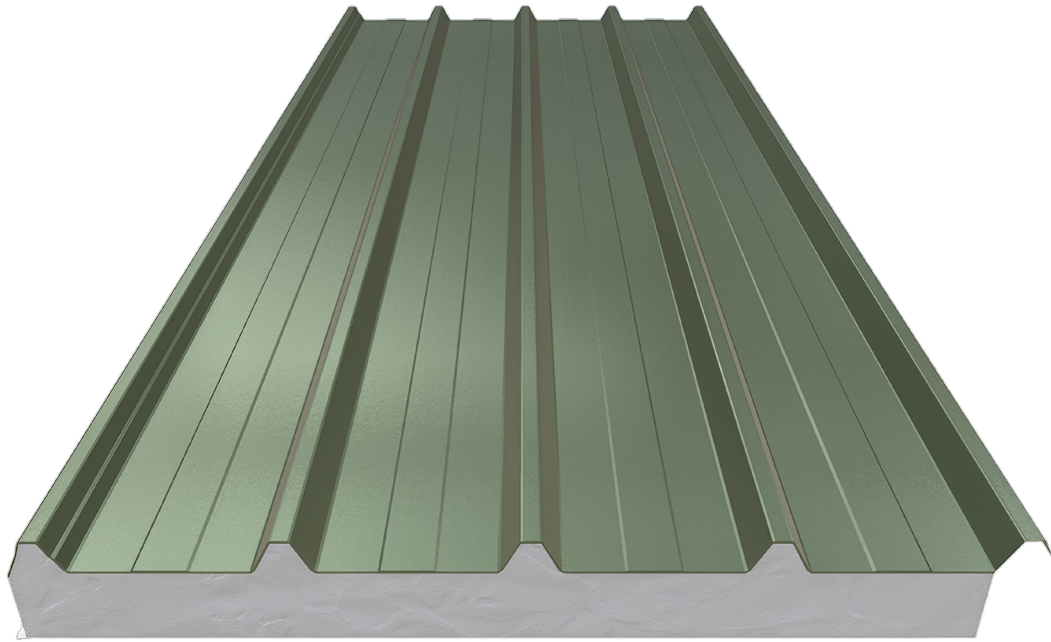


ThermaBarr COV Barn

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

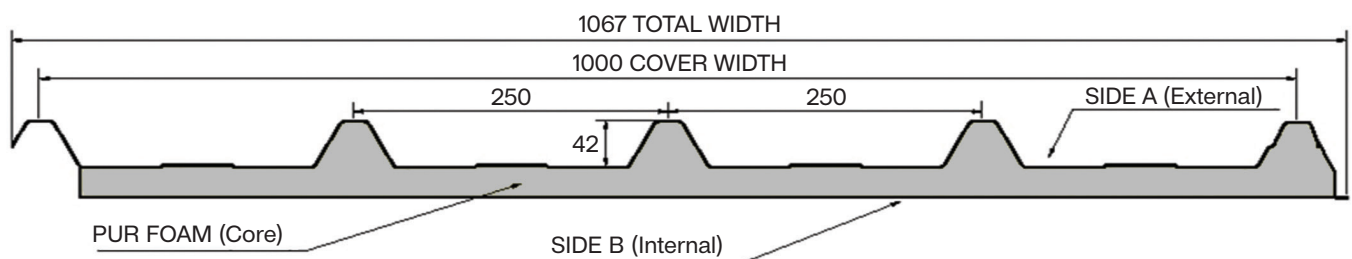


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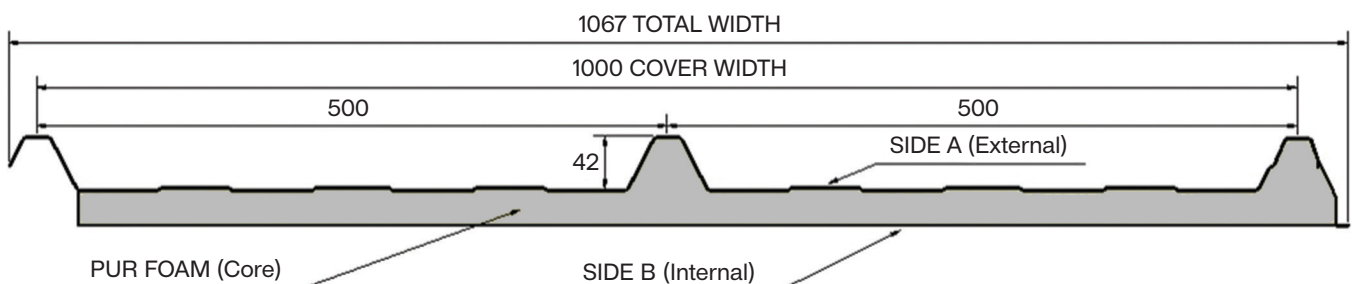
Effective cover width 1000mm | Nominal thickness from 25mm to 120mm

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

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



3-rib trapezoidal profile with a profile height of 42 mm and a pitch of 500 mm



Internal glass fibre-reinforced polyester resin sheet

- 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

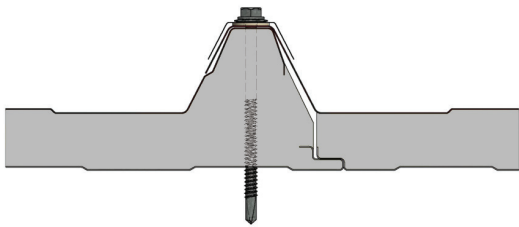
Panel weight and thermal transmittance were calculated based on:

- 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%.

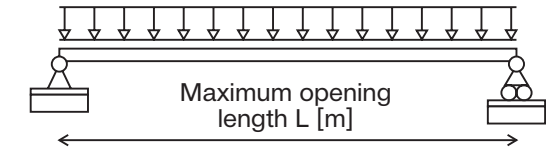
In this case, the panels must have a right-hand or left-hand side overlap, depending on the project specifications, with an overlap length ranging from 50 mm to 250 mm.



Allowable spans (m) - Uniformly distributed loads (daN/m²)

