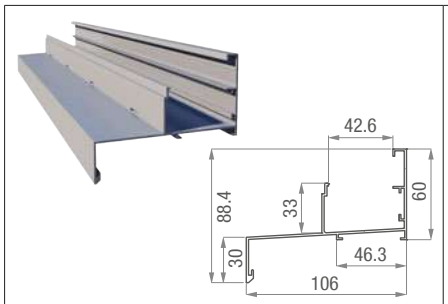
Simple profile
lower anodized aluminium profile

cod. M989



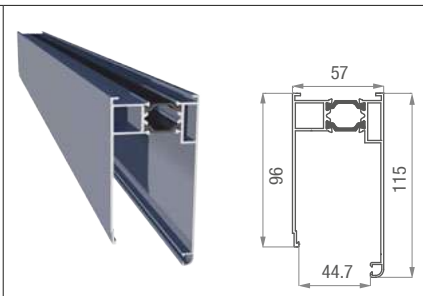
Simple profile
"high" upper anodized aluminium profile

cod. M9S4 + M9S6



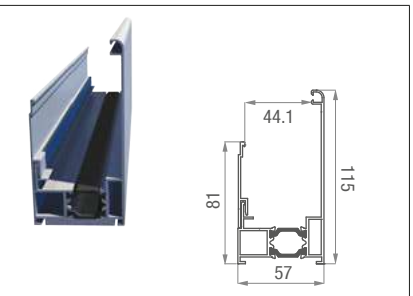
Simple profile
lower anodized aluminium profile with sill

cod. M988



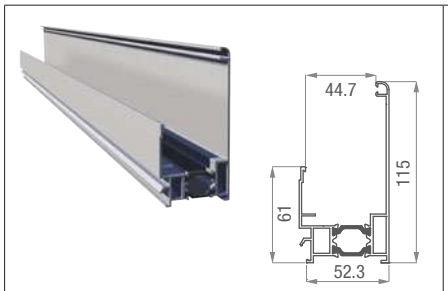
Thermal cut profile
upper anodized aluminium profile

cod. M9D2



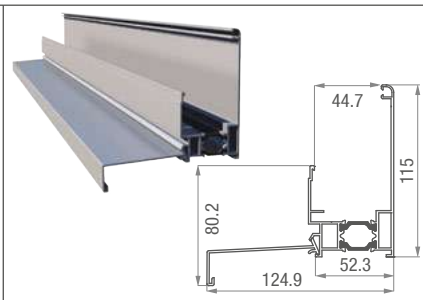
Thermal cut profile
side anodized aluminium profile

cod. M9D3 + M9D4



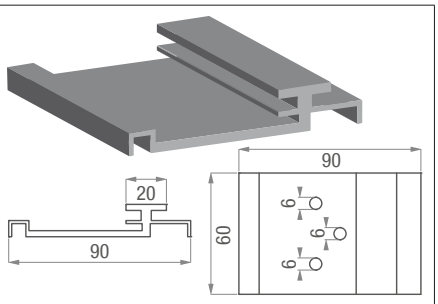
Thermal cut profile
lower anodized aluminium profile

cod. M9D1



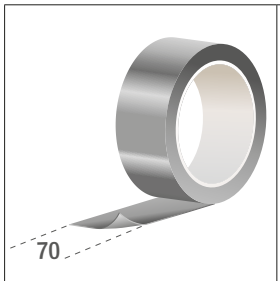
Thermal cut profile
lower anodized aluminium with sill

cod. M9D1 + M9D5



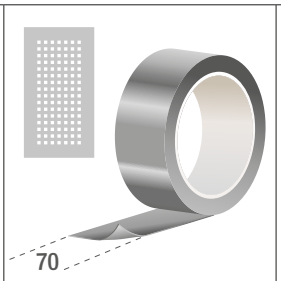
Aluminium hook

cod. M9V9



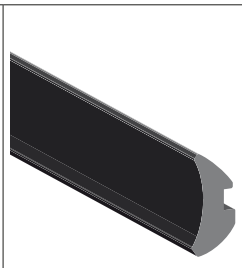
Aluminium adhesive tape
(50 m roll)

cod. M966



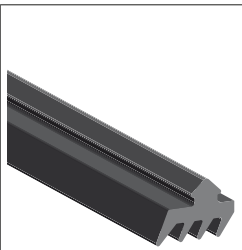
Perforated aluminium
adhesive tape (50 m roll)

cod. M970



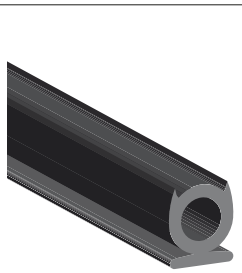
EPDM gasket for simple
and thermal cut profiles

cod. M998 - cod. M926



EPDM gasket
(3 mm thickness)

