## **Easyroof**® **Easypanel**

### **MULTIWALL PANELS FOR COVERINGS**



## Easyroof® / Easypanel

The Easyroof® and Easypanel panels are multiwall polycarbonate panels designed for use in the construction industry. They are mainly used for flat roofs in combination with sandwich panels or corrugated metal profiles. The 30 mm thickness ensures economy, high mechanical performance and adaptability for use in different solutions ever present in industrial buildings.





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#### **Benefits**

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













#### Main advantages of Easyroof® / Easypanel systems



#### Impact resistance

Polycarbonate's mechanical properties this the technopolymer with the highest impact resistance, allowing it to provide optimum protection against accidental damage 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 6,5x10<sup>-5</sup> 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 Easyroof® / Easypanel 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. Easyroof® / Easypanel 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 m<sup>2</sup> 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.

# **Easyroof**®

## MULTIWALL PANELS FOR COVERINGS

## Easyroof® 5M 30 mm

The Easyroof® 5M 30 mm panel is designed to facilitate the installation of single skylights coupled with the most common sandwich panels. The main features are: the system can fit to most common sandwich panels with variable thickness, the good thermal insulation and light transmission, the possibility to create skylights on long sloping roofs (please consider the necessary expansion spaces), the good load resistance, the 10-year warranty against hail, yellowing and loss of light transmission.

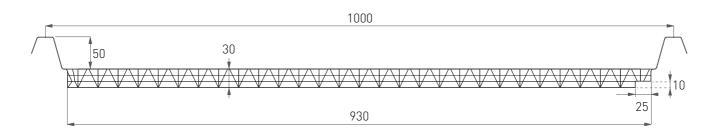




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Thickness (mm)

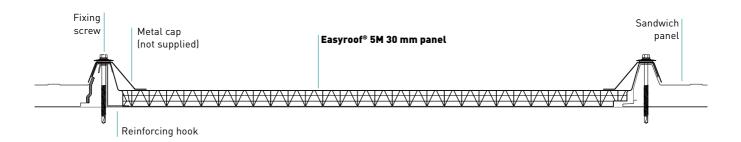




Easyroof® 5M 30 mm technical data					
Thickness		30 mm			
Number of walls		5			
Total height		80 mm			
Useable width		1000 mm			
Length	ирс	upon request (maximum recommended length 6m)			
Thermal transmittance		1,60 W/m² K			
Colours		LT*	G Value		
	Clear (8005)	45%	-		
	Opal (8121)	32%	-		
UV protection		Coextruded on the external side			
Warranty	10-year warran	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 <sup>-5</sup> 1/K)			
Fire certification		EUROCLASS B s2 d0			
* Values calculated according to ASTM standard					

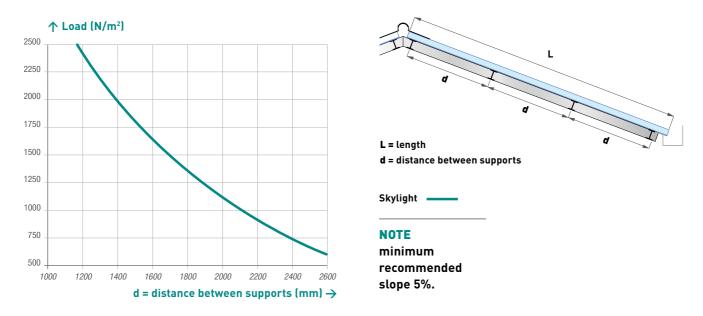


#### FLAT installation option - Easyroof® 5M 30 mm



#### Easyroof® 5M 30 mm load chart

#### Load chart for FLAT 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.

#### Easyroof® 5M 30 mm specifications

Construction of a flat translucent roof and / or full-brim skylight con sistema Easyroof® 5M 30 mm consisting of:

Easyroof $^{\circ}$  5M 30 mm multiwall polycarbonate panel, co-extruded UV-protection on the external side, 5 walls structure, 30 mm thickness, thermal transmittance 1,6 W/m $^{2}$  K, cclear or opal colours, adhesive aluminium tape end closures; dimensions: width 930 mm, fixing and usable width 1000 mm, length upon request; 10-year warranty.

Steel reinforcing hook (to be used under the empty trapez of the sandwich panel).

## **Easypanel**

## **MULTIWALL PANELS FOR COVERINGS**

## Easypanel 30 mm

The **Easypanel 30 mm** multifunction panel is designed to facilitate the installation of single skylights coupled with the most common sandwich panels (mainly for Spain market). The main features are: the good thermal insulation and light transmission, the possibility to create skylights on long sloping roofs (please consider the necessary expansion spaces), the good load resistance, the 10-year warranty against hail, yellowing and loss of light transmission. Easypanel 30 mm is provided with UV-resistant transparent coextruded gasket on both sides which ensures better air and water tightness.

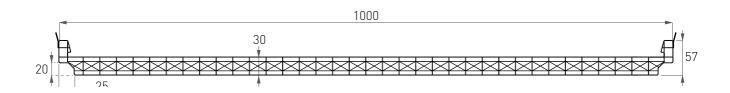








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Easypanel 30 mm technical data					
Thickness		30 mm			
Number of walls		6			
Width		1000 mm			
Length		upon request			
Thermal transmittance		1,40 W/m² K			
Colours		LT*	G Value		
	Clear (8005)	50%	-		
	Opal (8121)	30%	-		
UV protection		coextruded on the external side			
Warranty	10-year warran	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 <sup>-5</sup> 1/K)			
Fire certification		EUROCLASS B s1 d0 / B s2 d0			

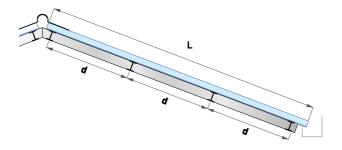






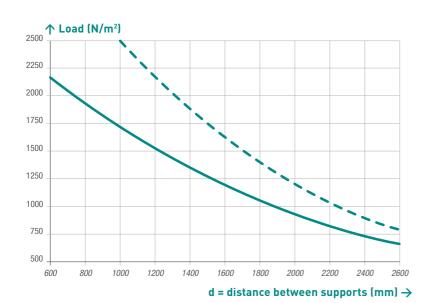


#### Easypanel 5M 30 mm load charts



L = length
d = distance between supports

#### Load chart for FLAT solution



3 or more supports

NOTE minimum recommended slope 5%.

2 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.

#### Easypanel 5M 30 mm specifications

#### Construction of a flat translucent full-brim skylight with Easypanel 5M 30 mm consisting of:

Easypanel 30 mm multiwall polycarbonate panel, co-extruded UV-protection on the external side, 6 walls structure, 30 mm thickness, thermal transmittance  $1.4 \text{ W/m}^2 \text{ K}$ , clear or opal colours, adhesive aluminium tape end closures; dimensions: width 1000 mm, length upon request; 10-year warranty.

## Easyroof<sup>®</sup> Easypanel

## MULTIWALL PANELS FOR COVERINGS

## Easyroof® 5M 30 mm - Easypanel 30 mm accessories

ACCESSORY	CODE	TECHNICAL DESIGN / RENDERING
Reinforcing hook for Easyroof®	M9X2	
Massive adhesive aluminium tape height 50 mm (50 m roll)	M957	
Perforated adhesive aluminium tape height 50 mm (50 m roll)	M969	
Fixing screw with washer and EPDM gasket 6.3 x 120 mm	М9Т8	