metecnospan



Technical Data Sheet

Version 60 Current as of: 29/11/23

Product Description

MetecnoSpan® is a roofing system that combines the roofing, insulation and ceiling in one roof panel with a fire-retardant polyisocyanurate (PIR) core. MetecnoSpan® is FM Approved (4880, 4881 & 4471) and is recommended where FM Approved products is required. MetecnoSpan[®] is capable of long spans and high thermal performance and is used mainly in commercial and industrial roofing applications.

Panel Properties				
Panel Thickness (mm)	40	60	80	100
Typical Mass (kg/m ²) based on 0.42/0.5mm skins	10.7	11.6	12.7	13.2
Declared λ (W/m.K) at 23°C	0.023	0.023	0.023	0.023
Declared R-value (m ² K/W) at 23°C	1.85	2.75	3.65	4.55
Total R-value (m ² K/W) at 15°C (Winter)	2.10	3.05	4.00	4.94
Total R-value (m ² K/W) at 30°C (Summer)	2.00	2.87	3.74	4.61

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 (ROOF APPLICATIONS ONLY)

PIR Core / 0.42mm Hi-tensile External / 0.5mm 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)				
Span (mm)	40	60	80	100	
1500	4.99	6.94	8.56	9.83	
2700	2.15	2.84	3.57	4.31	
3900	1.08	1.41	1.76	2.12	
5100	0.67	0.86	1.07	1.29	
6300	-	-	0.74	0.88	

Multi-span, wind pressure acting outward

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Span	Coop (mm)	Panel Thickness (mm)			
	Span (mm)	40	60	80	100
	1500	4.01	5.57	6.87	7.31
	2700	2.27	3.14	3.86	4.11
	3900	1.48	2.20	2.70	2.88
	5100	-	1.40	1.83	2.20
	6300	-	-	1.23	1.48





Core	PIR (Fire-retardant Polyisocyanurate)
Width (cover mm)	1000
Thickness (mm)	40, 60, 80, 100
Length	Up to 23m (check for availability)
External Material	0.42mm COLORBOND® steel
External Finishes	Trapezoidal Profile
Exterior Colour Options	Surfmist [®] . Other colours available subject to minimum order quantities.
Internal Material	0.5mm G300 COLORBOND® steel
Internal Finishes	Plain, Fineline, Satinline, V Rib
Interior Colour Options	Surfmist [®]
Pitch	2 degree minimum
Paint System	AS/NZS 2728 & AS 1397
Acoustic Properties	Rw 24 - 25 depending on thickness
Material Group Numbers	Group 1 & 2ª
Bushfire Attack Level	BAL-40 (All exposed core to be covered with flashing)
FM Approval	4471, 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	1
SMOGRA _{RC}	< 100

a. AS 5637.1 / AS ISO 9705 - BCA Group Number

MetecnoSpan® PIR steel skinned insulated building panels conform to the requirements of the BCA Specification as 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 MetecnoSpan® may be used, which may be outside the scope of our Codemark certificate. Data specific to CodeMark certification can be found on MetecnoSpan®'s CoC CM40183.

SPAN TABLE NOTES:

- Extended span tables including cyclonic regions C&D and wind pressure acting inwards are also available. Refer Metecno®.
- Fixing with min. 14g tek screws (or equivalent) at each rib are required. Pressures specified are for wind gusts only per AS/NZS 1170.2.
- Deflection limit of span/150 applies, and in accordance with Serviceability Limit State criteria per AS/NZS 1170.0 - TABLE C1. Self weight of the panel has been allowed for, plus an allowance of up to 25kg/m² for light duty
- Set weight of the patient has been allowed to, plus an aniwaite of up to 23kg/hr for light duty fittings (lights, etc.). No other dead loads permitted. Non-trafficable maintenance access (concentrated load) of 140kg on any span has been allowed
- Distributed live load of 0.25kPa (as per AS/NZS 1170.1) has been allowed for. 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.
- Min. roof slope of 2 degree applies. For FM Approved applications.
- a) a max. span of 1830mm applies. b) approved fasteners must be used. Refer Metecno®

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PIR



MetecnoPIR Manufacturing Sites

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

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

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