

IGNIL ADVISORY NOTE

Evaluation No. IGNIL-7072-99-06 Issue 01 Revision 03 [2023]

BONDOR BUSHFIRE COMPLIANCE

1 Executive Summary

Ignis Labs has been engaged by Bondor to undertake a review of the following products for their suitability in wall and roof applications in bushfire prone areas and their compliance with AS 3959:2018 for BAL 12.5 to BAL FZ and thus compliance with National Construction Code 2022 Volume One Clauses G5P1, G5D1, G5D2 and G5D3 and Volume Two H7D4.

AS 3959:2018 does not place conditions on the insulation. Requirements are placed on the external most lining material under BAL 12.5 to BAL 40 to be of steel sheeting. Systems complying with BAL FZ are to be tested to AS 1530.8.2 or achieve a Fire Resistance Level of at least 30/30/30. The review included the following products or systems with external steel skins:

The review included the following systems:

- BondorPanel
- Bondor-X 50, 75 and 100mm
- EconoClad
- Equideck
- Equitilt
- Equitilt Flameguard
- Equitilt Flameguard Plus
- InsulRoof
- InsulRoof-X 60, 80 and 100mm
- InsulWall
- LuxeWall Flameguard
- Luxewall
- MetecnoInspire
- MetecnoPanel
- MetecnoSpan
- SmoothPanel
- SolarSpan
- SolarSpan-X 60, 80 and 100mm

Each of the above systems is considered to comply with the requirements of AS 3959:2018 for the requirements of external cladding and roofing where applicable to BAL 12.5 to BAL 40 as each system has an external steel sheeting.

LuxeWall Flameguard (FRL 90/90/90), Equitilt Flameguard Plus (FRL up to -/180/180), and MetecnoPanel 200mm (FRL up to -/60/30) achieve an FRL of at least -/30/30 when tested from the outside and are therefore suitable for BAL FZ applications.

2 Fire Safety Measures

BAL 12.5 to BAL 40 | AS 3959 allows external wall cladding for BAL 12.5 to BAL 40 to be non-combustible material or the cladding that is fixed externally to a timber or steel framed wall and is steel sheeting. The above listed external wall cladding and roofing products satisfy this criteria.

BAL FZ | AS 3959 allows external wall cladding for BAL FZ provided the system is non-



combustible or complies with AS 1530.8.2 or achieves an FRL of at least 30/30/30 or -/30/30 when tested from the outside. LuxeWall Flameguard (FRL 90/90/90), Equitilt Flameguard Plus (FRL up to 180/180/180) and MetecnoPanel 200mm (FRL up to -/60/30) are considered to satisfy BAL FZ requirements under AS 3959.

Joints | All joints in the external surface material of the wall shall be covered, sealed overlapped, backed, or butt-jointed to prevent gaps greater than 3mm.

Junctions All exposed core material is to be encapsulated with non-combustible material to satisfy BAL requirements.

Vents and weep holes | Vents and weep holes are to be protected as per AS 3959:2018 for the respective BAL zone.

3 Conclusion

The National Construction Code 2022 Volume One Clause G5P1, G5D1, G5D2, and G5D3 and Volume Two H7D4 requires that Buildings of Class 1, 2, 3 and associated Class 10 buildings or decks located in designated Bushfire prone areas be constructed in accordance with AS 3959.

The following Bondor products are considered to be consistent and satisfy the requirements of AS 3959 for BAL 12 to BAL 40 for wall and roof applications and are to be installed in accordance with respective product installation instructions provided by Bondor: EconoClad; LuxeWall; Equideck; MetecnoInspire; Equitilt Flameguard; Equitilt Flameguard Plus; Equitilt; MetecnoPanel; MetecnoSpan; InsulRoof; InsulRoof-X 60, 80 and 100mm; Smooth Panel; InsulWall; SolarSpan; SolarSpan-X 60, 80 and 100mm; LuxeWall Flameguard; BondorPanel and Bondor-X 50, 75 and 100mm.

The following Bondor products are considered to be consistent and satisfy the requirements of AS 3959 for BAL FZ for wall applications and are to be installed in accordance with respective product installation instructions provided by Bondor: Equitilt Flameguard Plus; MetecnoPanel (200mm); and LuxeWall Flameguard.

The above information is based on the following data sheets and their versions:

• EconoClad	v13 current 28/10/2021
• LuxeWall	v11 current 06/07/2021
• Equideck	v51 current 30/08/2022
• MetecnoInspire	v16 current 29/08/2022
• Equitilt Flameguard	v53 current 16/08/2022
• Equitilt Flameguard Plus	v53 current 16/08/2022
• Equitilt	v7 current 29/08/2022
• MetecnoSpan	v58 current 29/08/2022
• InsulRoof	v19 current 21/04/2022
• SmoothPanel	v6 current 28/07/2022
• InsulWall	v46 current 19/05/2021
• SolarSpan	v53 current 29/08/2022
• LuxeWall Flameguard	v7 current 06/07/2021
• BondorPanel	v51 current 29/08/2022
• MetecnoPanel	v58 current 29/08/2022



The above information of MetecnoPanel is also based on the following:

- Exova Warringtonfire Test Report with EWFA Report No: 2464400

This advisory note serves as a certificate from a professional engineer in accordance with Clause A2G3 (1)(e) of the BCA 2022. Benjamin Hughes-Brown is a Chartered Professional Engineer and Fellow of Engineers Australia with over 15 years of experience in fire safety engineering. Benjamin satisfies the criteria established by BCA Clause A2G1 being a professional engineer. This is a report from a professional engineer.

The above Bondor products are considered to be consistent and satisfy the requirements of AS 3959:2018 for BAL 12.5 to BAL FZ areas for wall and roof application and are to be installed in accordance with the respective product installation instructions provided by Bondor. The above information is based on the data sheets listed above, system elements as well as their respected fire test(s).

Benjamin Hughes-Brown | FIEAust CPEng NER APEC Engineer IntPE(Aus)

Chartered Professional Engineer

CPEng, NER (Fire Safety / Mech) 2590091, RPEQ 11498, BDC-1875, PRE0000303, DEP0000317, PE0001872
MFireSafety (UWS), BEng (UTS), GradDipBushFire (UWS), DipEngPrac (UTS), DipEng (CIT)

Product Description

BondorPanel[®] is a versatile and high performing insulated wall and ceiling panel used in controlled environments such as cold storage, food preparation areas and clean rooms, but extends its use to transportable offices, wall partitions and many other applications.

Panel Properties							
Panel Thickness (mm)	50	75	100	125	150	200	250
Typical Mass (kg/m²)	11.3	11.6	12.0	12.3	12.7	13.3	14.0
SL Grade Declared λ (W/m.K) at 23°C	0.042	0.042	0.042	0.042	0.042	0.042	0.042
SL Grade Declared R-value (m²K/W) at 23°C	1.20	1.80	2.40	3.00	3.60	4.85	6.05
SL Grade Total R-value (m²K/W) at 6°C	1.45	2.10	2.74	3.38	4.03	5.31	6.60
SL Grade Total R-value (m²K/W) at 15°C (Winter)	1.41	2.04	2.66	3.28	3.91	5.16	6.41
SL Grade Total R-value (m²K/W) at 30°C (Summer)	1.34	1.94	2.53	3.13	3.72	4.91	6.09
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)
SL Grade EPS-FR Core / 0.6mm 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	250
1500	3.39	5.09	6.79	8.48	10.18	13.58	16.97
2700	1.86	2.83	3.77	4.71	5.66	7.54	9.43
3900	0.95	1.57	2.09	2.62	3.14	4.19	5.24
5100	0.54	0.92	1.22	1.53	1.84	2.45	3.06
6300	0.33	0.60	0.80	1.00	1.20	1.60	2.01
7500	-	0.42	0.57	0.71	0.85	1.13	1.42
8700	-	0.30	0.42	0.53	0.63	0.84	1.05

Multi Span, wind pressure acting outwards							
Span (mm)	Panel Thickness (mm)						
	50	75	100	125	150	200	250
1500	2.72	4.07	5.43	6.79	8.15	9.92	9.92
2700	1.51	2.26	3.02	3.77	4.53	5.51	5.51
3900	1.04	1.57	2.09	2.61	3.13	3.82	3.82
5100	0.61	0.92	1.22	1.53	1.84	2.45	2.92
6300	0.40	0.60	0.80	1.00	1.20	1.60	2.01
7500	0.28	0.42	0.57	0.71	0.85	1.13	1.42
8700	-	0.32	0.42	0.53	0.63	0.84	1.05

*Refer notes 1-4.

Span Table Internal Cold Storage

SL Grade EPS-FR Core / 0.6mm Steel Skins. Maximum span (mm):

Single Span, internal cold storage 0°C or more							
Span (mm)	Panel Thickness (mm)						
	50	75	100	125	150	200	250
Walls (Non-Load Bearing)	-	5700	7100	8300	9300	10800	12000
Walls (Load Bearing)	-	5100	6500	7500	8200	9500	10700
Ceilings	-	5100	6300	7200	7800	9000	9900

Multi-span, internal cold storage 0°C or more							
Span (mm)	Panel Thickness (mm)						
	50	75	100	125	150	200	250
Walls (Non-Load Bearing)	-	6500	7500	8900	9100	10500	11700
Walls (Load Bearing)	-	6000	6900	7700	8400	9700	10900
Ceilings	-	5300	6000	6900	7500	8600	9600

*Refer notes 3-10.



Core	EPS-FR (Expanded Polystyrene with fire retardant)
Width (cover mm)	1200
Thickness (mm)	50, 75, 100, 125, 150, 200, 250
Length	Up to 16m (check for availability)
External Material	BlueScope COLORBOND [®] Steel 0.6mm G300 CRP Grade
External Finishes	Plain, Ribbed, Satinline
Exterior Colour Options	COLORBOND [®] Intramax [™] or other standard & non-standard colours
Internal Material	BlueScope Colorbond [®] Steel 0.6mm G300 CRP Grade
Internal Finishes	Plain
Interior Colour Options	COLORBOND [®] Intramax [™]
Paint System	AS/NZS 2728 & AS 1397
Acoustic Properties	Rw 24 - 25 depending on thickness
Material Group Numbers	C1.10 Group 1 & 2 ^a
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	2-3
SMOGR _{RC}	< 100

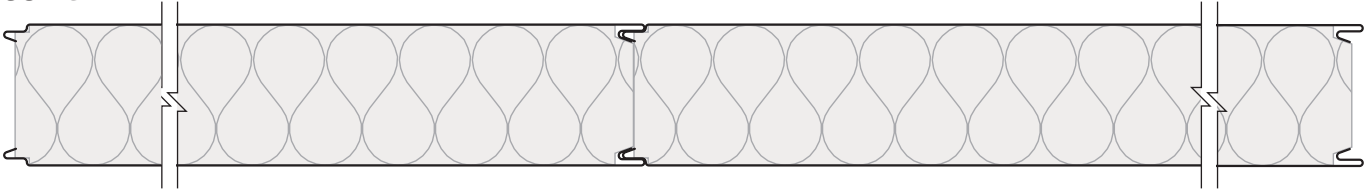
a. AS 5637.1 / AS ISO 9705 - BCA Group Number (Spec C1.10)
BondorPanel[®] EPS-FR steel skinned insulated building panels conform to the requirements of the BCA Specification C1.10 as either Group 2 or Group 1 depending on panel thickness and construction details. Refer Bondor[®] for more information.

The technical information contained in this document cover a breadth of applications where BondorPanel[®] may be used, which may be outside the scope of our Codemark certificate. Data specific to CodeMark certification can be found on BondorPanel[®]'s CoC CM40189.