cod. M9S5

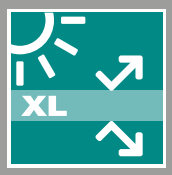


EPDM gasket
for "high" upper profile

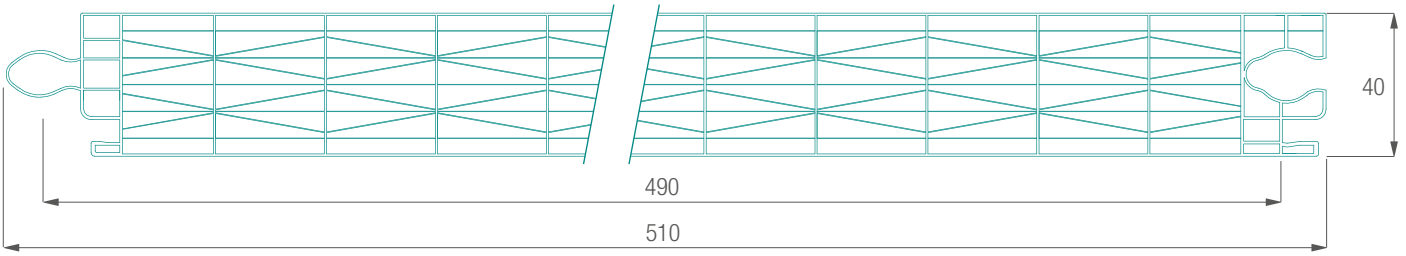
cod. M913

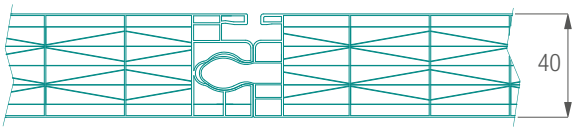
Modulit® 511 LP 40 mm

Modulit® 511LP 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 / 50 / 55 / 60 mm, module width from 490 mm to 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 anodized aluminium complete the fixing structure. Easy and economical installation, **Modulit® 511LP** allows excellent light transmission, high load resistance and thermal insulation.

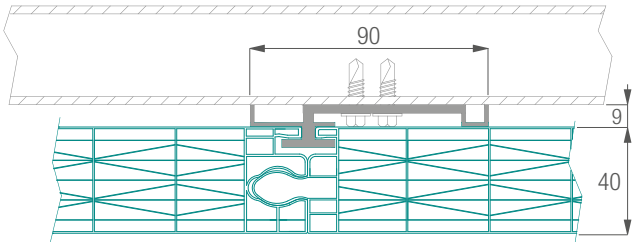


UV PROTECTED WALL





section panel / panel joining



section panel / hook / panel joining

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/m² K		
Colours		**LT**	**G Value**
	Clear (8005)	40%	59%
	Opal (8121)	22%	40%
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 s2 d0		

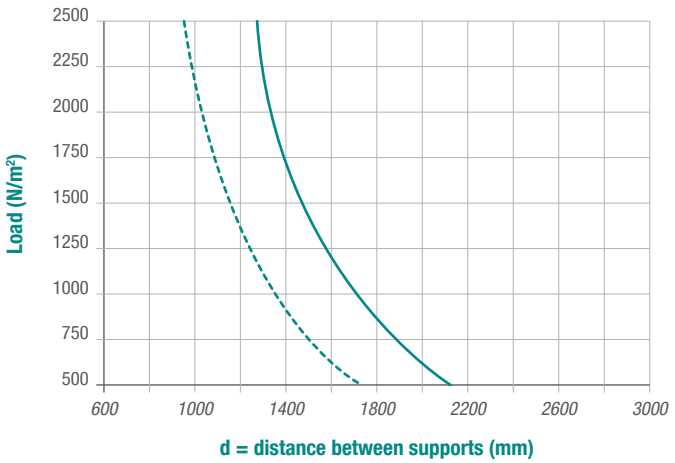
SPECIFICATIONS FOR MODULIT® 511 LP - 40 mm

Construction of **Modulit® 511 LP - 40 mm**
translucent wall system consisting of:

- 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 anodized aluminium profiles, silver finish minimum 15 micron (or raw profiles on request) or alternatively thermal cut anodized aluminium perimeter profiles, silver finish minimum 15 micron (or raw profiles on request).
- External gaskets in EPDM rubber.
- Aluminium hook (if required).

Modulit® 511 LP 40 mm load charts

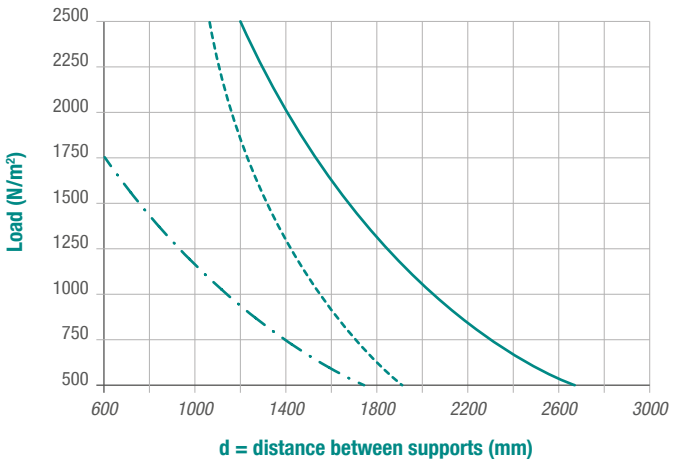
Load chart with 2 supports



Pressure / Suction
(max deflection 1/50)

Pressure / Suction
(max deflection 1/100)

Load chart with 3 or more supports



Pressure
(max deflection 1/50)

Pressure
(max deflection 1/100)

Suction
(max deflection 1/100)

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 Technical Office.

