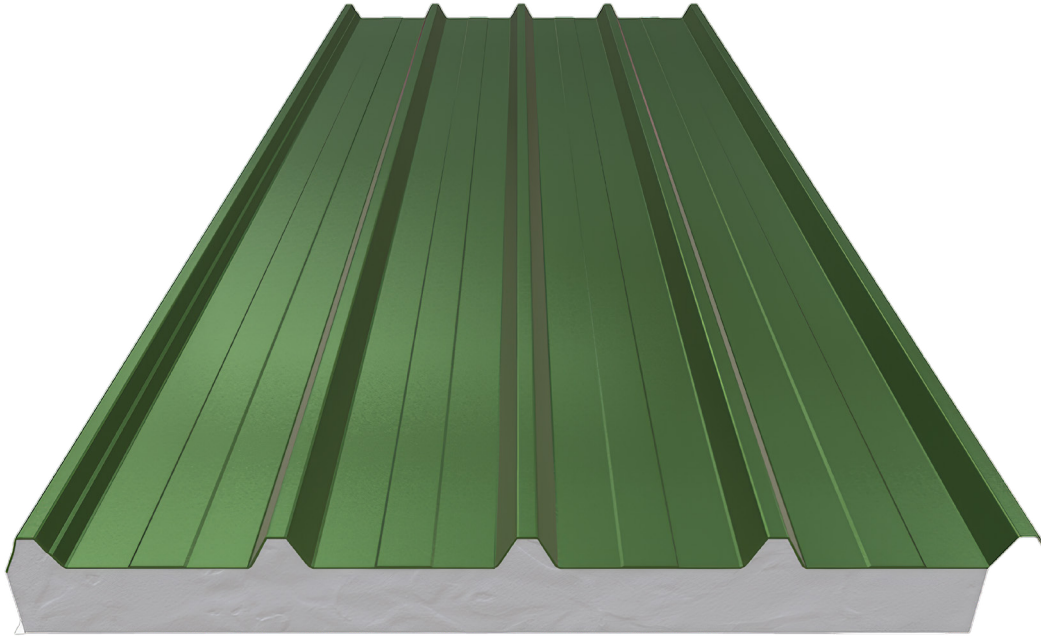


ThermaGard COV Barn

Self-supporting insulated roof panels with an external trapezoidal metal facing, an internal polyester resin sheet and a High Index polyisocyanurate (PIR) foam core, suitable for roofing applications on buildings intended for agricultural use.

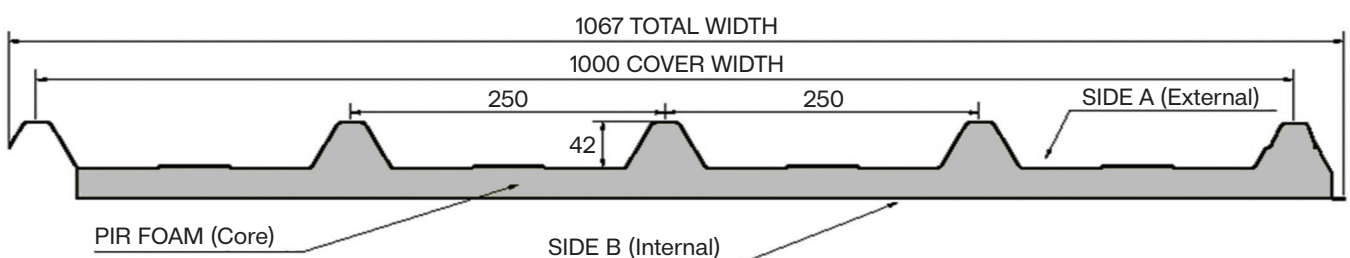


Available in

Effective cover width 1,000 mm | Nominal thickness from 25 mm to 120 mm

Bespoke lengths from 2 m to 14 m, depending on project requirements

5-rib trapezoidal profile with a profile height of 42 mm and a pitch of 250 mm



Inner Sheet of polyester resin reinforced with glass fibers

- Nominal thickness from 0,40mm to 0,50mm
- Coil width 1010mm
- Surface resistant to chemical and bacterial agents
- Resistant to contact with urea and ammonia
- UV-resistant surface
- Reaction to fire F-s2-d0
- Color Opal White

