

Self-supporting steel insulated panel with polyurethane core, with 5 ribs, designed for roofs with a minimum slope of 7%. The inner face of the panel is made of **polyester resin reinforced with fiberglass**.

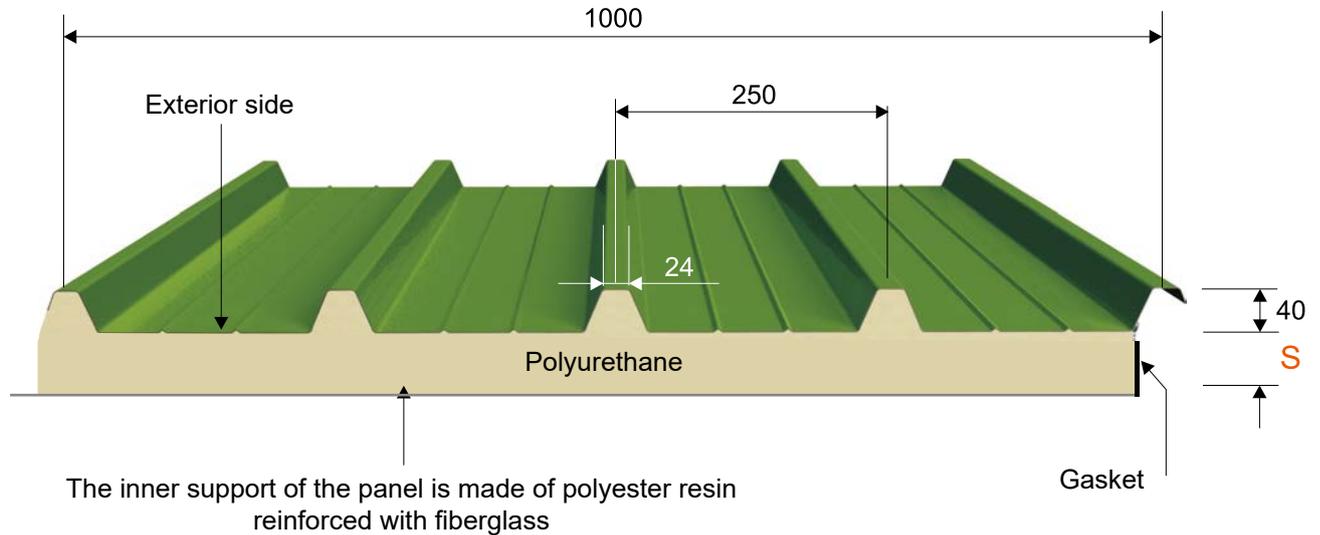


Table of permissible loads**

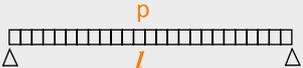
Panel arranged horizontally on one and three openings, with the following load values: $p=100\text{ daN/m}^2$; $p=120\text{ daN/m}^2$; $p=150\text{ daN/m}^2$; $p=200\text{ daN/m}^2$; $p=250\text{ daN/m}^2$; $p=300\text{ daN/m}^2$.

The calculation is performed according to SR-EN 14509 for the service limit state and considers as calculation value, the maximum value of the load in the wrapping of the action combinations.

Given in the tables, the values of the maximum allowable openings in the six loading hypotheses with respect to the condition of maximum allowable arrow at the service limit state (for the roof function of sandwich panels, the maximum allowable arrow is $f = \text{opening} / 200$).

The panel subjected to the calculation has a face made of pre-painted galvanized laminated sheet with thickness $t_e = 0.5\text{ mm}$, on the outside, and a face made of polyester resin reinforced with fiberglass, $t_i = 0.4\text{ mm}$, on the inside

Permissible openings for simple loadings (0.5 steel/0.4 fiber)