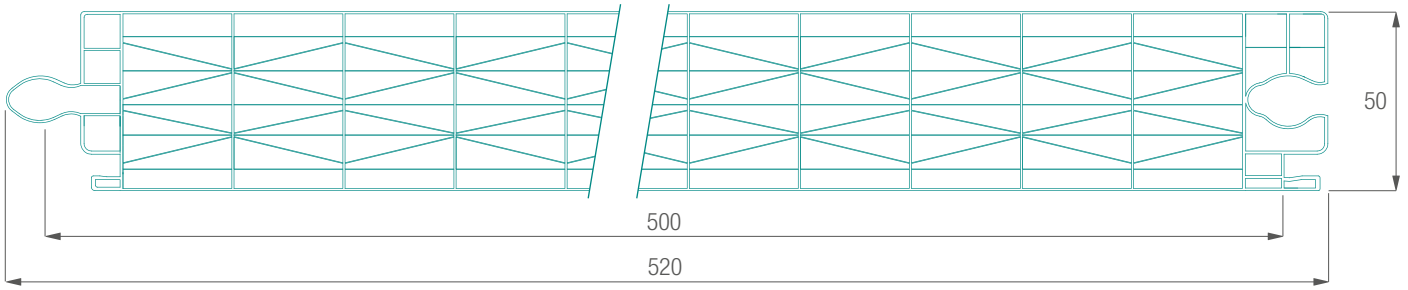
Modulit® 511 LP 50 mm

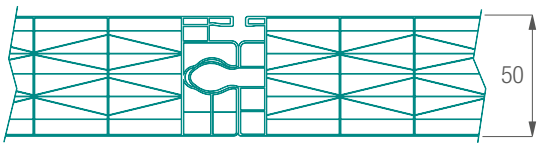
SPECIFICATIONS FOR MODULIT® 511 LP - 50 mm

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

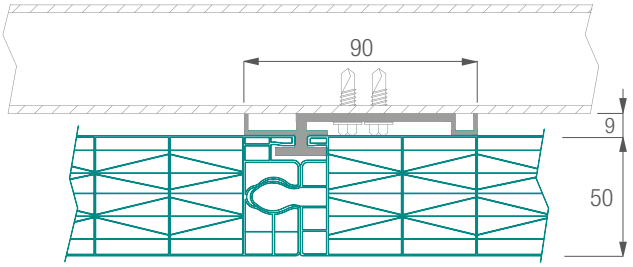
- Polycarbonate multiwall panel, external co-extruded UV-protection, 11 wall structure, 50 mm thickness, thermal transmittance 0,91 W/m² K, clear colour (other colours available on request).
- Edges closed with aluminium tape; dimensions: module width 500 mm, length upon request; 10-year warranty.
- Perimeter anodized aluminium profiles, silver finish minimum 15 micron (or raw profiles on request) or alternatively thermal cut anodized aluminium perimeter profiles, silver finish minimum 15 micron (or raw profiles on request).
- External gaskets in EPDM rubber.
- Aluminium hook (if required).

UV PROTECTED WALL





section panel / panel joining



section panel / hook / panel joining

Modulit® 511 LP - 50 mm technical data			
Thickness	50 mm		
Structure	11 walls		
Module width	500 mm		
Length	Upon request		
Thermal transmittance	0,91 W/m² K		
Colours		**LT**	**G Value**
	Clear (8005)	36%	56%
	Opal (8121)	20%	38%
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 s2 d0		

Modulit® 511 LP

55 mm

XL

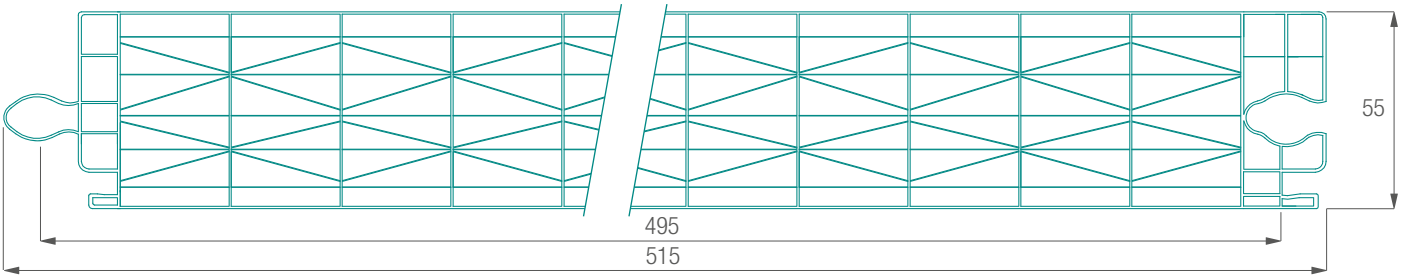
PLUS

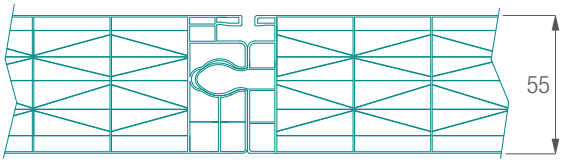
SPECIFICATIONS FOR MODULIT® 511 LP - 55 mm

