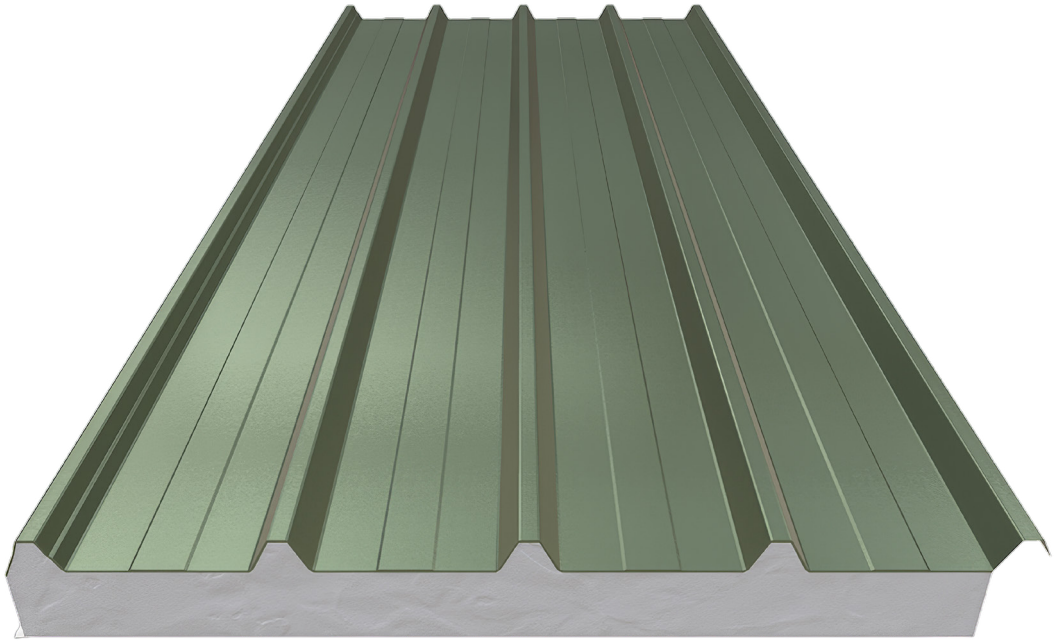
ThermaBarr COV Barn

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

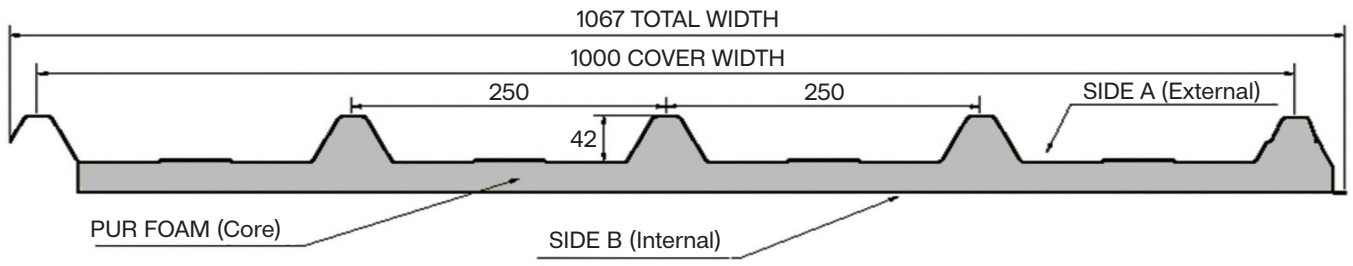


Available in

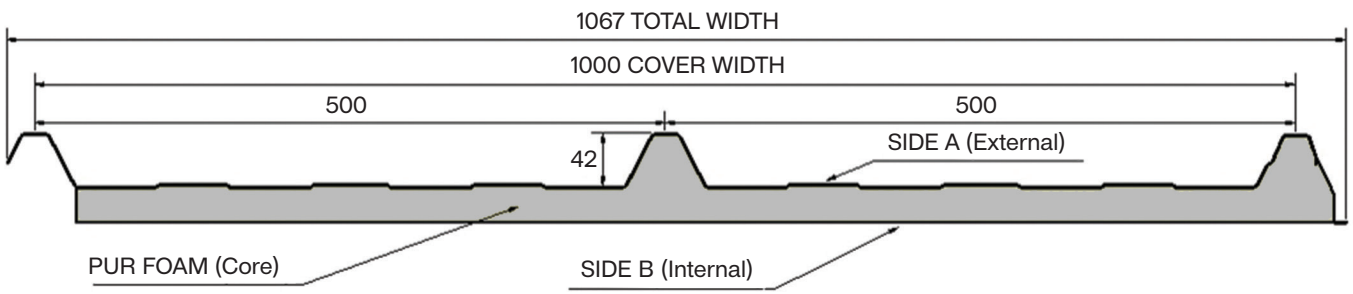
Effective cover width 1000mm | Nominal thickness from 25mm to 120mm

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)

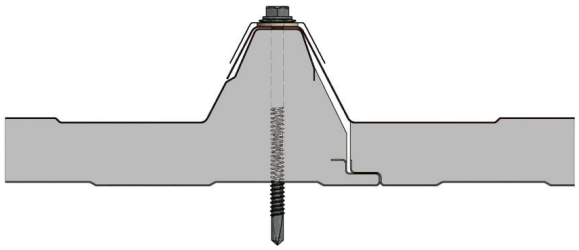
Metal Sheet Thickness > 0,50mm

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

Panel nominal thickness	Panel weight	Thermal Transmittance
[mm]	[kg/m²]	U [W/m².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

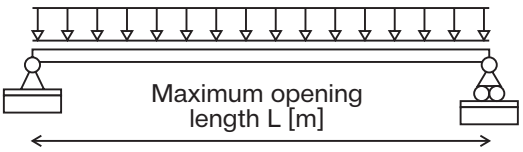


They are fixed to the supporting structure using the standard visible fixing method.

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/m^2)



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.