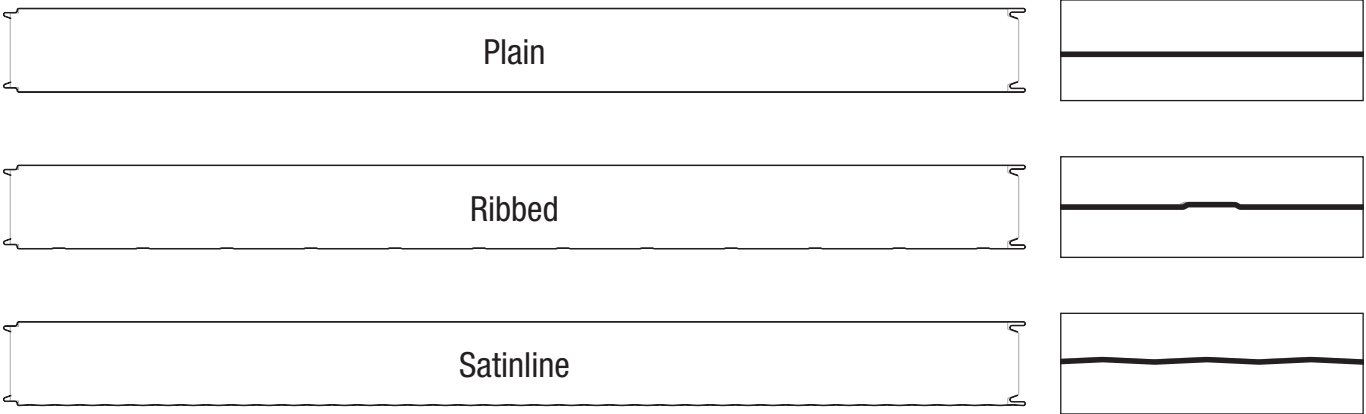
SPAN TABLE NOTES:

- Extended span tables including cyclonic regions C&D and 300mm thick panel are also available. Refer Bondor[®].
- Fixing with min. 14g tek screws (x4 off) or mushroom head bolts (x2 off) per fixing point 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.
- This span table applies for cold storage constructed wholly within a larger enclosed building. Pressure relief port is to be provided for a freezer in accordance with Bondor[®] recommendation.
- Panel thicknesses of not less than 100mm are recommended for chillers, not less than 150mm for freezers and not less than 200mm for blast freezers, depending on structural considerations. Check 'R' value for insulation requirements.
- Fixing with mushroom head bolts (x1 off) minimum per panel per line of support is required.
- Self weight of the panel has been allowed for, plus an allowance of up to 10kg/m² 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 for.
- 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.

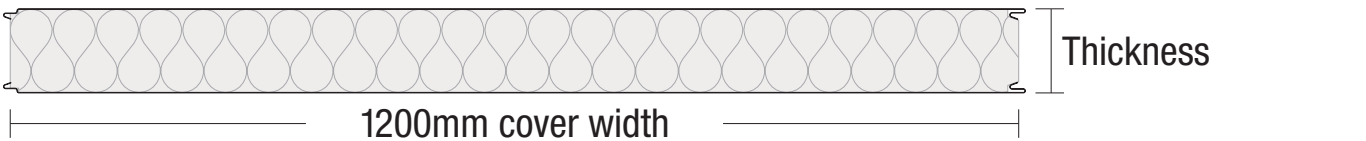
Joint



Profiles



Dimensions

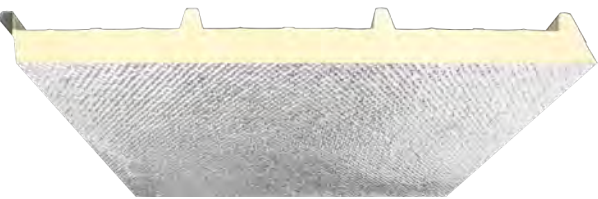


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PERTH 17 Gauge Circuit Canning Vale WA 6155 T: 08 9256 0600 F: 08 9256 0620	ADELAIDE 70 – 72 Rundle Road Salisbury South SA 5106 T: 08 8282 5000 F: 08 8282 5099	LAUNCESTON 7 Connector Park Drive Kings Meadows TAS 7249 T: 03 6335 8500 F: 03 6335 8544
To connect to your nearest Bondor [®] branch simply call 1300 300 099 or visit www.bondor.com.au		

Metecno Pty Limited. ABN 44 096 402 934. The manufacturer reserves the right to change the specification without notice. Bondor[®], Equitilt[®], BondorPanel[®], FlameGuard[®], MetecnoPanel[®], EconoClad[®], MetecnoKasset[®], InsulWall[®], LuxeWall[®], DesignerWall[®], SolarSpan[®], InsulRoo[®], MetecnoSpan[®], Purline[®], Equideck[®], InsulLiving[®], Metecno are trademarks of Metecno Pty Limited. BlueScope, COLORBOND[®] Intramax[™] and colour names are trademarks of BlueScope Steel Limited. The colours shown in this publication have been reproduced to represent actual product colours as accurately as possible. However, given printing limitations, we recommend checking your chosen colour against an actual sample before placing orders. This advice is of a general nature only. Designers must provide for adequate structural performance and other Building Code requirements. This information is subject to change. Refer to Bondor[®] website for latest version. Consult Bondor[®] for your application. BON0126 Tech Data Sheets - BondorPanel v51 29/08/2022



Leaders in Thermal & Architectural Building Solutions



Product Description

EconoClad® is a high performing and low cost roofing or walling insulated panel suitable for industrial and commercial cladding. EconoClad® has a non-ozone depleting fire-retardant PIR core bonded between a hi-tensile COLORBOND® steel roof and a silver/white/black, multi-layered foil/fibreglass/PVC flexible facings on the internal side. EconoClad® is a fast, economical and practical roof or wall cladding option.

Panel Properties					
Panel Thickness (mm)	25	40	60	80	100
Typical Mass (kg/m²)	5.6	6.3	7.1	7.9	8.7
Declared λ (W/m.K) at 23°C	0.023	0.023	0.023	0.023	0.023
Declared R-value (m²K/W) at 23°C	1.15	1.85	2.75	3.65	4.55
Total R-value (m²K/W) at 15°C (Winter)	1.50	2.22	3.17	4.12	5.06
Total R-value (m²K/W) at 30°C (Summer)	1.98	2.64	3.51	4.38	5.25
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 APPLICATION ONLY)

PIR Core / 0.42mm Hi-tensile External Steel Skin.

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

Multi-span, wind pressure acting outwards		
Span (mm)	Panel Thickness (mm)	
	25, 40 & 60	80 & 100
600	8.05	8.05
900	5.38	5.38
1200	4.05	4.05
1500	3.25	3.25
1800	-	2.51
2100	-	1.72*
2400	-	1.16*

* For Region B, 1.86kPa and 1.43kPa can be used for 2100mm and 2400mm span respectively.

Recommended Uses

Air conditioned offices, supermarkets, agricultural buildings, industrial buildings, warehouses, commercial buildings, domestic re-roofing.



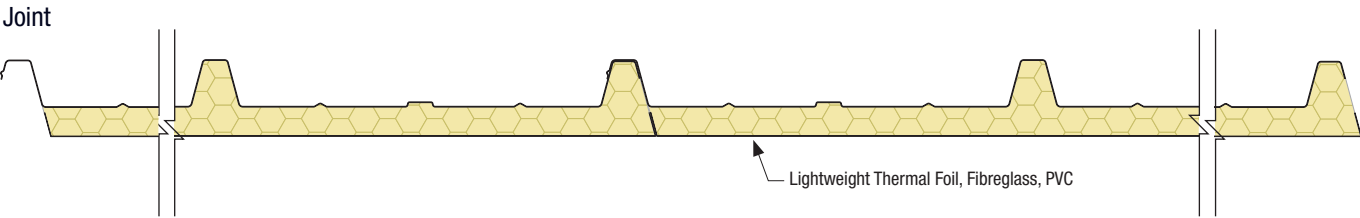
Core	PIR (Fire-retardant Polyisocyanurate)
Width (cover mm)	1000
Thickness (mm)	25, 40, 60, 80, 100
Length	Up to 16m (check for availability)
External Material	0.42mm COLORBOND® steel
External Finishes	High-Rib Trapezoidal Cladding Profile
Exterior Colour Options	Surfmist®. Other colours available subject to minimum order quantities.
Internal Material	Lightweight Thermal Foil, Fibreglass, PVC ^c
Internal Finishes	Foilback, Embossed PVC ^c
Interior Colour Options	Bright White, Silver, Black
Pitch	2 degree minimum
Paint System	AS/NZS 2728 & AS 1397
Acoustic Properties	Rw 23
Material Group Numbers	C1.10 Group 2 ^a
Bushfire Attack Level	BAL-40 (All exposed core to be covered with flashing)
FM Approval	4880 ^b
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

- a. AS 5637.1 / AS ISO 9705 - BCA Group Number (Spec C1.10)
EconoClad® PIR steel skinned insulated building panels conform to the requirements of the BCA Specification C1.10 as Group 2.
b. When used as internal wall and ceiling, EconoClad® can achieve FM Approval. Refer to your local Metecno® branch for details.
c. For Fire Hazard Properties of EconoClad® with PVC internal facing, contact Metecno®.

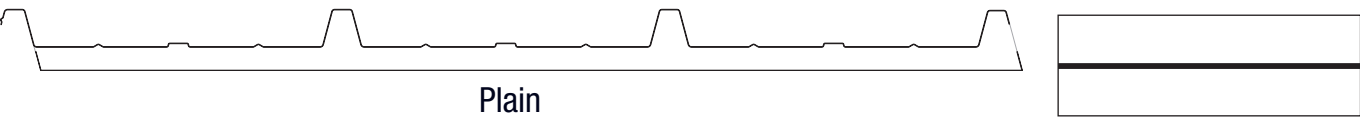
The technical information contained in this document cover a breadth of applications where EconoClad® may be used, which may be outside the scope of our Codemark certificate. Data specific to CodeMark certification can be found on EconoClad®'s CoC CM40234.

- 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. Values only valid for use with steel members of bmt 1.5mm or thicker. For thinner steel substrates, fastener capacities must be checked.
 - Pressures specified are for wind gusts only per AS/NZS 1170.2.
 - Deflection limit of span/120 applies, and in accordance with Serviceability Limit State criteria per AS1562.1 - Cl 5.5.
 - Self weight of the panel has been allowed for, plus an allowance of up to 10kg/m² for light duty fittings (lights, etc.). No other dead loads permitted.
 - Non-trafficable maintenance access (concentrated load) of 110kg on any one panel has been allowed for.
 - 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.

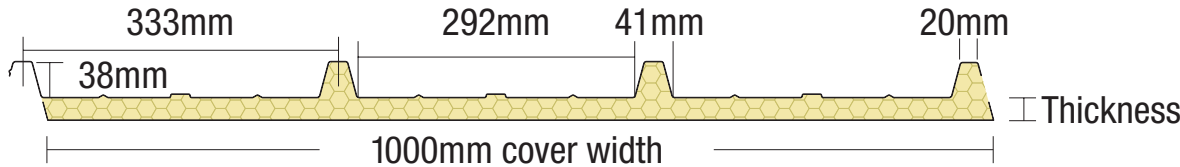
EconoClad®



Profiles



Dimensions



Bondor® National Network

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To connect to your nearest Bondor® branch simply call 1300 300 099 or visit www.bondor.com.au

Metecno Pty Limited. ABN 44 096 402 934. The manufacturer reserves the right to change the specification without notice. Bondor®, Equitilt®, BondorPanel®, FlameGuard®, FlameGuard® Plus, MetecnoPanel®, MetecnoInspire®, EconoClad®, MetecnoKasset®, MetecnoTherm®, InsulWall®, LuxeWall®, DesignerWall®, SolarSpan®, InsulRoof®, MetecnoSpan®, CoolRoof®, Equideck®, InsulLiving®, Metecno® are trademarks of Metecno Pty Limited. BlueScope, COLORBOND®, Intramax™ and colour names are trademarks of BlueScope Steel Limited. The colours shown in this publication have been reproduced to represent actual product colours as accurately as possible. However, given printing limitations, we recommend checking your chosen colour against an actual sample before placing orders. This advice is of a general nature only. Designers must provide for adequate structural performance and other Building Code requirements. *Conditions may apply. **Limited availability, minimum order quantity may be required. ^Check with NCC for permissible Solar Absorptance before selecting the exterior roof colour. Darker colours may be warranted for use in limited regions refer to www.bondor.com.au as this information is subject to change. Consult Bondor® for your application.



Leaders in Thermal & Architectural Building Solutions



EPS-FR

Technical Data Sheet

Version 51
Current as of: 30/08/22

Product Description

Equideck® EPS-FR insulated roofing panel system provides a flat and standing-seam like roof profile made from COLORBOND® steel, a pre-painted ceiling underside and high performance insulated core in an all-in-one roofing panel. Equideck® is made using Australian-made COLORBOND® steel for durability and delivers a long-spanning and thermally efficient roof.