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

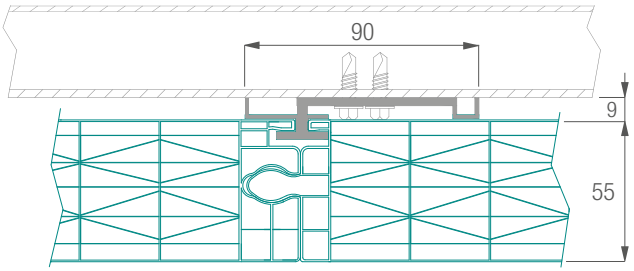
- Polycarbonate multiwall panel, external co-extruded UV-protection, 11 wall structure, 55 mm thickness, thermal transmittance 0,83 W/m² K, clear colour (other colours available on request).
- Edges closed with aluminium tape; dimensions: module width 495 mm, length upon request; 10-year warranty
- Perimeter anodized aluminium profiles, silver finish minimum 15 micron (or raw profiles on request) or alternatively thermal cut anodized aluminium perimeter profiles, silver finish minimum 15 micron (or raw profiles on request).
- External gaskets in EPDM rubber.
- Aluminium hook (if required)

UV PROTECTED WALL





section panel / panel joining



section panel / hook / panel joining

Modulit® 511 LP - 55 mm technical data			
Thickness	55 mm		
Structure	11 walls		
Module width	495 mm		
Length	Upon request		
Thermal transmittance	0,83 W/m² K		
Colours		**LT**	**G Value**
	Clear (8005)	36%	55%
	Opal (8121)	20%	38%
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 s2 d0		

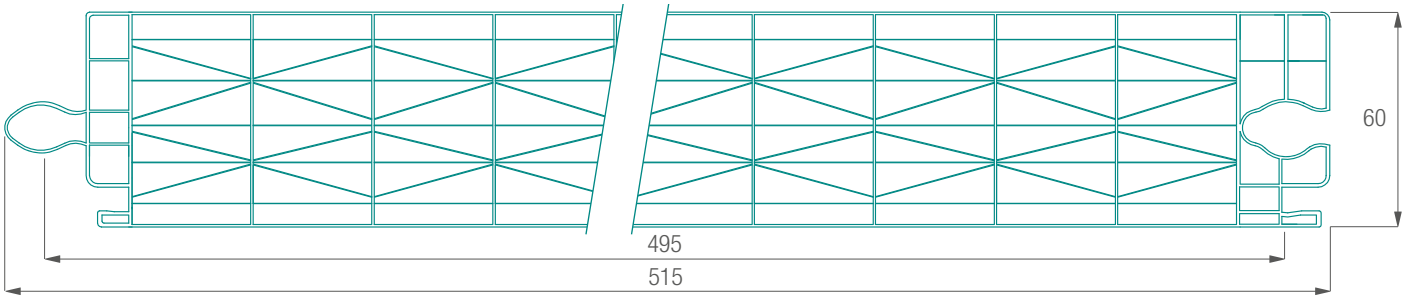
Modulit® 511 LP 60 mm

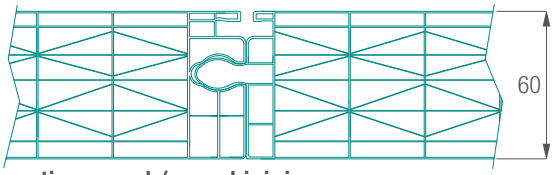
SPECIFICATIONS FOR MODULIT® 511 LP - 60 mm

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

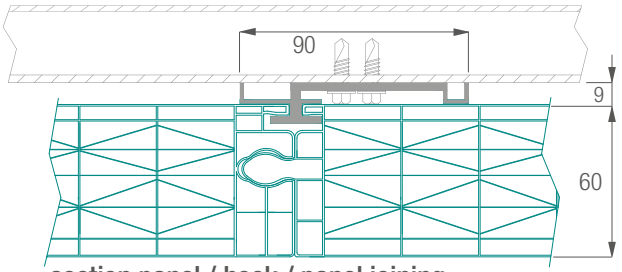
- Polycarbonate multiwall panel, external co-extruded UV-protection, 11 wall structure, 60 mm thickness, thermal transmittance 0,79 W/m² K, clear colour (other colours available on request).
- Edges closed with aluminium tape; dimensions: module width 495 mm, length upon request; 10-year warranty.
- Perimeter anodized aluminium profiles, silver finish minimum 15 micron (or raw profiles on request) or alternatively thermal cut anodized aluminium perimeter profiles, silver finish minimum 15 micron (or raw profiles on request).
- External gaskets in EPDM rubber.
- Aluminium hook (if required)

