insulroof®

EPS-FR

PUR

Technical Data Sheet

Version 20
Current as of: 31/05/23

Product Description

InsulRoof® is a long-spanning insulated roof panel that features a corrugated roof profile and a pre-finished steel ceiling lining encased in Bondor's new proprietary dual layered insulating core technology comprising of EPS-FR and PUR.
This all-in-one roofing solution is manufactured using Australian-made BlueScope® COLORBOND® steel for durability and is ideal for a variety of applications including housing, multi-residential, commercial and industrial roofing applications where a corrugated roof profile is desired.
SupaCore® is a proprietary and world-first insulating core technology developed by Bondor® to deliver dual layers of high performance insulation and bonding strength.

Panel Properties						
Panel Thickness (mm)	50	75	100	125	150	200
Typical Mass (kg/m^2)	11.6	11.9	12.3	12.6	13.0	13.7
SL Grade Declared λ (W/m.K) at 23^{o}C	0.042	0.042	0.042	0.042	0.042	0.042
SL Grade Declared R-value (m^{2}K/W) at 23^{o}C	1.40	2.00	2.60	3.20	3.80	5.05
SL Grade Total R-value (m^{2}K/W) at 15^{o}C (Winter)	1.61	2.23	2.85	3.48	4.10	5.35
SL Grade Total R-value (m^{2}K/W) at 30^{o}C (Summer)	1.58	2.17	2.77	3.36	3.96	5.14

Note: The Declared R-value is at 23^{o}C in accordance with AS/NZS 4859.1:2018 & AS/NZS 4859.2:2018.

Span Table

NON-CYCLONIC REGION A&B (ROOF APPLICATIONS ONLY)

SL Grade EPS-FR Core / 0.42 Hi-tensile External / 0.6mm Internal Steel Skins.
Maximum uniformly distributed ultimate wind load (kPa) for the given span:

Single Span, wind pressure acting outwards						
Span (mm)	Panel Thickness (mm)					
	50	75	100	125	150	200
1500	4.76	6.32	8.52	9.28	11.17	15.48
2700	2.69	3.11	4.27	5.46	6.66	9.09
3900	1.42	1.83	2.57	3.14	3.72	4.86
5100	-	-	1.55	1.88	2.22	2.89
6300	-	-	1.05	1.27	1.49	1.93
7500	-	-	-	0.93	1.08	1.40
8700	-	-	-	-	0.83	1.07

Multi-span, wind pressure acting outwards						
Span (mm)	Panel Thickness (mm)					
	50	75	100	125	150	200
1500	3.83	5.70	7.57	9.43	10.09	10.10
2700	2.17	3.21	4.25	5.28	5.65	5.66
3900	1.53	2.25	2.97	3.69	3.94	3.95
5100	-	-	2.01	2.45	2.89	3.05
6300	-	-	1.35	1.64	1.93	2.49
7500	-	-	-	1.19	1.39	1.80
8700	-	-	-	-	-	1.37

CodeMark Australia | CMI Certification Certificate CM40235

BAL40

Colorbond®

Core	EPS-FR (Expanded Polystyrene with fire retardant) PUR (Polyurethane Foam)
Width (cover mm)	1000
Thickness (mm)	50, 75, 100, 125, 150, 200
Length	Up to 12m (check for availability)
External Material	0.42mm G550 COLORBOND® steel
External Finishes	Corrugated
Exterior Colour Options	Classic Cream™, Surfmist®, Paperbark®, Shale Grey™, Dune®, Pale Eucalypt®, Manor Red®**, Basalt®^, Woodland Grey®^**, Zincalume™
Internal Material	0.6mm G300 COLORBOND® steel
Internal Finishes	Plain, VJ
Interior Colour Options	Classic Cream™, Surfmist®
Pitch	5 degree minimum
Paint System	AS/NZS 2728 & AS 1397
Acoustic Properties	Rw 23 - 24 depending on thickness
Material Group Numbers	Group 1 & 2
Bushfire Attack Level	BAL-40 (All exposed core to be covered with flashing)
Fire Hazard Properties	AS/NZS 1530.3
Ignitability Index	0
Spread of Flame Index	0
Heat Evolved Index	0
Smoke Index	1
SMOGRA$_{RC}$	< 100

** Limited availability.
^ Darker colours warranted for use in limited regions. Check with your local InsulRoof® dealer for more information.

