metecnopanel® PIR

Technical Data Sheet

Version 60
Current as of: 29/11/23

Product Description

MetecnoPanel® is a durable, insulated wall and ceiling panel with a PIR (Polyisocyanurate) fire-retardant core and high performing thermal properties. MetecnoPanel® is FM Approved to FM 4880 & 4881 - No Height Restriction and is recommended where improved fire performance is required for insurance purposes. MetecnoPanel® is available in a variety of panel surface profiles and COLORBOND® colours to create an inspiring interior and exterior finish.

Panel Properties						
Panel Thickness (mm)	50	75	100	125	150	200
Typical Mass (kg/m²) based on 0.6/0.6mm skins	12.0	13.0	14.0	14.7	15.5	17.4
Declared λ (W/m.K) at 23˚C	0.023	0.023	0.023	0.023	0.023	0.023
Declared R-value (m²K/W) at 23˚C (AU)	2.20	3.30	4.45	5.55	6.65	8.90
Total R-value (m²K/W) at 6˚C	2.61	3.84	5.06	6.29	7.51	9.96
Total R-value (m²K/W) at 15˚C (Winter)	2.49	3.66	4.83	5.99	7.16	9.49
Total R-value (m²K/W) at 30˚C (Summer)	2.31	3.38	4.46	5.53	6.60	8.75

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

Span Table

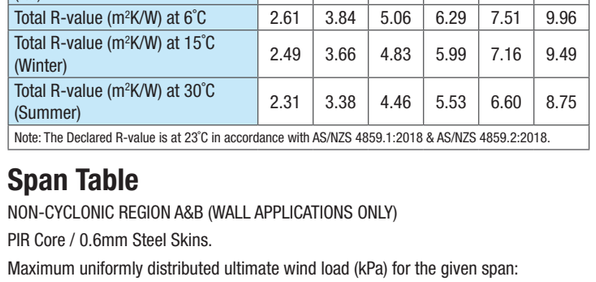
NON-CYCLONIC REGION A&B (WALL APPLICATIONS ONLY)

PIR Core / 0.6mm Steel Skins.

Maximum uniformly distributed ultimate wind load (kPa) for the given span:

Single Span - wind pressure acting inwards/outwards						
Span (mm)	Panel Thickness (mm)					
	50	75	100	125	150	200
1500	2.93	4.39	5.86	7.32	8.79	11.72
2700	1.63	2.44	3.25	4.07	4.88	6.51
3900	1.10	1.65	2.20	2.74	3.29	4.39
5100	0.64	0.96	1.28	1.60	1.93	2.57
6300	0.37	0.63	0.84	1.05	1.26	1.68
7500	0.23	0.45	0.59	0.74	0.89	1.19

Multi Span - wind pressure acting inwards/outwards						
Span (mm)	Panel Thickness (mm)					
	50	75	100	125	150	200
1500	3.91	5.86	7.81	9.33	11.72	11.93
2700	2.17	3.25	4.34	5.18	6.51	6.63
3900	1.10	1.65	2.20	2.74	3.29	4.39
5100	0.64	0.96	1.28	1.60	1.93	2.57
6300	0.42	0.63	0.84	1.05	1.26	1.68
7500	0.30	0.45	0.59	0.74	0.89	1.19



CodeMark Australia | CMI Certification Certificate CM40196

Global Green Tag Certified | trust brands | BAL40 | FM Approved

Colorbond®

Core	PIR (Fire-retardant Polyisocyanurate)
Width (cover mm)	1100
Thickness (mm)	50, 75, 100, 125, 150, 200
Length	Up to 23m (check for availability)
External Material	BlueScope® Steel 0.5mm, 0.6mm G300; Grade 316 Stainless Steel 0.55mm
External Finishes	Plain, Fineline, Satinline, Ribbed
Exterior Colour Options	Surfmist®. Other colours available subject to minimum order quantities.
Internal Material	BlueScope® Steel 0.5mm, 0.6mm G300; Grade 316 Stainless Steel 0.55mm
Internal Finishes	Plain, Fineline, Satinline, Ribbed
Interior Colour Options	COLORBOND® Intramax™
Paint System	AS/NZS 2728 & AS 1397
Acoustic Properties	Rw 25 - 27 depending on thickness
Material Group Numbers	Group 1 & 2[a]
Bushfire Attack Level	BAL-40 200mm: BAL-FZ (All exposed core to be covered with flashing)
FM Approval	4880, 4881
Environmental	Zero Ozone Depleting Potential (ODP)
Fire hazard properties	AS/NZS 1530.3
Ignitability Index	0
Spread of Flame Index	0
Heat Evolved Index	0
Smoke Index	4
$SMOGRA_{RC}$	< 100