UV PROTECTED WALL





section panel / panel joining



section panel / hook / panel joining

Modulit® 511 LP - 60 mm technical data			
Thickness	60 mm		
Structure	11 walls		
Module width	495 mm		
Length	Upon request		
Thermal transmittance	0,79 W/m² K		
Colours		**LT**	**Value G**
	Clear (8005)	35%	53%
	Opal (8121)	18%	36%
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 E		

Installation options

Installation within supports
with bottom sill

H = L - 40 mm
(simple profiles)

H = L - 95 mm
(thermal cut profiles)

Installation within supports
without bottom sill

H = L - 35 mm
(simple profiles)

H = L - 95 mm
(thermal cut profiles)

External installation
without sill

H = L + 108 mm
(simple profiles)

H = L + 135 mm
(thermal cut profiles)

L = *net space between supports*

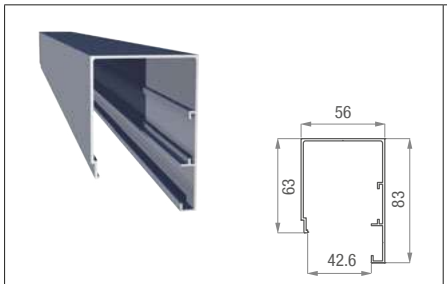
H = *panel height*

Detail
of the upper
thermal cut profile

Detail
of the lower
thermal cut profile with sill

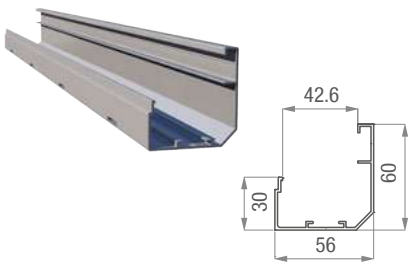
Detail
of the side
thermal cut profile

Modulit® 511 LP - 40 mm accessories



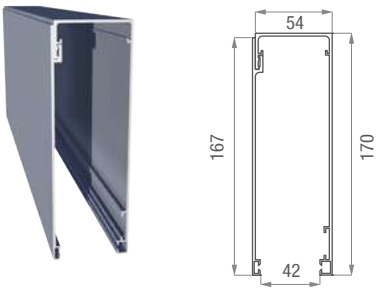
Simple profile
upper / side anodized aluminium profile

cod. M987



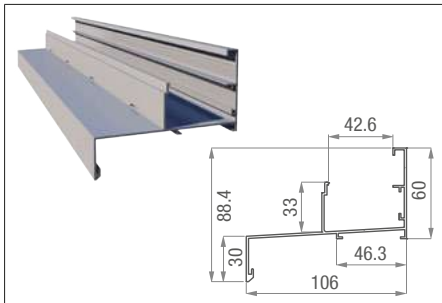
Simple profile
lower anodized aluminium profile

cod. M989



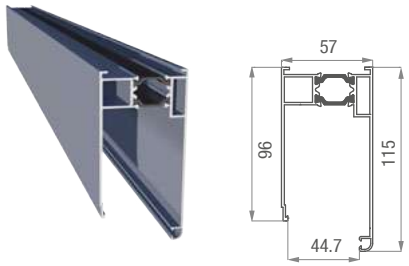
Simple profile
"high" upper anodized aluminium profile

cod. M9S4 + M9S6



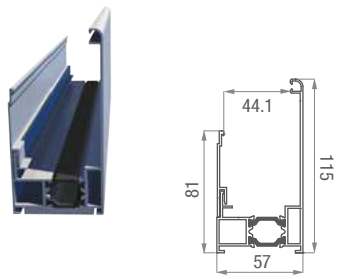
Simple profile
lower anodized aluminium profile with sill

cod. M988



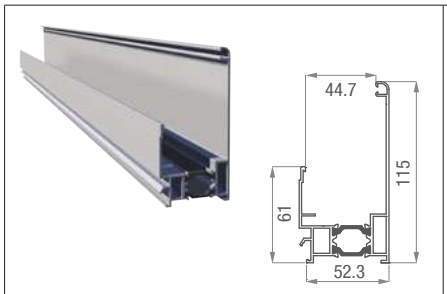
Thermal cut profile
upper anodized aluminium profile

cod. M9D2



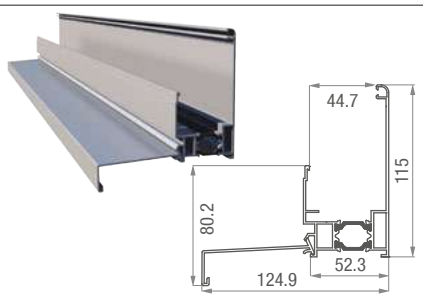
Thermal cut profile
side anodized aluminium profile

cod. M9D3 + M9D4



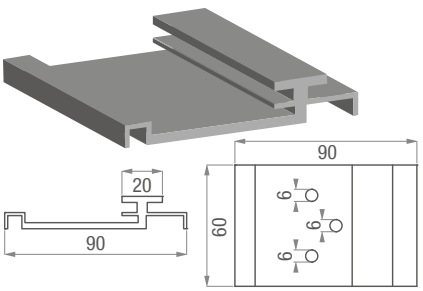
Thermal cut profile
lower anodized aluminium profile