The technical information contained in this document cover a breadth of applications where InsulRoof® may be used, which may be outside the scope of our Codemark certificate. Data specific to CodeMark certification can be found on InsulRoof®'s CoC CM40235.

SPAN TABLE NOTES:
1. Extended span tables including Region C&D, single span and multi-span wind pressure acting inwards are also available. Refer Bondor®.
2. Fixing with 4x 14g tek screws (or equivalent) per panel at minimum every 3rd corrugation are required. Boxes shaded grey indicate fixings to be 7x 14g tek screws (or equivalent) per panel at minimum every 2nd corrugation.
3. Pressures specified are for wind gusts only per AS/NZS 1170.2.
4. Deflection limit of span/150 applies, and in accordance with Serviceability Limit State criteria per AS/NZS 1170.0 - TABLE C1.
5. Self weight of the panel has been allowed for, plus an allowance of up to 25kg/m^2 for light duty fittings (lights, etc.). No other dead loads permitted.
6. Non-trafficable maintenance access (concentrated load) of 140kg on any span has been allowed for.
7. Distributed live load of 0.25kPa (as per AS/NZS 1170.1) has been allowed for. Bondor® tests comply with details outlined in AS 4040.0, AS 4040.1, AS 4040.2, AS 4040.3, AS 1562.1 and AS/NZS 1170.1.

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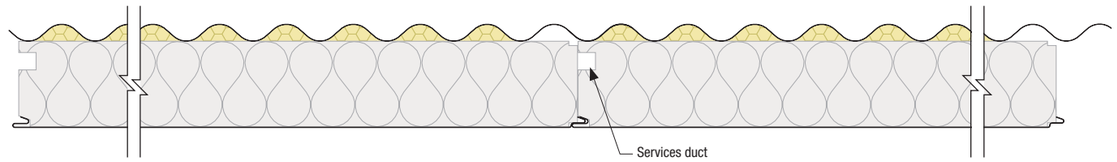
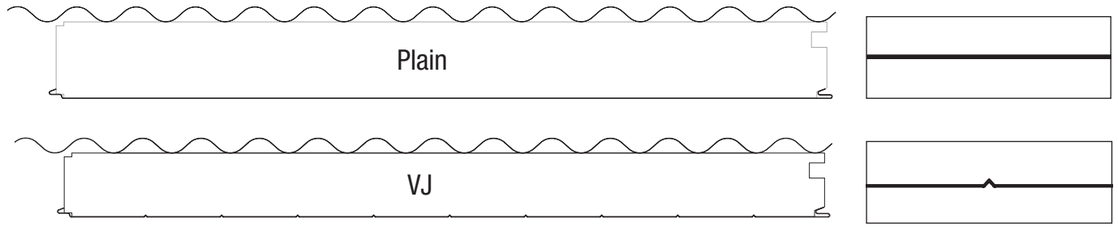
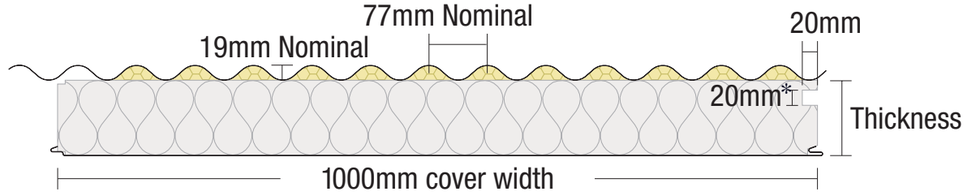
Joint



Profiles



Dimensions



* Services ducts 30x30mm are available for panel thicknesses 150-200mm.

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