a. AS 5637.1 / AS ISO 9705 - BCA Group Number
MetecnoPanel® PIR steel skinned insulated building panels conform to the requirements of the BCA Specification as either Group 1 or Group 2 depending on panel thickness and construction details. Refer Metecno® for more information.

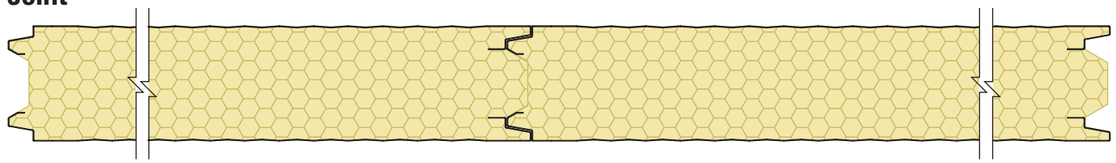
The technical information contained in this document cover a breadth of applications where MetecnoPanel® may be used, which may be outside the scope of our Codemark certificate. Data specific to CodeMark certification can be found on MetecnoPanel®'s CoC CM40196.

SPAN TABLE NOTES:
1. Extended span tables including cyclonic regions C&D are also available. Refer Metecno®.
2. Fixing with min. 14g tek screws (x4 off) or mushroom head bolts (x2 off) per fixing point are required.
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. Metecno® 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.

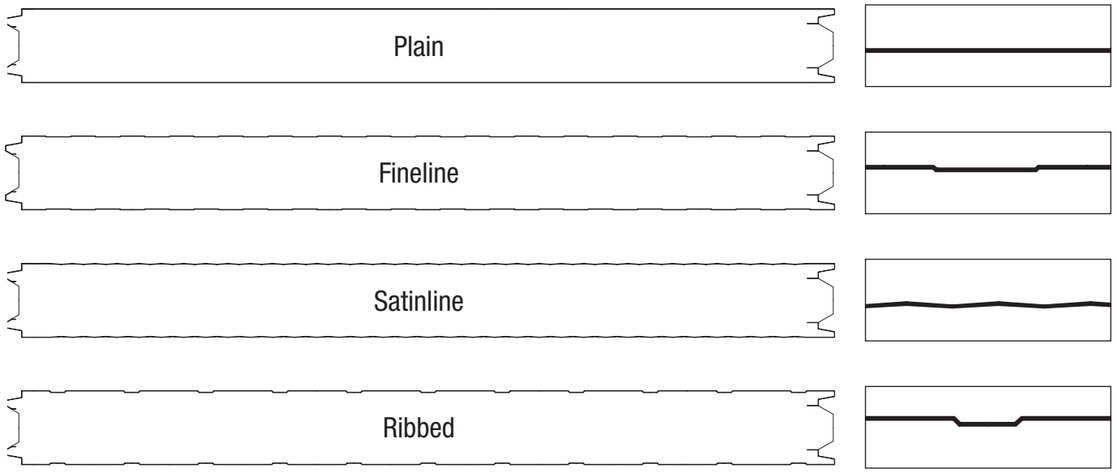
metecnopanel® PIR

Technical Data Sheet

Joint



Profiles



Dimensions

MetecnoPIR Manufacturing Sites

MetecnoPIR – QLD
111 Ingram Road
Acacia Ridge QLD 4110
T: 07 3323 9900

MetecnoPIR – VIC
9-27 Amcor Way
Campbellfield VIC 3061
T: 03 9250 3300

To connect to your nearest MetecnoPIR branch simply call 1300 747 726 or visit www.metecnopir.com.au

meTecno® PIR