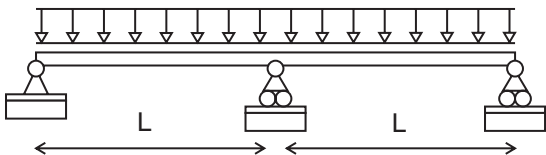
Single Span Load Table
PANEL THICKNESS (MM)

	100	120	150	200	250	300
30	1.80	1.60	1.40	1.00	0.80	0.65
40	1.90	1.70	1.60	1.30	1.25	1.05
50	2.05	1.85	1.65	1.50	1.35	1.20
60	2.35	2.00	1.85	1.50	1.45	1.30
80	2.60	2.45	2.10	1.75	1.65	1.50
100	3.00	2.85	2.40	2.05	1.80	1.70
120	3.45	3.20	2.85	2.35	2.05	1.95



Multi Span Load Table
PANEL THICKNESS (MM)

	100	120	150	200	250	300
30	1.90	1.75	1.65	1.20	0.90	0.70
40	2.20	2.00	1.65	1.45	1.25	1.05
50	2.35	2.15	1.80	1.65	1.40	1.30
60	2.60	2.20	2.05	1.75	1.60	1.45
80	2.95	2.70	2.40	1.95	1.80	1.55
100	3.30	3.15	2.75	2.35	2.05	1.75
120	3.70	3.45	3.15	2.70	2.35	2.15



Allowable spans on different loads - in meters for each uniformly distributed load (p), calculated and combined with experimental data, so as to ensure maximum displacement (f) less than l/200. Maximum values of distance (m) between two supports for the outer steel plate with a thickness of 0.50 mm and the inner face Polyester with glass fibers (FG) with a thickness of 0.50 mm, under uniformly distributed load.