Panel Properties							
Panel Thickness (mm)	50	75	100	125	150	200	250
Typical Mass (kg/m²)	11.3	11.6	12.0	12.3	12.7	13.3	14.0
SL Grade Declared λ (W/m.K) at 23°C	0.042	0.042	0.042	0.042	0.042	0.042	0.042
SL Grade Declared R-value (m²K/W) at 23°C	1.20	1.80	2.40	3.00	3.60	4.85	6.05
SL Grade Total R-value (m²K/W) at 15°C (Winter)	1.40	2.03	2.65	3.27	3.90	5.15	6.40
SL Grade Total R-value (m²K/W) at 30°C (Summer)	1.38	1.98	2.57	3.17	3.76	4.95	6.13
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)

SL Grade EPS-FR Core / 0.6mm 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	250
1500	3.49	5.19	6.89	8.59	10.29	12.12	12.12
2700	1.97	2.93	3.88	4.82	5.77	6.78	6.79
3900	1.06	1.67	2.20	2.73	3.25	4.31	4.74
5100	-	1.02	1.33	.164	1.95	2.57	3.18
6300	-	-	0.91	1.11	1.32	1.72	2.13
7500	-	-	-	-	0.96	1.25	1.54
8700	-	-	-	-	-	0.96	1.18

Multi Span, wind pressure acting outwards							
Span (mm)	Panel Thickness (mm)						
	50	75	100	125	150	200	250
1500	2.82	4.18	4.91	4.91	4.91	4.92	4.92
2700	1.61	2.37	2.77	2.78	2.78	2.78	2.79
3900	1.14	1.67	1.95	1.96	1.96	1.96	1.97
5100	-	1.02	1.33	1.52	1.53	1.53	1.54
6300	-	-	0.91	1.11	1.26	1.26	1.27
7500	-	-	-	-	0.96	1.08	1.08
8700	-	-	-	-	-	0.95	0.95

Quick and Easy installation

With the Equideck® unique panel design, the roofing, insulation and ceiling are installed in one simple operation. Equideck® does not need traditional requirements for ceiling lining, reflective membrane or insulating wool and painting, keeping construction time and on-site trades to a minimum.



Core	EPS-FR (Expanded Polystyrene with fire retardant)
Width (cover mm)	1200
Thickness (mm)	50, 75, 100, 125, 150, 200, 250 (non-std options available)
Length	Up to 16m (check for availability)
External Material	BlueScope® COLORBOND® Steel 0.6mm G300
External Finishes	Plain, Ribbed, Satinline
Exterior Colour Options	Surfmist®
Internal Material	BlueScope® COLORBOND® Steel 0.6mm G300
Internal Finishes	Plain
Interior Colour Options	Surfmist®
Pitch	3 degrees minimum
Paint System	AS/NZS 2728 & AS 1397
Acoustic Properties	Rw 24 - 25 depending on thickness
Material Group Numbers	C1.10 Group 1 & 2 ^a
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	2-3
SMOGR _{hc}	< 100

a. AS 5637.1 / AS ISO 9705 - BCA Group Number (Spec C1.10)
Equideck® EPS-FR steel skinned insulated building panels conform to the requirements of the BCA Specification C1.10a as either Group 2 or Group 1 depending on panel thickness and construction details. Refer Bondor® for more information.

The technical information contained in this document cover a breadth of applications where Equideck® may be used, which may be outside the scope of our Codemark certificate. Data specific to CodeMark certification can be found on Equideck®'s CoC CM40195.

- SPAN TABLE NOTES:
- Extended span tables including wind pressure acting inwards are also available. Refer Bondor®.
 - Fixing details refer Bondor®.
 - 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 10kg/m² 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 for.
 - 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.
 - Min. roof slope of 3 degree applies.

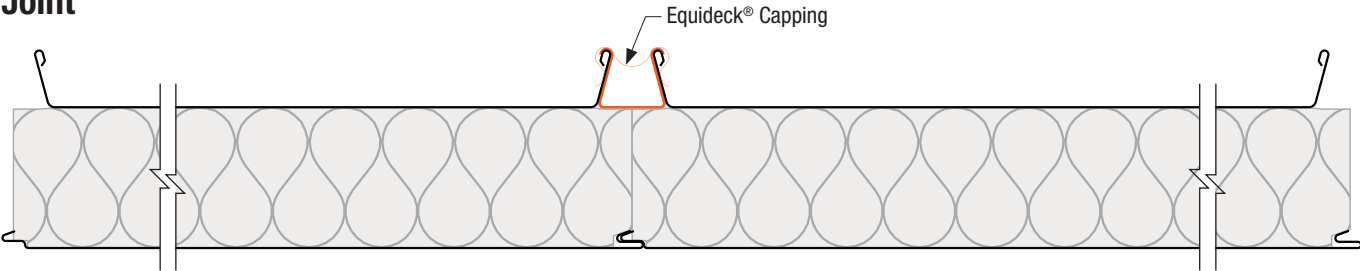


EPS-FR

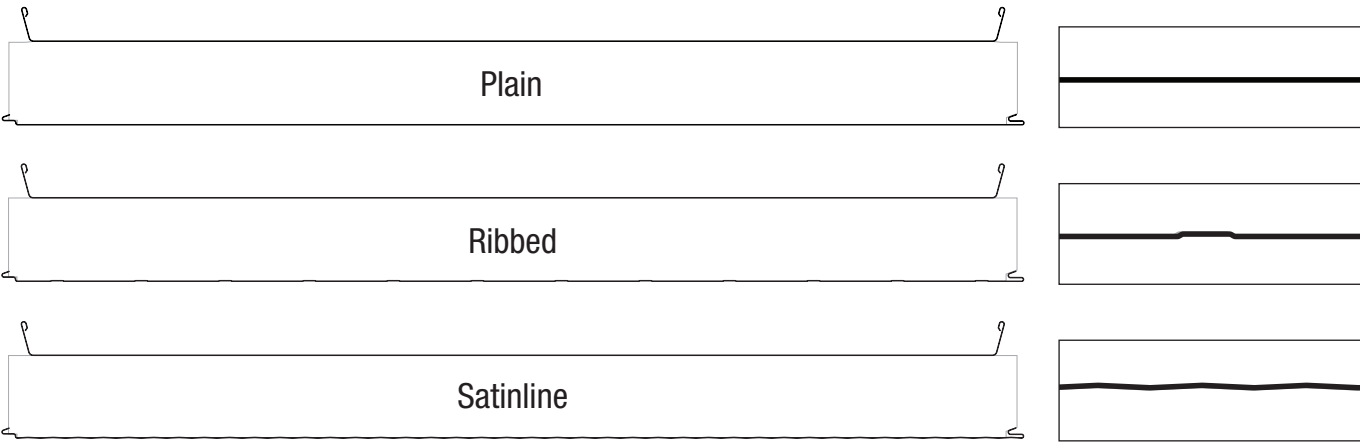
Technical Data Sheet

Version 51
Current as of: 30/08/22

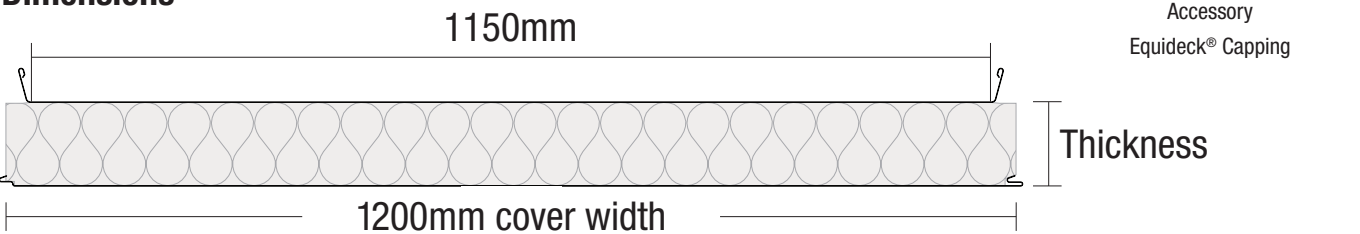
Joint



Profiles



Dimensions



Bondor® National Network		
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PERTH 17 Gauge Circuit Canning Vale WA 6155 T: 08 9256 0600 F: 08 9256 0620	ADELAIDE 70 – 72 Rundle Road Salisbury South SA 5106 T: 08 8282 5000 F: 08 8282 5099	LAUNCESTON 7 Connector Park Drive Kings Meadows TAS 7249 T: 03 6335 8500 F: 03 6335 8544
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Leaders in Thermal & Architectural Building Solutions



EPS-FR

Technical Data Sheet

Version 7
Current as of: 29/08/22

Product Description

Equitilt® EPS-FR is an architectural walling panel system installed in a vertical or horizontal orientation that combines functionality with creative expression. Equitilt® is offered in a variety of metallic or standard COLORBOND® colours that can be mixed with surface profiles to deliver a stunning finish to a building's exterior and interior.

Panel Properties							
Panel Thickness (mm)	50	75	100	125	150	200	250
Typical Mass (kg/m²) based on 0.7/0.6mm skins	12.0	12.4	12.8	13.2	13.5	14.2	14.9
SL Grade Declared λ (W/m.K) at 23°C	0.042	0.042	0.042	0.042	0.042	0.042	0.042
SL Grade Declared R-value (m²K/W) at 23°C	1.20	1.80	2.40	3.00	3.60	4.85	6.05
SL Grade Total R-value (m²K/W) at 15°C (Winter)	1.41	2.04	2.66	3.28	3.91	5.16	6.41
SL Grade Total R-value (m²K/W) at 30°C (Summer)	1.34	1.94	2.53	3.13	3.72	4.91	6.09
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)

SL Grade EPS-FR Core / 0.7mm 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	250
1500	4.27	6.40	8.53	10.67	12.80	17.07	21.33
2700	2.01	3.21	4.27	5.33	6.40	8.52	10.62
3900	1.03	1.54	2.05	2.56	3.07	4.08	5.10
5100	0.58	0.90	1.20	1.50	1.79	2.39	2.98
6300	0.35	0.59	0.78	0.98	1.17	1.56	1.95
7500	-	0.42	0.55	0.69	0.83	1.10	1.38
8700	-	0.31	0.41	0.51	0.62	0.82	1.02

Multi Span, wind pressure acting outwards							
Span (mm)	Panel Thickness (mm)						
	50	75	100	125	150	200	250
1500	3.41	5.12	6.83	8.53	10.24	12.53	12.53
2700	1.90	2.84	3.79	4.74	5.69	6.96	6.96
3900	1.03	1.54	2.05	2.56	3.07	4.08	4.82
5100	0.60	0.90	1.20	1.50	1.79	2.39	2.98
6300	0.40	0.59	0.78	0.98	1.17	1.56	1.95
7500	0.28	0.42	0.55	0.69	0.83	1.10	1.38
8700	-	0.31	0.41	0.51	0.62	0.82	1.02



Core	EPS-FR (Expanded Polystyrene with fire retardant)
Width (cover mm)	1200, 900 (non-std)
Thickness (mm)	50, 75, 100, 125, 150, 200, 250; non-std options available
Length	Up to 16m (check for availability)
External Material	0.6mm, 0.7mm G300 COLORBOND® steel
External Finishes	Plain, Ribbed, Satinline, Shadowline Series 600/1200
Exterior Colour Options	Standard & Non-Standard colours. Check for availability.
Internal Material	0.6mm, 0.7mm G300 COLORBOND® steel
Internal Finishes	Plain, Ribbed, Satinline, Shadowline Series 600/1200
Interior Colour Options	Standard & Non-Standard colours. Check for availability.
Paint System	AS/NZS 2728 & AS 1397
Acoustic Properties	Rw 24 - 25 depending on thickness
Material Group Numbers	C1.10 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	2-3
SMOGR _{HC}	< 100

a. AS 5637.1 / AS ISO 9705 - BCA Group Number (Spec C1.10)
Equitilt® EPS-FR steel skinned insulated building panels conform to the requirements of the BCA Specification C1.10 as either Group 2 or Group 1 depending on panel thickness and construction details. Refer Bondor® for more information.

The technical information contained in this document cover a breadth of applications where Equitilt® may be used, which may be outside the scope of our Codemark certificate. Data specific to CodeMark certification can be found on Equitilt®'s CoC CM40104.