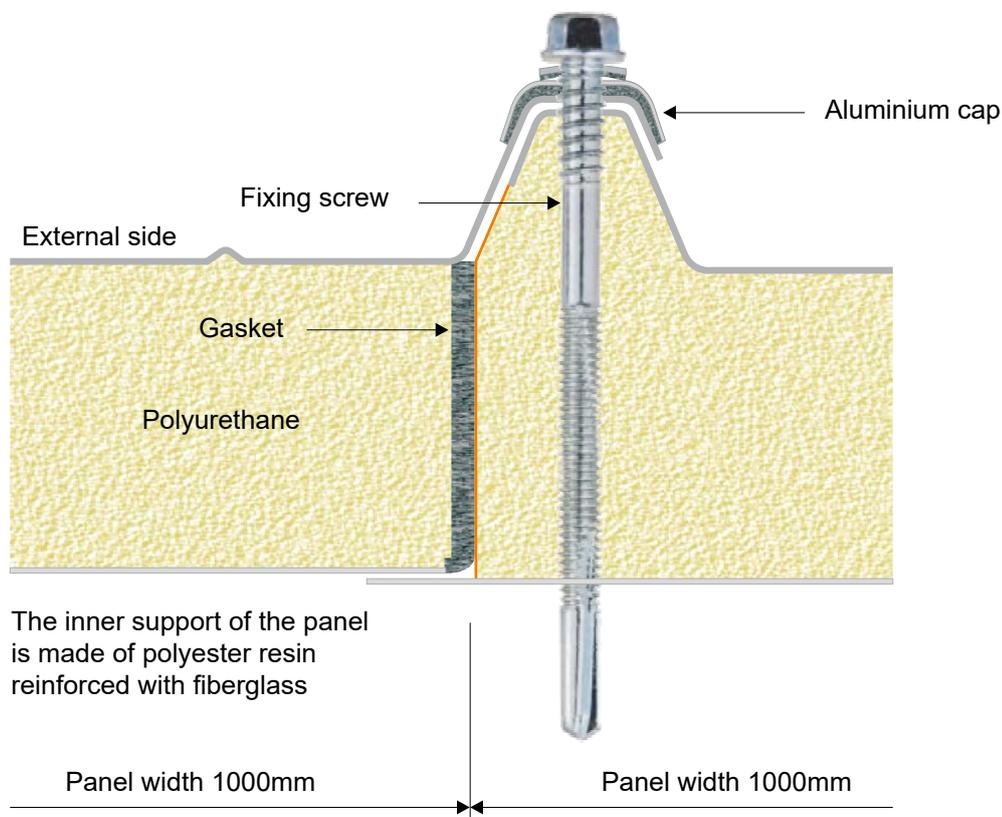
G (mm)	Loadings (daN/m ²)					
	100	120	150	200	250	300
30	1,75	1,65	1,45	1,05	0,85	0,70
40	1,95	1,75	1,55	1,35	1,20	1,00
50	2,10	1,90	1,70	1,45	1,30	1,15
60	2,30	2,05	1,80	1,55	1,40	1,25
80	2,65	2,40	2,15	1,80	1,60	1,45
100	3,05	2,80	2,45	2,10	1,85	1,65
120	3,40	3,15	2,80	2,40	2,10	1,90

Permissible openings for simple loadings (0.5steel/0.4 fiber)



G (mm)	Loadings (daN/m ²)					
	100	120	150	200	250	300
30	1,95	1,80	1,60	1,15	0,95	0,75
40	2,15	1,95	1,70	1,50	1,30	1,10
50	2,30	2,10	1,85	1,60	1,45	1,25
60	2,55	2,25	2,00	1,70	1,55	1,40
80	3,00	2,65	2,35	2,00	1,75	1,60
100	3,35	3,10	2,70	2,30	2,00	1,80
120	3,75	3,50	3,10	2,65	2,30	2,10

**The company reserves the right to make the necessary modifications or improvements to its products, at any time, without being subject to prior notice.



STEEL (0.5mm) – FIBER (0.4 mm) PANEL WEIGHT		THERMAL TRANSFER COEFFICIENT (K)	
G	M	K	
(mm)	(kg/m ²)	(kcal/m ² h °C)	(W/m ² K)
30	6,74	1,09	1,27
40	7,14	0,82	0,95
50	7,54	0,65	0,76
60	7,94	0,54	0,63
80	8,74	0,41	0,48
100	9,54	0,33	0,38
120	10,34	0,27	0,32

Thermal transfer coefficients

The values were determined in an authorized laboratory, using the value of lambda thermal conductivity (measured at 10°C) of 0.021 W/mK (0.017 kcal/mhC), according to EN 12667:2002.

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