cod. M9D1



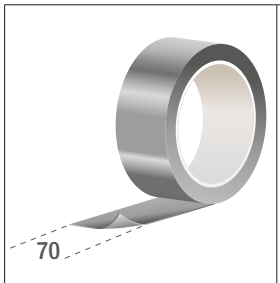
Thermal cut profile
lower anodized aluminium with sill

cod. M9D1 + M9D5



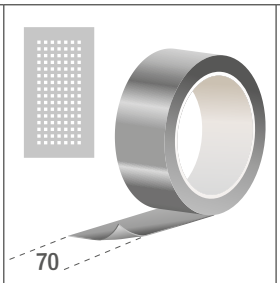
Aluminium hook

cod. M9V9



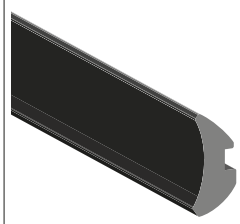
Aluminium adhesive tape
(50 m roll)

cod. M966



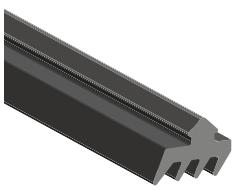
Perforated aluminium
adhesive tape (50 m roll)

cod. M970



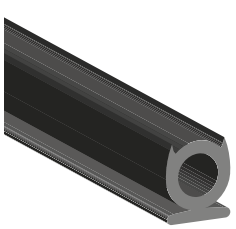
EPDM gasket for simple
and thermal cut profiles

cod. M998 - cod. M926



EPDM gasket
(3 mm thickness)

cod. M9S5



EPDM gasket for "high"
upper profile

cod. M913

Integrated gasket

Excellent transparency that renders the gasket indistinguishable from the panel

Improved air and water tightness

Flexibility

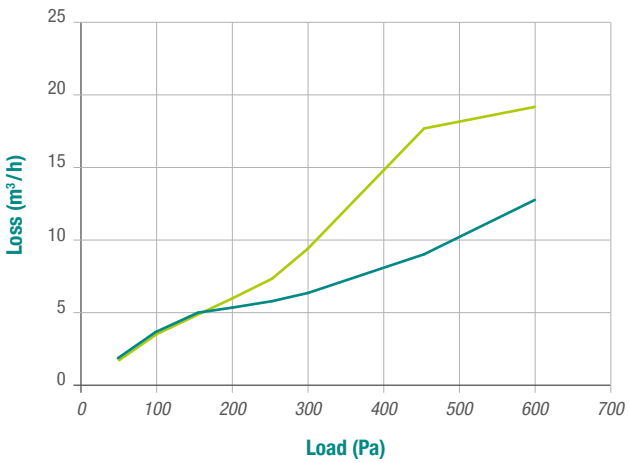
UV Resistant

Perfect integration provided by "male / female" joint

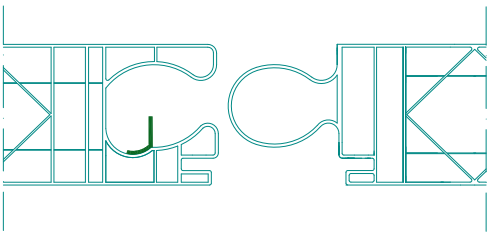
The integrated transparent gasket is exclusive to Stabilit Europa s.l.u. This element, which doesn't limit the light transmission of the panel and doesn't create unsightly lines of different colours, adapts to different shapes of the product to which it is applied, improving the performances of air and water resistance.

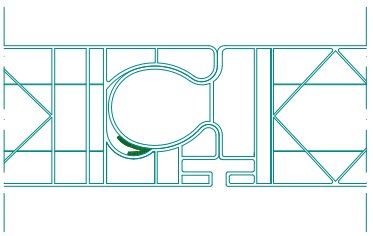
Air penetration test (EN 12153)

Under pressure



WITHOUT gasket
WITH gasket





NOTE: 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.

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.