SPAN TABLE NOTES:
1. Extended span tables including wind pressure acting inwards are also available. Refer Bondor®.
2. Fixing with min. 4x 14g tek screws or 2x mushroom head bolts per panel are required. Concealed fixings is available. Refer Bondor®.
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. 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.

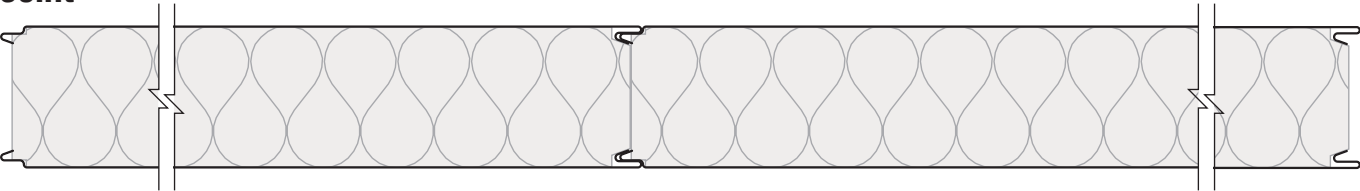


EPS-FR

Technical Data Sheet

Version 7
Current as of: 29/08/22

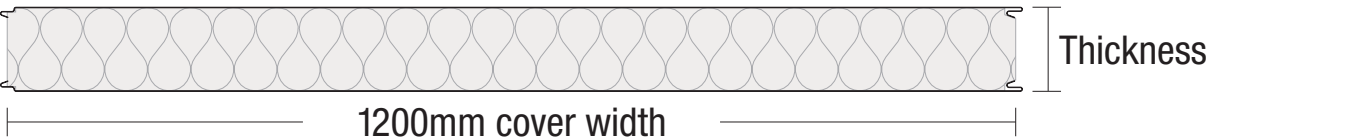
Joint



Profiles

Plain	
Ribbed	
Satinline	
Shadowline Series 600	
Shadowline Series 1200	

Dimensions



Bondor® National Network		
BRISBANE / EXPORT 103 Ingram Road Acacia Ridge QLD 4110 T: 07 3323 8500 F: 07 3323 8501	MELBOURNE 6 Dunmore Drive Truganina VIC 3029 T: 03 8326 8000 F: 03 8326 8099	SYDNEY 49 – 53 Newton Road Wetherill Park NSW 2164 T: 02 9609 0888 F: 02 9729 1114
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Leaders in Thermal & Architectural Building Solutions

Product Description

Equitilt® FlameGuard® is a non-combustible architectural walling panel system manufactured with a mineral wool fibre core material. Equitilt® FlameGuard® is FM Approved to FM 4880 No Height Restriction. Equitilt® FlameGuard® Plus is FM Approved to FM 4880 & FM 4881 No Height Restriction. These panels are recommended to be used where improved fire performance is required for insurance purposes in walling applications.

Panel Properties				
Panel Thickness (mm)	FlameGuard®		FlameGuard® Plus	
	50	75	100	150
Typical Mass (kg/m²) based on 0.6/0.6mm skins	15.6	18.1	20.6	25.6
Declared λ (W/m.K) at 23°C	0.037	0.037	0.037	0.037
Declared R-value (m²K/W) at 23°C	1.36	2.04	2.72	4.09
Total R-value (m²K/W) at 15°C (Winter)	1.58	2.29	3.00	4.41
Total R-value (m²K/W) at 30°C (Summer)	1.48	2.13	2.79	4.11
Note: The Declared R-value is at 23°C in accordance with AS/NZS 4859.1:2018 & AS/NZS 4859.2:2018.				
Max. Lengths for Standard Supply				
Max Panel Length (m)	5	7	9	11 <small>(Special Order)</small>

Span Table

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

Mineral Wool 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)			
	FlameGuard®		FlameGuard® Plus	
	50	75	100	150
1500	1.88	2.81	3.75	5.63
2700	1.04	1.56	2.08	3.13
3900	0.72	1.08	1.44	2.16
5100	0.49	0.78	1.04	1.56
6300	0.30	0.51	0.68	1.02

Multi-span, wind pressure acting inwards/outwards				
Span (mm)	Panel Thickness (mm)			
	FlameGuard®		FlameGuard® Plus	
	50	75	100	150
1500	1.50	2.25	3.00	4.50
2700	0.83	1.25	1.67	2.50
3900	0.58	0.87	1.15	1.73
5100	0.44	0.66	0.88	1.32
6300	0.34	0.51	0.68	1.02

* Refer Notes 1 - 4.

Span Table

INTERNAL APPLICATIONS

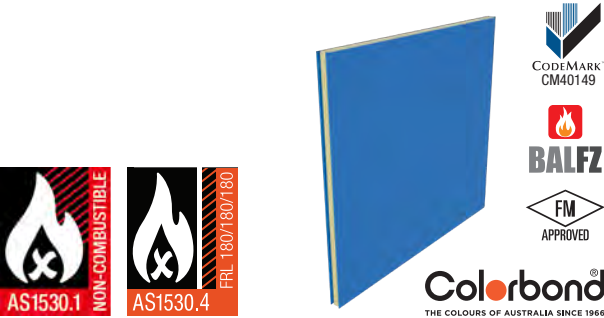
Inside Buildings				
Span (mm)	Panel Thickness (mm)			
	FlameGuard®		FlameGuard® Plus	
	50	75	100	150
Walls (Non-Load Bearing)	6000	7200	8400	10000
Ceilings	2300	3400	4500	4500

* Refer Notes 3 - 9.

FlameGuard® Plus FRL Systems Vertical Walls					
	Panel Thickness (mm)				
	FlameGuard®		FlameGuard® Plus		
	100	100	100	150	150
Maximum FRL	-/30/30	-/60/60	-/90/90	-/60/60	-/180/180

FlameGuard® Plus FRL Systems Horizontal Walls			
	Panel Thickness (mm)		
	100		150
	100	100	150
Maximum FRL	-/60/60	-/90/90	-/120/120

Bondor® provide a variety of FRL construction and fixing options. Refer to Bondor® for maximum span and up-to-date construction details.



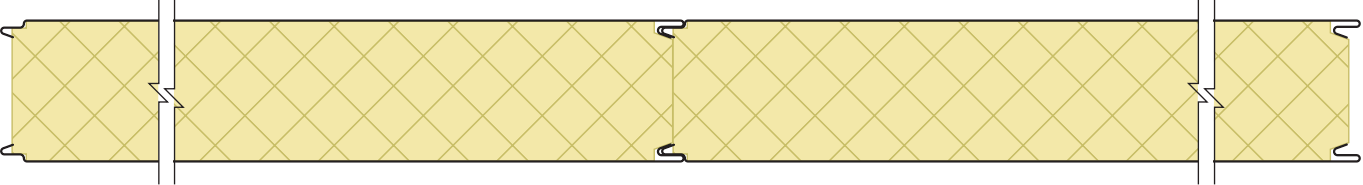
Core	MW (Mineral Wool)
Width (cover mm)	1200, 1140**, 900**
Thickness (mm)	FlameGuard®: 50, 75 FlameGuard® Plus: 100, 150
Length	Up to 11m (check for availability)
External Material	0.6mm, 0.7mm G300 COLORBOND® steel
External Finishes	Plain, Ribbed, Satinline, Shadowline Series 600/1200
Exterior Colour Options	Standard & Non-Standard colours. Check for availability.
Internal Material	0.6mm, 0.7mm G300 COLORBOND® steel
Internal Finishes	Plain, Ribbed, Satinline, Shadowline Series 600/1200
Interior Colour Options	COLORBOND® Intramax™
Paint System	AS/NZS 2728 & AS 1397
Acoustic Properties	Rw 28 - 30 depending on thickness
Material Group Numbers	C1.10 Group 1 & 2
Bushfire Attack Level	FlameGuard®: BAL-40 FlameGuard® Plus: BAL-FZ (All exposed core to be covered with flashing)
FM Approval	FlameGuard®: 4880 FlameGuard® Plus: 4880 & 4881
Environmental	Zero Ozone Depleting Potential (ODP)
Combustibility	AS 1530.1 Non-combustible
Fire hazard properties	AS/NZS 1530.3
Ignitability Index	0
Spread of Flame Index	0
Heat Evolved Index	0
Smoke Index	3
SMOGR _{RC}	< 100

** Contact a local Bondor representative to discuss minimum order quantities for non-standard widths.

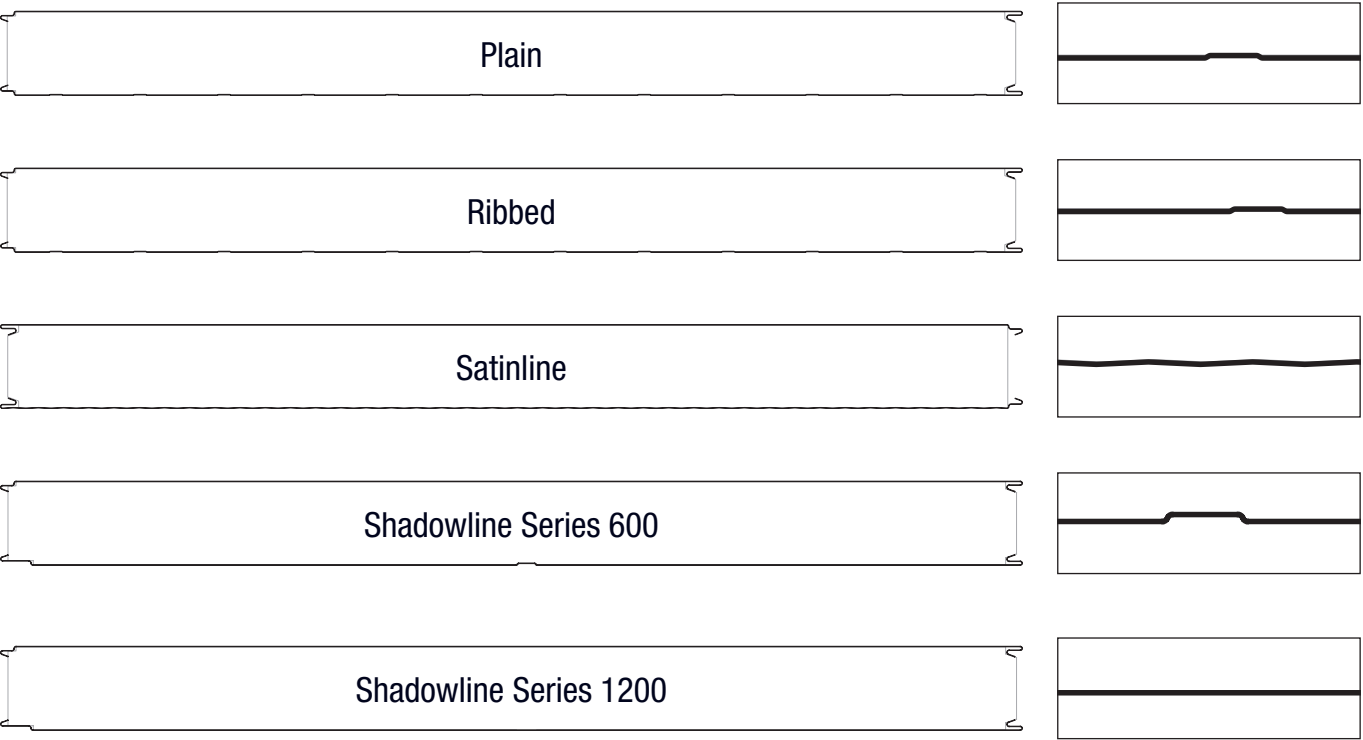
The technical information contained in this document cover a breadth of applications where Equitilt FlameGuard® may be used, which may be outside the scope of our Codemark certificate. Data specific to CodeMark certification can be found on Equitilt FlameGuard®'s CoC CM40149.

- SPAN TABLE NOTES:
- Extended span tables including wind pressure acting inwards are also available. Refer Bondor®.
 - Fixing with min. 2x 14g tek screws or 1x mushroom head bolts per panel 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.
 - This span table does not apply to cold store enclosure.
 - For ceilings, fixing with min. 4x 14g tek screws or 2x mushroom head bolts at each line of support per panel are required.
 - For ceilings, self weight of the panel has been allowed for, plus an allowance of up to 10kg/m² for light duty fittings (lights, etc.). No other dead loads permitted.
 - Non-trafficable maintenance access (concentrated load) of 110kg on any one panel has been allowed for.
 - 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.