Technical Specifications

Dimensional Tolerances

(according to the EN 14509)

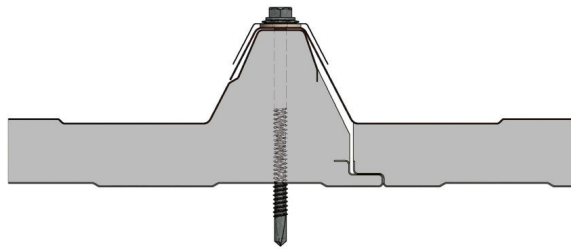
Metal Sheet Thickness > 0,50mm

Panel thickness	$\pm 2 \text{ mm} / \pm 2 \%$	$D \leq 100 \text{ mm} / D > 100 \text{ mm}$
Depth of the profile (rib height)	$\pm 1 \text{ mm} / \pm 2,5 \text{ mm}$	$5 < h \leq 50 \text{ mm} / 50 < h \leq 100 \text{ mm}$
Panel length	$\pm 5 \text{ mm} / \pm 10 \text{ mm}$	$L \leq 3000 \text{ mm} / L > 3000 \text{ mm}$
Panel cover width	$\pm 2 \text{ mm}$	$W = 1000 \text{ mm}$
Deviation from squareness	$\leq 6 \text{ mm}$	$W = 1000 \text{ mm}$
Deviation from straightness	$\leq 1 \text{ mm/m}$	$\leq 5 \text{ mm}$
Pitch of profile	$\pm 2 \text{ mm} / \pm 3 \text{ mm}$	$h \leq 50 \text{ mm} / h > 50 \text{ mm}$
Ribs width	$\pm 1 \text{ mm}$	For b1 value
Valleys width	$\pm 2 \text{ mm}$	For b2 value

Panel nominal thickness	Panel weight	Thermal Transmittance
[mm]	[kg/m ²]	U [W/m ² .K]
25	6,8	0,83
30	7,0	0,70
35	7,2	0,61
40	7,4	0,53
50	7,8	0,43
60	8,2	0,36
80	9,0	0,27
100	9,8	0,22
120	10,6	0,18

Panel weight and thermal transmittance were calculated based on:

- Core density 40 kg/m³
- Core thermal conductivity 0.023 W/mK
- Steel sheet thicknesses 0.50 mm
- Coating SP
- Polyester sheet thickness 0,50mm



They are fixed to the supporting structure using the standard visible fixing method.

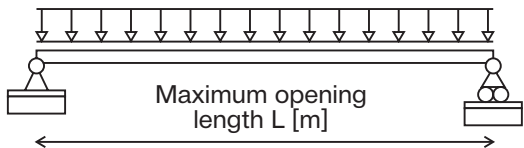
Designed for roofs with a minimum slope of 10%.

In this case, the panels must have a right-hand or left-hand side overlap, depending on the project specifications, with an overlap length ranging from 50 mm to 250 mm.

Max load in span Load bearing capacity (kg/m²)

Single Span Load Table
PANEL THICKNESS (MM)

	1,00	1,25	1,50	1,75	2,00	2,25	2,50	2,75	3,00	3,25	3,50	3,75	4,00
0,50	340	205	135	100	65	45	-	-	-	-	-	-	-
0,60	615	390	245	140	90	55	-	-	-	-	-	-	-
0,70	800	500	290	165	105	65	45	-	-	-	-	-	-
0,80	920	570	320	195	115	80	55	-	-	-	-	-	-
0,90	950	600	350	215	135	90	60	50	-	-	-	-	-



The calculated values indicate the maximum allowable load or the serviceability limit state (l/200).
The nominal panel thicknesses available are: 25 mm, 30 mm, 35 mm, 40 mm, 50 mm, 60 mm, 80 mm, 100 mm and 120 mm.
The support width is 120 mm. The anchoring system must be capable of withstanding the maximum allowable loads.