Modulit®
Opening window

Perfectly integrated into the system

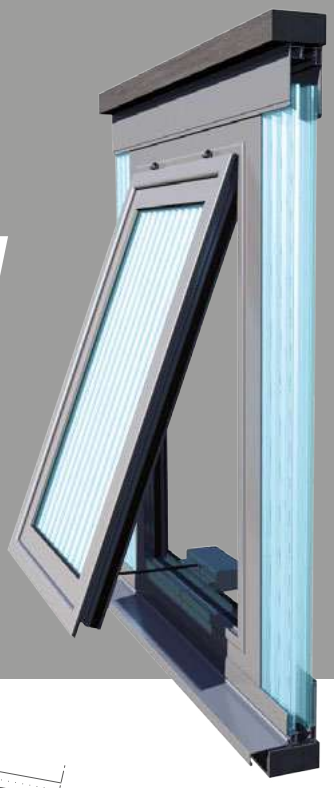
Ease and economical installation

Thermal insulation

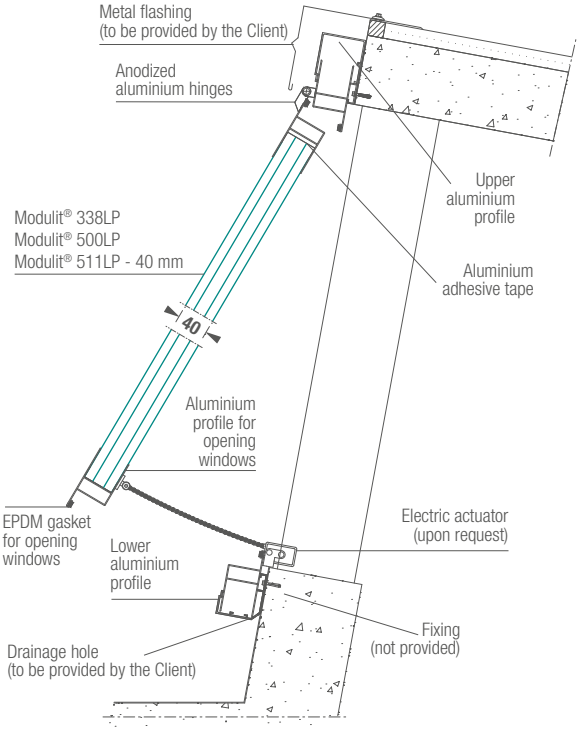
Electric opening

Aluminium hinges

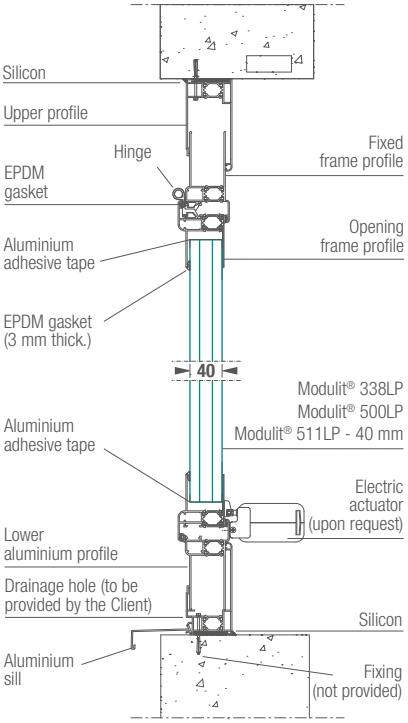
Closure gaskets in EPDM



All **Modulit®** systems (till 40 mm thickness) 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 (Stabilit provides only the electric actuator).



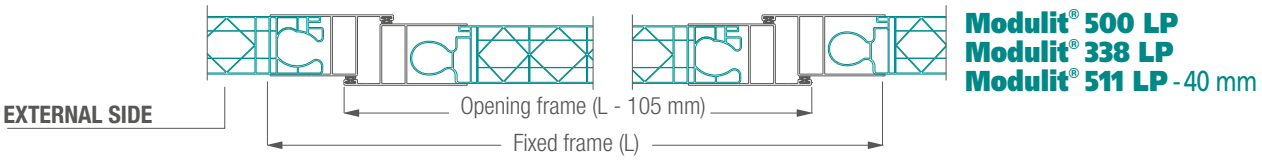
Vertical section - sloped shed - with simple profiles, 40 mm thickness



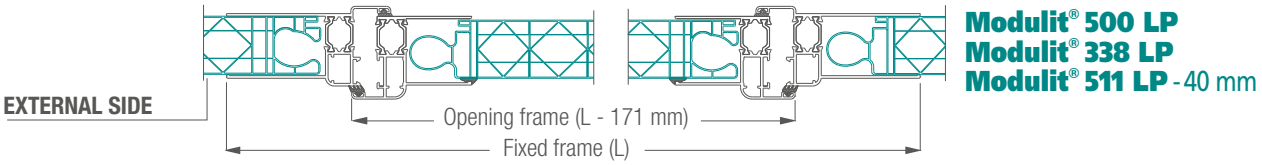
Vertical section with thermal cut profiles, 40 mm thickness

Standard width of external window fixed frame (L)

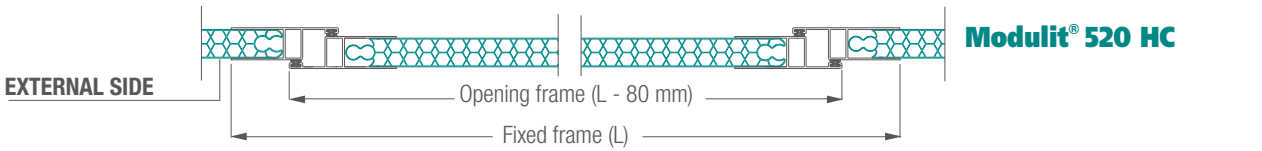
		Nr. Modulit® panels				
	Modulit®	**1**	**2**	**3**	**4**	**5**
Simple profiles	**520 HC**	680 mm	1180 mm	1670 mm	2170 mm	2670 mm
	338 LP	570 mm	910 mm	1245 mm	1585 mm	1920 mm
	500 LP	730 mm	1230 mm	1730 mm	2230 mm	2730 mm
	511 LP - 40 mm	710 mm	1200 mm	1690 mm	2180 mm	2670 mm
Thermal cut profiles	**338 LP**	624 mm	962 mm	1300 mm	1638 mm	1976 mm
	500 LP	786 mm	1286 mm	1786 mm	2286 mm	2786 mm
	511 LP - 40 mm	770 mm	1260 mm	1750 mm	2240 mm	2730 mm