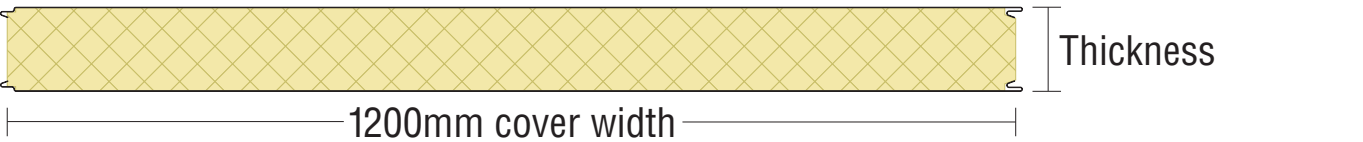
Joint



Profiles



Dimensions



Bondor® National Network		
BRISBANE / EXPORT 103 Ingram Road Acacia Ridge QLD 4110 T: 07 3323 8500 F: 07 3323 8501	MELBOURNE 6 Dunmore Drive Truganina VIC 3029 T: 03 8326 8000 F: 03 8326 8099	SYDNEY 49 – 53 Newton Road Wetherill Park NSW 2164 T: 02 9609 0888 F: 02 9729 1114
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To connect to your nearest Bondor® branch simply call 1300 300 099 or visit www.bondor.com.au		

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EPS-FR
PUR

Technical Data Sheet

Version 19
Current as of: 21/04/22



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/m²)	11.6	11.9	12.3	12.6	13.0	13.7
SL Grade Declared λ (W/m.K) at 23°C	0.042	0.042	0.042	0.042	0.042	0.042
SL Grade Declared R-value (m²K/W) at 23°C	1.40	2.00	2.60	3.20	3.80	5.05
SL Grade Total R-value (m²K/W) at 15°C (Winter)	1.61	2.23	2.85	3.48	4.10	5.35
SL Grade Total R-value (m²K/W) at 30°C (Summer)	1.58	2.17	2.77	3.36	3.96	5.14
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)

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



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®^**, Zinalume™
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	C1.10 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
SMOGR _{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:
- Extended span tables including Region B, single span and multi-span wind pressure acting inwards are also available. Refer Bondor®.
 - 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.
 - 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 fittings (lights, etc.). No other dead loads permitted.
 - Non-trafficable maintenance access (concentrated load) of 140kg on any span has been allowed for.
 - 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.

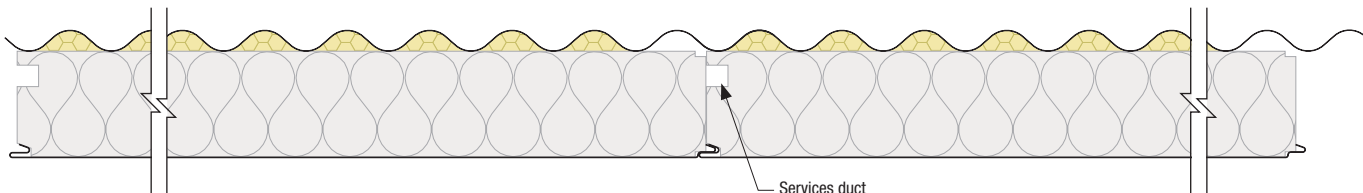


EPS-FR
PUR

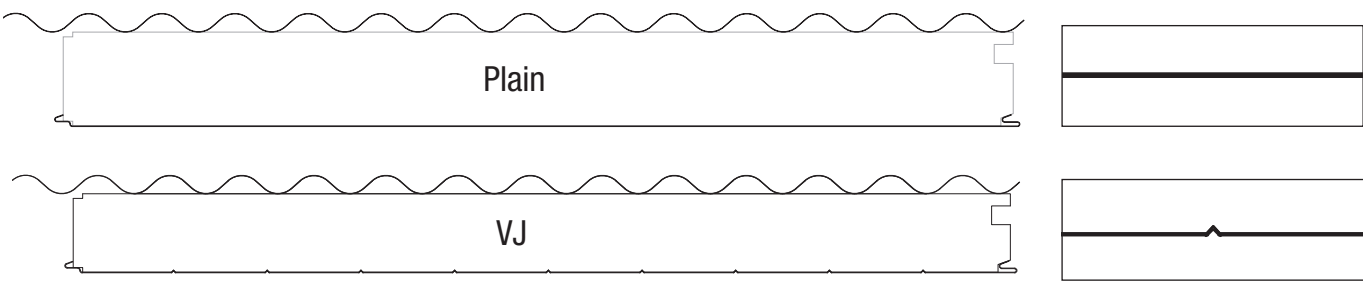
Technical Data Sheet

Version 19
Current as of: 21/04/22

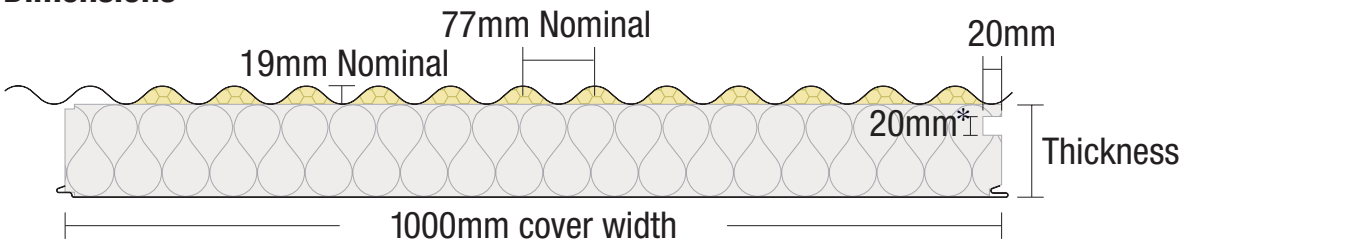
Joint



Profiles



Dimensions



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

Bondor® National Network		
BRISBANE / EXPORT 103 Ingram Road Acacia Ridge QLD 4110 T: 07 3323 8500 F: 07 3323 8501	MELBOURNE 6 Dunmore Drive Truganina VIC 3029 T: 03 8326 8000 F: 03 8326 8099	SYDNEY 49 – 53 Newton Road Wetherill Park NSW 2164 T: 02 9609 0888 F: 02 9729 1114
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Leaders in Thermal & Architectural Building Solutions

Product Description

InsulWall® is a lightweight and structural insulated panel made from EPS-FR that is lined with a unique BlueScope® primed steel ready for third party coating systems such as a Dulux® Wash & Wear painted interiors and Dulux® Acratex® acrylic-render coated exteriors. InsulWall® is purpose designed to suit commercial applications as well as the residential housing, modular and renovation market. InsulWall® is available in thicknesses to suit 90mm interior walls and 140mm exterior walls and is available for use with the NCC CodeMark accredited InsulLiving® building system.

Panel Properties		
Panel Thickness (mm)	90	140
Typical Mass (kg/m²)	11.8	12.5
SL Grade Declared λ (W/m.K) at 23°C	0.042	0.042
SL Grade Declared R-value (m²K/W) at 23°C	2.15	3.40
SL Grade Total R-value (m²K/W) at 15°C (Winter)	2.41	3.66
SL Grade Total R-value (m²K/W) at 30°C (Summer)	2.29	3.48
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)

SL Grade EPS-FR Core / 0.6mm Steel Skins.

Maximum wall height / span (mm):	
Wind Class	Span (mm)
N2	5400
N3	4200
N4	3600

Span Table

CYCLONIC REGION A&B (WALL APPLICATIONS ONLY)

SL Grade EPS-FR Core / 0.6mm Steel Skins.

Maximum wall height / span (mm):	
Wind Class	Span (mm)
C1	3600
C2	3000

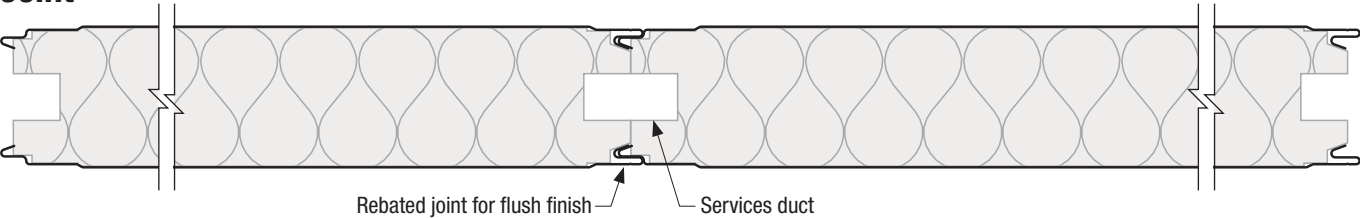


Core	EPS-FR (Expanded Polystyrene with fire retardant)
Width (cover mm)	1200
Thickness (mm)	90, 140
Length	Up to 16m (check for availability)
External Material	0.6mm G300 prime coated BlueScope® steel
External Finishes	Plain
Exterior Colour Options	External coating should strictly follow Dulux® DuSpec Specification. Dulux® Acratex® Coventry Coarse.
Internal Material	0.6mm G300 prime coated BlueScope® steel
Internal Finishes	Plain
Interior Colour Options	Internal coating should strictly follow Dulux® DuSpec Specification. Broad walls - Dulux® Wash & Wear 101 Adv L/G. Kitchens - Dulux® Wash & Wear Kitchen. Bathrooms - Dulux® Wash & Wear Bathroom L/G for wet areas
Paint System	AS/NZS 2728 & AS 1397
Acoustic Properties	Rw 24 - 25 depending on thickness
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	2-3
SMOGR _{RC}	< 100

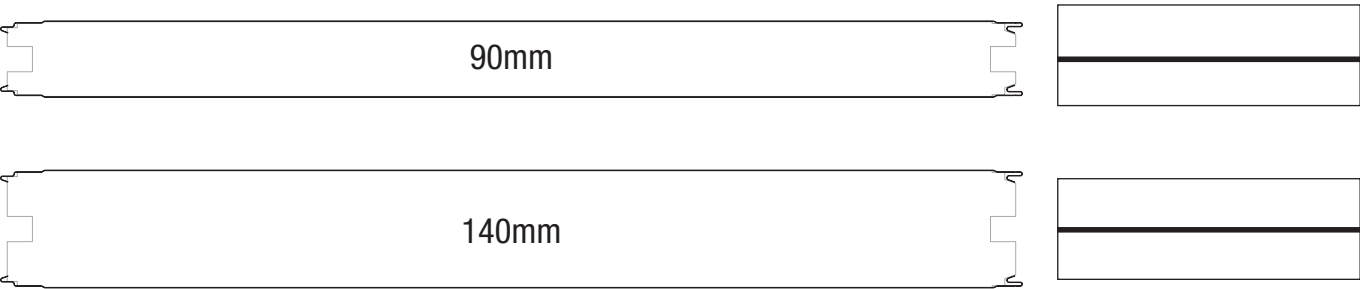
The technical information contained in this document cover a breadth of applications where InsulWall® may be used, which may be outside the scope of our Codemark certificate. Data specific to CodeMark certification can be found on InsulWall®'s CoC CM40033.

- SPAN TABLE NOTES:
1. Wind speeds and coefficients based on AS 4055 - Wind Loads for Housing.
 2. Serviceability deflection limit of span/150 has been allowed for.
 3. Further information is available in the Technical Manual including: bracing capacity, axial load, support of cupboards and bracket loading.