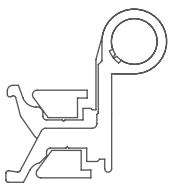
Modulit® 500 LP
Modulit® 338 LP
Modulit® 511 LP - 40 mm



Modulit® 500 LP
Modulit® 338 LP
Modulit® 511 LP - 40 mm

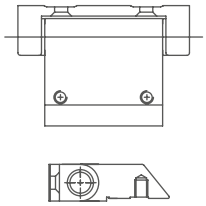


Modulit® 520 HC



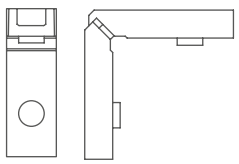
Hinges
for thermal cut profiles

cod. M925



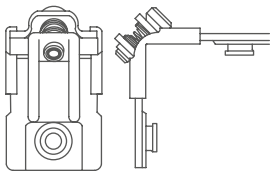
Hinges
for simple profiles

cod. M912



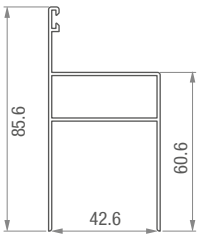
Bracket for window profiles
codes M9V4, M9D6 e M9D7

cod. M97A



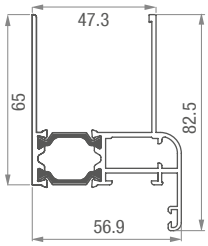
Bracket for window profiles
code M986

cod. M974



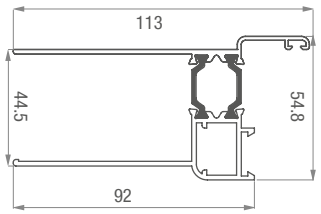
Anodized aluminium fixed
and opening frame profile,
for 40 mm thickness panel

cod. M986



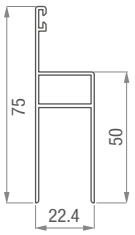
Anodized aluminium thermal cut
opening frame profile,
for 40 mm thickness panel

cod. M9D6



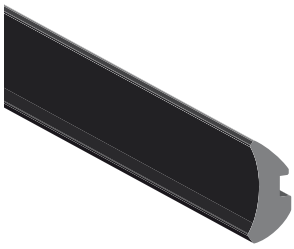
Anodized aluminium thermal cut
fixed frame profile,
for 40 mm thickness panel

cod. M9D7



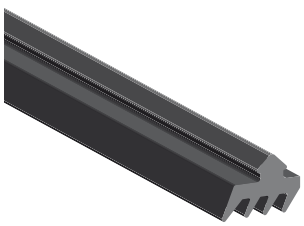
Anodized aluminium fixed
and opening frame profile,
for 20 mm thickness panel

cod. M9V4



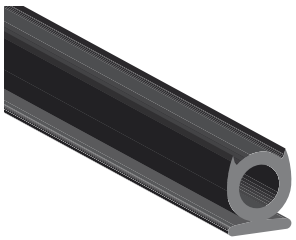
EPDM gasket
for thermal cut profiles

cod. M998



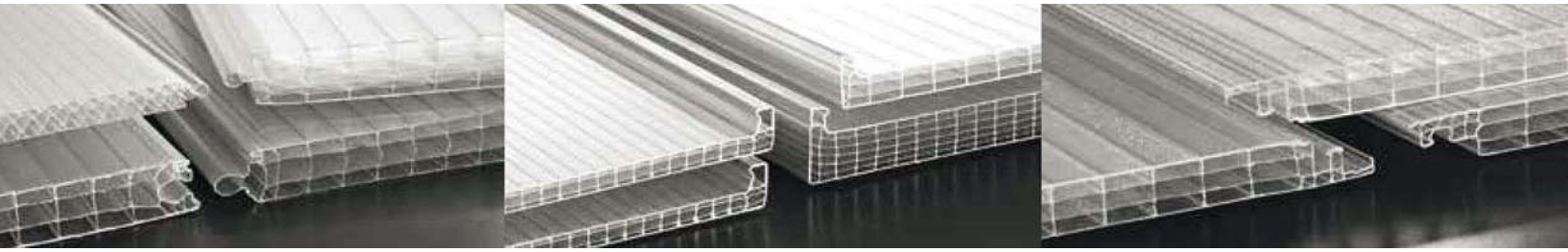
3 mm EPDM gasket for both simple
and thermal cut profiles

cod. M9S5



EPDM gasket
for simple profiles

cod. M913



Distributor

Stabilit
EUROPA

Customer Service
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