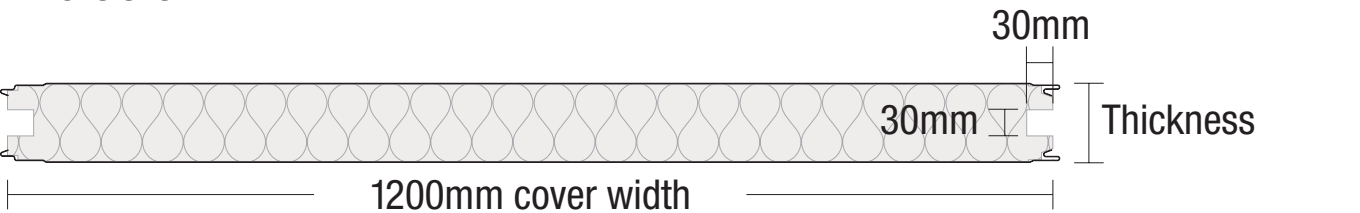
Joint



Profiles



Dimensions



Bondor® National Network		
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PERTH 17 Gauge Circuit Canning Vale WA 6155 T: 08 9256 0600 F: 08 9256 0620	ADELAIDE 70 – 72 Rundle Road Salisbury South SA 5106 T: 08 8282 5000 F: 08 8282 5099	LAUNCESTON 7 Connector Park Drive Kings Meadows TAS 7249 T: 03 6335 8500 F: 03 6335 8544
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Leaders in Thermal & Architectural Building Solutions

Product Description

LuxeWall® is a modern, lightweight residential wall cladding solution developed with a concealed fixing system to fasten to timber and metal stud wall framing. The system uses architectural steel faced insulated wall cladding conceal fixed in a vertical orientation. LuxeWall® is available in standard wall thicknesses of 50mm & 75mm (Note: 90 to 200mm wall thicknesses are available via special order).

LuxeWall® (EPS) Thermal Performance Total R-Value (m²K/W)								
Framing	Timber Framing				Steel Framing			
LuxeWall® Panel Thickness	50mm		75mm		50mm		75mm	
	Summer	Winter	Summer	Winter	Summer	Winter	Summer	Winter
System 1	1.8	1.9	2.4	2.5	1.7	1.8	2.3	2.5
System 2	2.9	3.1	3.5	3.7	2.8	3.0	3.4	3.6
System 3	3.3	3.6	3.9	4.2	3.1	3.4	3.8	4.1

Notes:
System 1: LuxeWall® SL Grade & 10mm Plasterboard
System 2: LuxeWall® SL Grade with R1.5 Batts & 10mm Plasterboard
System 3: LuxeWall® SL Grade with R2.0 Batts & 10mm Plasterboard

For 13mm Plasterboard add 0.02 to above Total R-value.
For 16mm Plasterboard add 0.04 to above Total R-value.
Calculations based on AS/NZS 4859.1:2018 & AS/NZS 4859.2:2018.
Mean temperatures: Summer: 30°C, Winter: 15°C.



Core	EPS-FR with CorePlus®
Width (cover mm)	1200, 900**
Thickness (mm)	50, 75 (other thicknesses available on request)
Length	Up to 6.5m (check for availability)
External Material	BlueScope® COLORBOND® Steel 0.6mm G300
External Finishes	Plain, VJ**
Exterior Colour Options	Metallic Cosmic®, Metallic Astro®, Matt Basalt®, Matt Surfmist®
Internal Material	BlueScope® COLORBOND® Steel 0.6mm G300 with HygienePlus®
Internal Finishes	Plain
Interior Colour Options	Surfmist
Paint System	AS/NZS 2728 & AS 1397
Acoustic Properties	Rw 35, 40 (EPS), *depending on construction
Material Group Numbers	C1.10 Group 1
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	2-3
SMOGR _{RC}	< 100

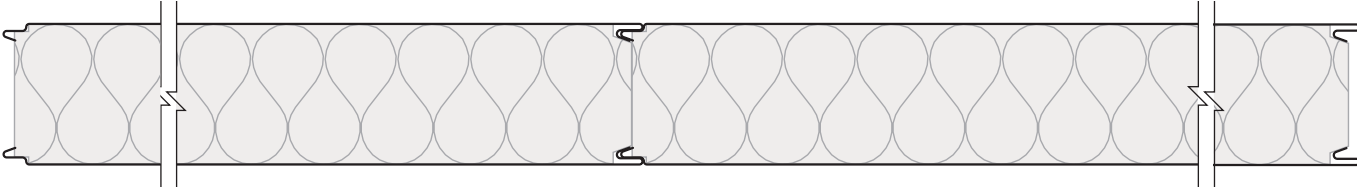
** Available on request.
* Contact Bondor® for construction details required.

The technical information contained in this document cover a breadth of applications where LuxeWall® may be used, which may be outside the scope of our CodeMark certificate. Data specific to CodeMark certification can be found on LuxeWall®'s CoC CM40203.

- SPAN TABLE NOTES:
- Batten spacing based on fixing strength and LuxeWall® span.
 - Batten must be checked separately for spans.
 - Wind speeds and coefficients based on AS 4055 - Wind Loads for Housing.
 - Wall pressure coefficients based on following assumptions:
 - External Pressure Cpe = +0.7, -0.65
 - Internal Pressure - Building has no dominant openings and more than one permeable wall or is effectively sealed. Cpi = +0.2, -0.3
 - Local Pressure - kl = 2.0 for negative wall pressure within 1200mm of corners
 - Combination Factor Kc = 0.9
 - Wall away from corner - Cfig = +0.9, -0.765. Wall within 1200mm of corner Cfig = -1.35
 - Serviceability deflection limit of span/150 has been allowed for.
 - Top Hat Battens require 2 fixings per stud and LuxeWall® fixed at 300mm centres.
 - M6 RoofZips to be used to fix battens into LuxeWall® modules.

Span Table												
Wind Classification	Ultimate Wind Pressure (kPa)		Number of Top Hats Battens per Panel									
	Away from corners	Within 1200mm of corners	Wall Height (Panel length in vertical orientation) (mm)									
			≤2400		≤2700		≤3000		≤3300		≤6500	
			Panel Location		Panel Location		Panel Location		Panel Location		Panel Location	
			Typical	Corner	Typical	Corner	Typical	Corner	Typical	Corner	Typical	Corner
N1	+0.62, -0.53	-0.94	2	2	2	2	2	2	2	3	3	4
N2	+0.86, -0.74	-1.30	2	2	2	3	2	3	2	3	4	5
N3	+1.35, -1.16	-2.03	3	3	3	4	3	4	3	4	5	7
N4	+2.01, -1.72	-3.01	3	4	4	5	4	5	4	6	7	10

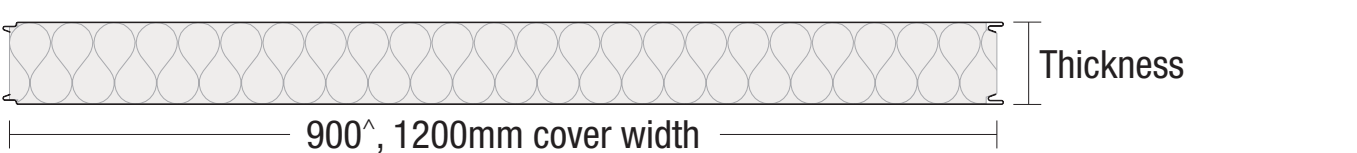
Joint



Profiles



Dimensions



Bondor® National Network

BRISBANE / EXPORT
103 Ingram Road
Acacia Ridge QLD 4110
T: 07 3323 8500
F: 07 3323 8501

PERTH
17 Gauge Circuit
Canning Vale WA 6155
T: 08 9256 0600
F: 08 9256 0620

MELBOURNE
6 Dunmore Drive
Truganina VIC 3029
T: 03 8326 8000
F: 03 8326 8099

ADELAIDE
70 – 72 Rundle Road
Salisbury South SA 5106
T: 08 8282 5000
F: 08 8282 5099

SYDNEY
49 – 53 Newton Road
Wetherill Park NSW 2164
T: 02 9609 0888
F: 02 9729 1114

LAUNCESTON
7 Connector Park Drive
Kings Meadows TAS 7249
T: 03 6335 8500
F: 03 6335 8544

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Leaders in Thermal & Architectural Building Solutions



Product Description

LuxeWall® FlameGuard® Fire Rated System is a fire rated architectural boundary wall system tested and approved for both FRL 60/60/60 and FRL 90/90/90 for use in commercial and residential applications. LuxeWall® FlameGuard® is a lightweight, conceal fixed and architecturally finished high performance wall product that simplifies installation on zero boundary properties where site access is difficult.

LuxeWall® FlameGuard® (MW) Thermal Performance Total R-Value (m²K/W)								
Framing	Timber Framing				Steel Framing			
LuxeWall® FlameGuard® Panel Thickness	50mm		75mm		50mm		75mm	
	Summer	Winter	Summer	Winter	Summer	Winter	Summer	Winter
System 1	1.8	1.9	2.4	2.6	1.8	1.9	2.4	2.5
System 2	2.9	3.1	3.5	3.8	2.8	3.0	3.4	3.7
System 3	3.3	3.6	4.0	4.2	3.2	3.4	3.8	4.1

Notes:
System 1: LuxeWall® FlameGuard® & 10mm Plasterboard
System 2: LuxeWall® FlameGuard® with R1.5 Batts & 10mm Plasterboard
System 3: LuxeWall® FlameGuard® with R2.0 Batts & 10mm Plasterboard

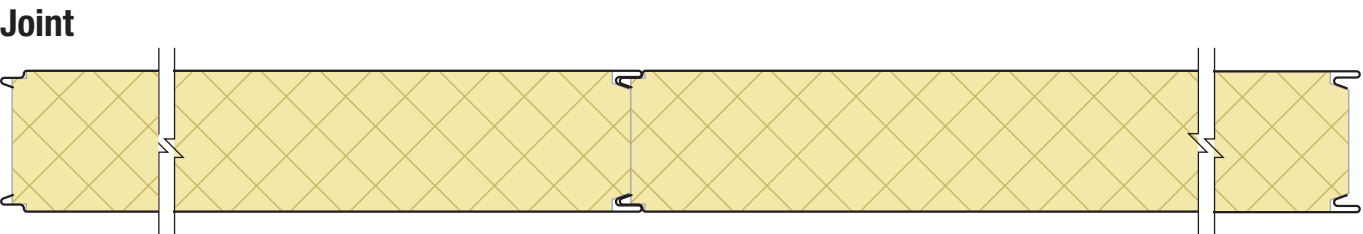
For 13mm Plasterboard add 0.02 to above Total R-value.
For 16mm Plasterboard add 0.04 to above Total R-value.
Calculations based on AS/NZS 4859.1:2018 & AS/NZS 4859.2:2018.
Mean temperatures: Summer: 30°C, Winter: 15°C.

Core	MW (Mineral Wool)
Width (cover mm)	1200, 900**
Thickness (mm)	50, 75 (other thicknesses available on request)
Length	Up to 6.5m (check for availability)
External Material	BlueScope® COLORBOND® Steel 0.6mm G300
External Finishes	Plain (Other options available)**
Exterior Colour Options	Standard, Matt & Metallic options available
Internal Material	BlueScope® COLORBOND® Steel 0.6mm G300 with HygienePlus®
Internal Finishes	Plain
Interior Colour Options	Surfmist®
Paint System	AS/NZS 2728 & AS 1397
Acoustic Properties	Rw 40, 45* depending on construction
Material Group Numbers	C1.10 Group 1
Bushfire Attack Level	BAL-FZ (All exposed core to be covered with flashing)
Combustibility	AS 1530.1 Non-combustible
Fire hazard properties	AS/NZS 1530.3
Ignitability Index	0
Spread of Flame Index	0
Heat Evolved Index	0
Smoke Index	2-3
Fire Resistance	AS 1530.4 FRL 90/90/90

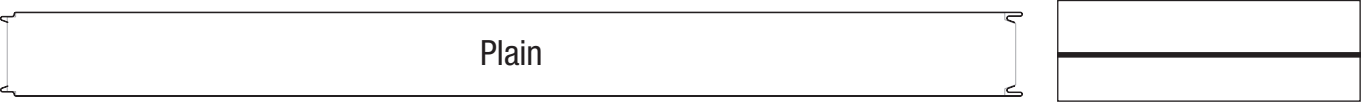
** Available on request.
* Contact Bondor® for construction details required.
The technical information contained in this document cover a breadth of applications where LuxeWall® FlameGuard® may be used, which may be outside the scope of our CodeMark certificate. Data specific to CodeMark certification can be found on LuxeWall® FlameGuard®'s OC CM40239.
SPAN TABLE NOTES:
1. Batten spacing based on fixing strength, LuxeWall® span and FRL requirement for span to be < 1250mm.
2. Batten must be checked separately for spans.
3. Wind speeds and coefficients based on AS 4055 - Wind Loads for Housing.
4. Wall pressure coefficients based on following assumptions:
a) External Pressure Cpe = +0.7, -0.65
b) Internal Pressure - Building has no dominant openings and more than one permeable wall or is effectively sealed. Cpi = +0.2, -0.3
c) Local Pressure - kl = 2.0 for negative wall pressure within 1200mm of corners
d) Combination Factor Kc = 0.9
e) Wall away from corner - Clig = +0.9, -0.765, Wall within 1200mm of corner Clig = -1.35
5. Serviceability deflection limit of span/150 has been allowed for.
6. Top Hat Battens require 2 fixings per stud and LuxeWall® fixed at 300mm centres.
7. M6 RoofZips to be used to fix battens into LuxeWall® modules.
8. Maximum span between fixing points is 1250mm.
9. Maximum span at panel edge is 250mm.

Standard Span Table												
Wind Classification	Ultimate Wind Pressure (kPa)		Number of Top Hats Battens per Panel									
	Away from corners	Within 1200mm of corners	Wall Height (Panel length in vertical orientation) (mm)									
			≤2400		≤2700		≤3000		≤3300		≤6500	
			Panel Location		Panel Location		Panel Location		Panel Location		Panel Location	
			Typical	Corner	Typical	Corner	Typical	Corner	Typical	Corner	Typical	Corner
N1	+0.62, -0.53	-0.94	2	2	2	2	2	2	2	3	3	4
N2	+0.86, -0.74	-1.30	2	2	2	3	2	3	2	3	4	5
N3	+1.35, -1.16	-2.03	3	3	3	4	3	4	3	4	5	7
N4	+2.01, -1.72	-3.01	3	4	4	5	4	5	4	6	7	10

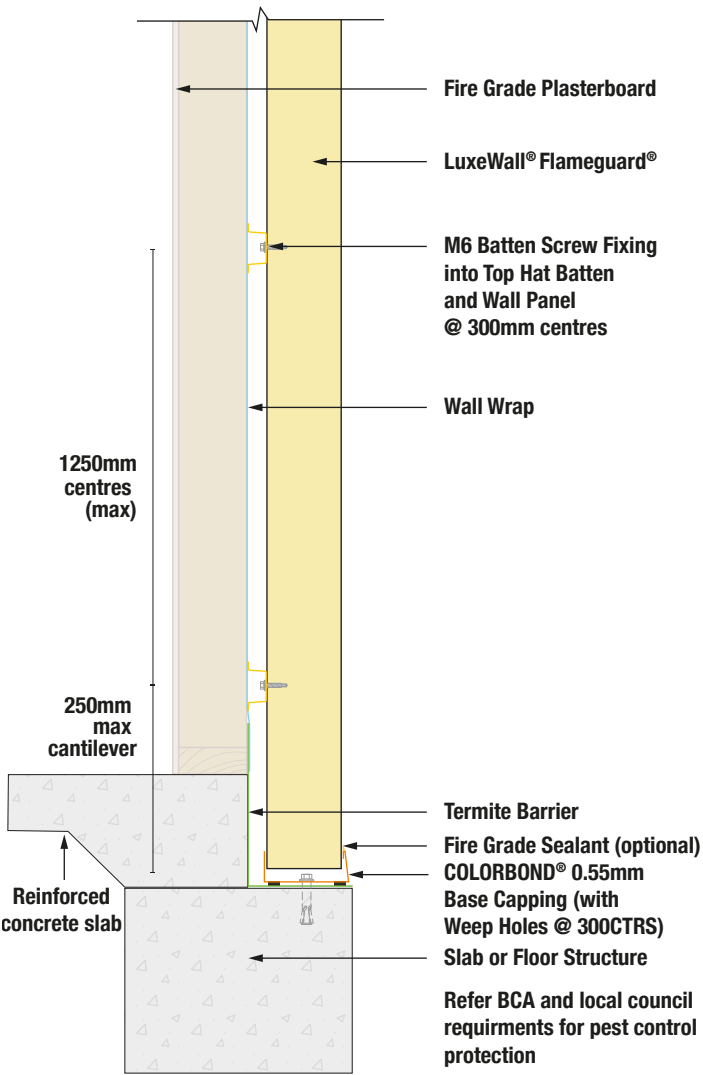
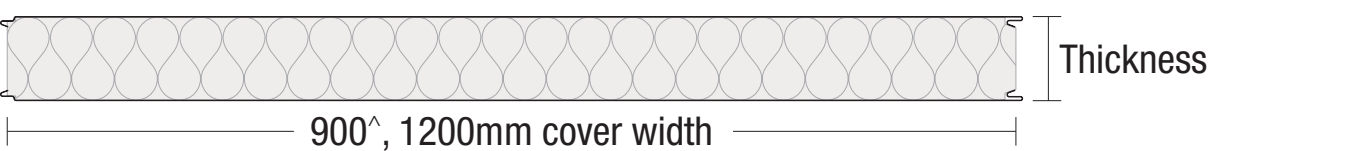
Span Table (FRL Applications)												
Wind Classification	Ultimate Wind Pressure (kPa)		Number of Top Hats Battens per Panel									
	Away from corners	Within 1200mm of corners	Wall Height (Panel length in vertical orientation) (mm)									
			≤2400		≤2700		≤3000		≤3300		≤6500	
			Panel Location		Panel Location		Panel Location		Panel Location		Panel Location	
			Typical	Corner	Typical	Corner	Typical	Corner	Typical	Corner	Typical	Corner
N1	+0.62, -0.53	-0.94	3	3	3	3	4	4	4	4	6	6
N2	+0.86, -0.74	-1.30	3	3	3	3	4	4	4	4	6	6
N3	+1.35, -1.16	-2.03	3	3	3	4	4	4	4	4	6	7
N4	+2.01, -1.72	-3.01	3	4	4	5	4	5	4	6	7	10



Profiles



Dimensions



Leaders in Thermal & Architectural Building Solutions

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Product Description

MetecnoInspire® is an insulated architectural facade system that offers architects and designers an inspiring palette of colours, attractive surface profiles and excellent thermal properties. MetecnoInspire® also offers an innovative concealed fix system making it an ideal solution for Inspired facade or walling designs.

Panel Properties				
Panel Thickness (mm)	50	60*	80	100
Typical Mass (kg/m²) based on 0.6/0.5mm skins	13.9	14.3	15.1	16.0
Declared λ (W/m.K) at 23°C	0.023	0.023	0.023	0.023
Declared R-value (m²K/W) at 23°C	2.20	2.65	3.55	4.45
Total R-value (m²K/W) at 15°C (Winter)	2.49	2.96	3.89	4.83
Total R-value (m²K/W) at 30°C (Summer)	2.31	2.74	3.60	4.46

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 External (Micro V Rib) / 0.5mm Internal (Plain) Steel
Maximum uniformly distributed ultimate wind load (kPa) for the given span:

Single Span, wind pressure acting outwards				
Span (mm)	Panel Thickness (mm)			
	50	60*	80	100
1500	2.74	3.52	4.15	4.48
2400	1.71	2.20	2.59	2.80
3300	1.25	1.53	1.88	2.04
4200	0.79	0.94	1.26	1.58
5100	0.53	0.64	0.86	1.07
6000	0.39	0.46	0.62	0.77

Multi-span, wind pressure acting outwards				
Span (mm)	Panel Thickness (mm)			
	50	60*	80	100
1500	2.05	2.82	3.23	3.50
2400	1.28	1.76	2.02	2.19
3300	0.93	1.28	1.47	1.59
4200	0.73	0.94	1.15	1.25
5100	0.57	0.64	0.95	1.03
6000	0.38	0.46	0.79	0.88



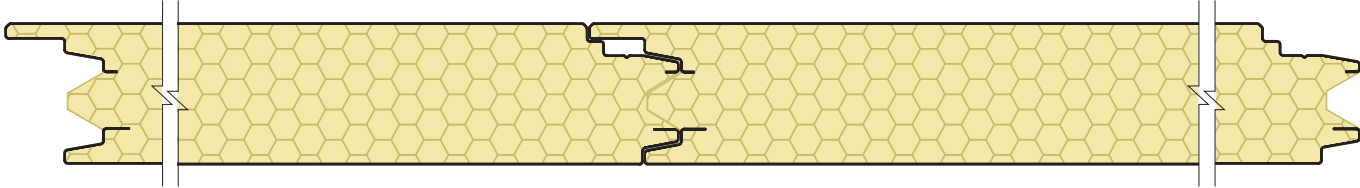
Core	PIR (Fire-retardant Polyisocyanurate)
Width (cover mm)	1100
Thickness (mm)	50, 60*, 80, 100
Length	Up to 16m (check for availability)
External Material	BlueScope® Steel 0.5mm, 0.6mm G300
External Finishes	Single V Rib, V Rib, Double V Rib, Micro V Rib, Satinline
Exterior Colour Options	Classic Cream™, Surfmist®, Paperbark®, Evening Haze®, Shale Grey™, Dune®, Cove™, Windspray®, Pale Eucalypt®, Gully™, Mangrove®, Wallaby®, Jasper®, Manor Red®, Terrain®, Basalt®, Woodland Grey®, Monument®, Ironstone®, Cottage Green®, Deep Ocean®, Night Sky®, Metallics: Galatic™, Cosmic™, Rhea™, Astro™, Aries™, Celestian™
Internal Material	BlueScope® Steel 0.5mm, 0.6mm G300
Internal Finishes	Plain
Interior Colour Options	COLORBOND® Intramax™
Paint System	AS/NZS 2728 & AS 1397
Acoustic Properties	Rw 26 depending on thickness
Material Group Numbers	C1.10 Group 1 & 2 ^a
Bushfire Attack Level	BAL-40 (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
SMOGR _{RC}	< 100

^aMetecnoInspire® V only.
a. AS 5637.1 / AS ISO 9705 - BCA Group Number (Spec C1.10)
MetecnoInspire® PIR steel skinned insulated building panels conform to the requirements of the BCA Specification C1.10 as either Group 1 or Group 2 depending on panel thickness and construction details. Refer Metecno® for more information.

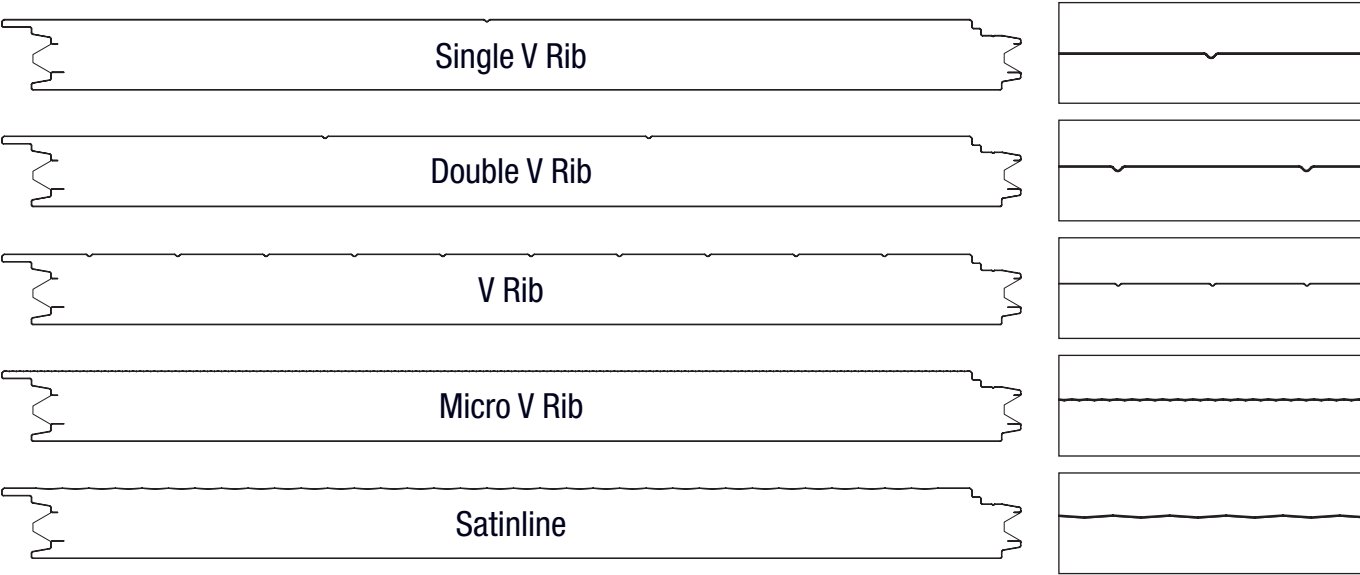
The technical information contained in this document cover a breadth of applications where MetecnoInspire® may be used, which may be outside the scope of our Codemark certificate. Data specific to CodeMark certification can be found on MetecnoInspire®'s CoC CM40191.

SPAN TABLE NOTES:
1. Pressures specified are for wind gusts only per AS/NZS 1170.2.
2. Deflection limit of span/150 applies, and in accordance with Serviceability Limit State criteria per AS/NZS 1170.0 - TABLE C1.
3. Fixings with tek screws, 2 at panel joint per line of support.
4. This span table applies to non-cyclonic regions only. 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.
5. Correct at time of publishing. Refer Metecno® for updates.
6. Refer to your certifying engineer for panel selection.

Joint



Profiles



Dimensions



Bondor® National Network		
BRISBANE / EXPORT 103 Ingram Road Acacia Ridge QLD 4110 T: 07 3323 8500 F: 07 3323 8501	MELBOURNE 6 Dunmore Drive Truganina VIC 3029 T: 03 8326 8000 F: 03 8326 8099	SYDNEY 49 – 53 Newton Road Wetherill Park NSW 2164 T: 02 9609 0888 F: 02 9729 1114
PERTH 17 Gauge Circuit Canning Vale WA 6155 T: 08 9256 0600 F: 08 9256 0620	ADELAIDE 70 – 72 Rundle Road Salisbury South SA 5106 T: 08 8282 5000 F: 08 8282 5099	LAUNCESTON 7 Connector Park Drive Kings Meadows TAS 7249 T: 03 6335 8500 F: 03 6335 8544
To connect to your nearest Bondor® branch simply call 1300 300 099 or visit www.bondor.com.au		

Metecno Pty Limited. ABN 44 096 402 934. The manufacturer reserves the right to change the specification without notice. Bondor®, Equitilt®, BondorPanel®, FlameGuard®, FlameGuard® Plus, MetecnoPanel®, MetecnoInspire®, EconoClad®, MetecnoKasset®, MetecnoTherm®, InsulWall®, LuxeWall®, DesignerWall®, SolarSpan®, InsulRoof®, MetecnoSpan®, CoolRoof®, Equideck®, InsulLiving®, Metecno® are trademarks of Metecno Pty Limited. BlueScope, COLORBOND®, Intramax™ and colour names are trademarks of BlueScope Steel Limited. The colours shown in this publication have been reproduced to represent actual product colours as accurately as possible. However, given printing limitations, we recommend checking your chosen colour against an actual sample before placing orders. This advice is of a general nature only. Designers must provide for adequate structural performance and other Building Code requirements. *Conditions may apply. **Limited availability, minimum order quantity may be required. ^Check with NCC for permissible Solar Absorptance before selecting the exterior roof colour. Darker colours may be warranted for use in limited regions refer to www.bondor.com.au as this information is subject to change. Consult Bondor® for your application. BON0126 Tech Data Sheets -MetecnoInspire v16 29/08/2022



Leaders in Thermal & Architectural Building Solutions

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/m ²) 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 (m ² K/W) at 23°C (AU)	2.20	3.30	4.45	5.55	6.65	8.90
Total R-value (m ² K/W) at 6°C	2.61	3.84	5.06	6.29	7.51	9.96
Total R-value (m ² K/W) at 15°C (Winter)	2.49	3.66	4.83	5.99	7.16	9.49
Total R-value (m ² K/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



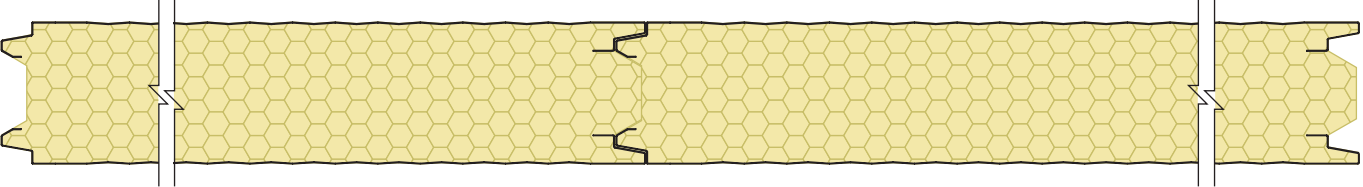
Core	PIR (Fire-retardant Polyisocyanurate)
Width (cover mm)	1100
Thickness (mm)	50, 75, 100, 125, 150, 200
Length	Up to 25m (check for availability)
External Material	BlueScope [®] Steel 0.5mm, 0.6mm G300; Grade 316 Stainless Steel 0.55mm
External Finishes	Plain, Fineline, Satinline, Ribbed
Exterior 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	C1.10 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
SMOGR _{HC}	< 100

a. AS 5637.1 / AS ISO 9705 - BCA Group Number (Spec C1.10)
MetecnoPanel[®] PIR steel skinned insulated building panels conform to the requirements of the BCA Specification C1.10 as either Group 1 or Group 2 depending on panel thickness and construction details. Refer Metecno[®] for more information.

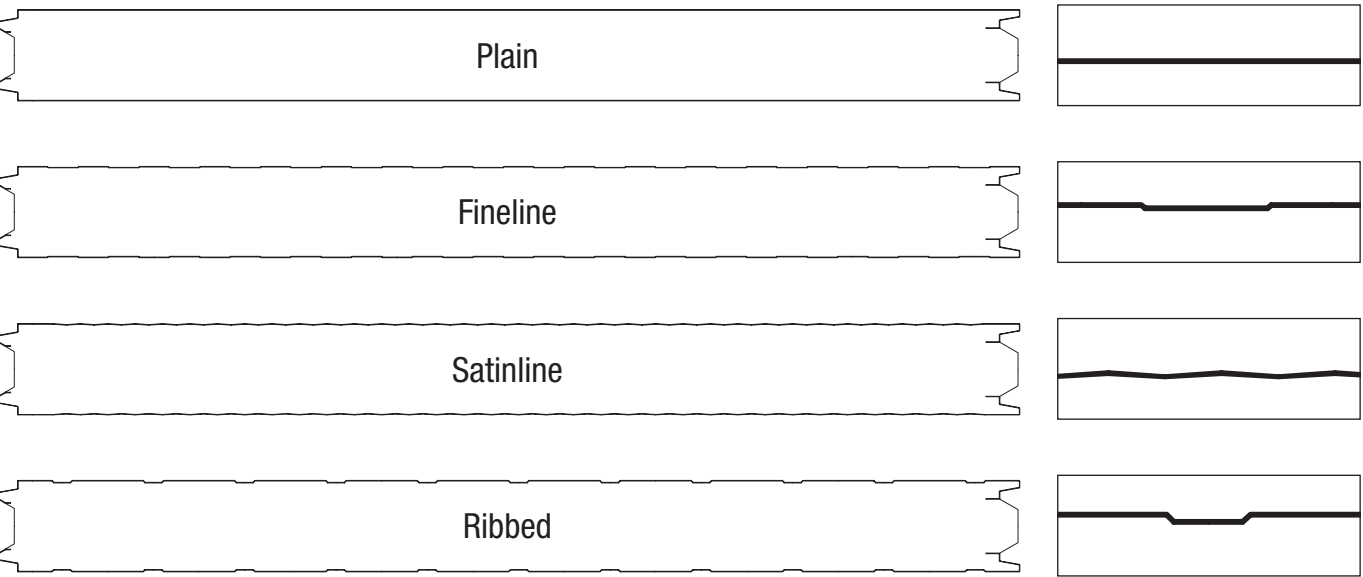
The technical information contained in this document cover a breadth of applications where MetecnoPanel[®] may be used, which may be outside the scope of our Codemark certificate. Data specific to CodeMark certification can be found on MetecnoPanel[®]'s CoC CM40196.

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

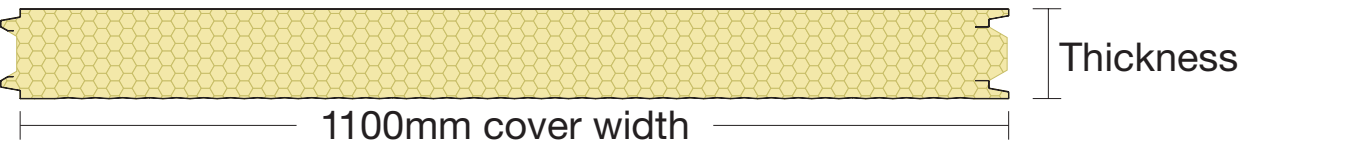
Joint



Profiles



Dimensions



Bondor [®] National Network		
BRISBANE / EXPORT 103 Ingram Road Acacia Ridge QLD 4110 T: 07 3323 8500 F: 07 3323 8501	MELBOURNE 6 Dunmore Drive Truganina VIC 3029 T: 03 8326 8000 F: 03 8326 8099	SYDNEY 49 – 53 Newton Road Wetherill Park NSW 2164 T: 02 9609 0888 F: 02 9729 1114
PERTH 17 Gauge Circuit Canning Vale WA 6155 T: 08 9256 0600 F: 08 9256 0620	ADELAIDE 70 – 72 Rundle Road Salisbury South SA 5106 T: 08 8282 5000 F: 08 8282 5099	LAUNCESTON 7 Connector Park Drive Kings Meadows TAS 7249 T: 03 6335 8500 F: 03 6335 8544
To connect to your nearest Bondor [®] branch simply call 1300 300 099 or visit www.bondor.com.au		

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Leaders in Thermal & Architectural Building Solutions

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.

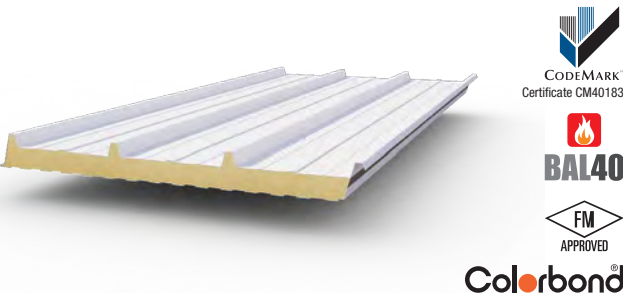
Panel Properties				
Panel Thickness (mm)	40	60	80	100
Typical Mass (kg/m ²) based on 0.42/0.5mm skins	10.7	11.6	12.7	13.2
Declared λ (W/m.K) at 23°C	0.023	0.023	0.023	0.023
Declared R-value (m²K/W) at 23°C	1.85	2.75	3.65	4.55
Total R-value (m²K/W) at 15°C (Winter)	2.10	3.05	4.00	4.94
Total R-value (m²K/W) 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)			
	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 outwards				
Span (mm)	Panel Thickness (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



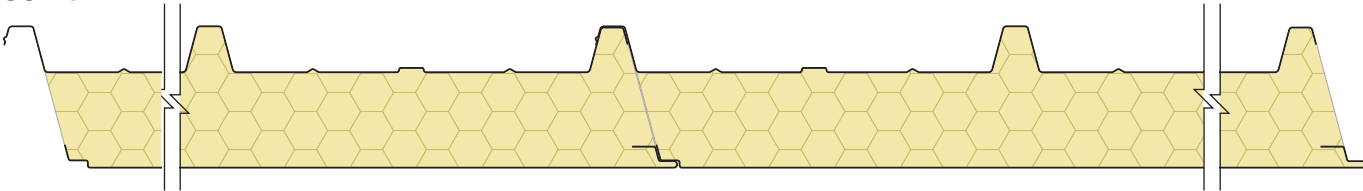
Core	PIR (Fire-retardant Polyisocyanurate)
Width (cover mm)	1000
Thickness (mm)	40, 60, 80, 100
Length	Up to 25m (check for availability)
External Material	0.42mm COLORBOND [®] steel
External Finishes	Trapezoidal Profile
Exterior Colour Options	Surfmist [®] . Other colours available subject to minimum 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	C1.10 Group 1 & 2 ^a
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
SMOGR _{HC}	< 100

a. AS 5637.1 / AS ISO 9705 - BCA Group Number (Spec C1.10)
MetecnoSpan[®] PIR steel skinned insulated building panels conform to the requirements of the BCA Specification C1.10 as as either Group 1 or Group 2 depending on panel thickness and construction details. Refer Metecno[®] for more information.

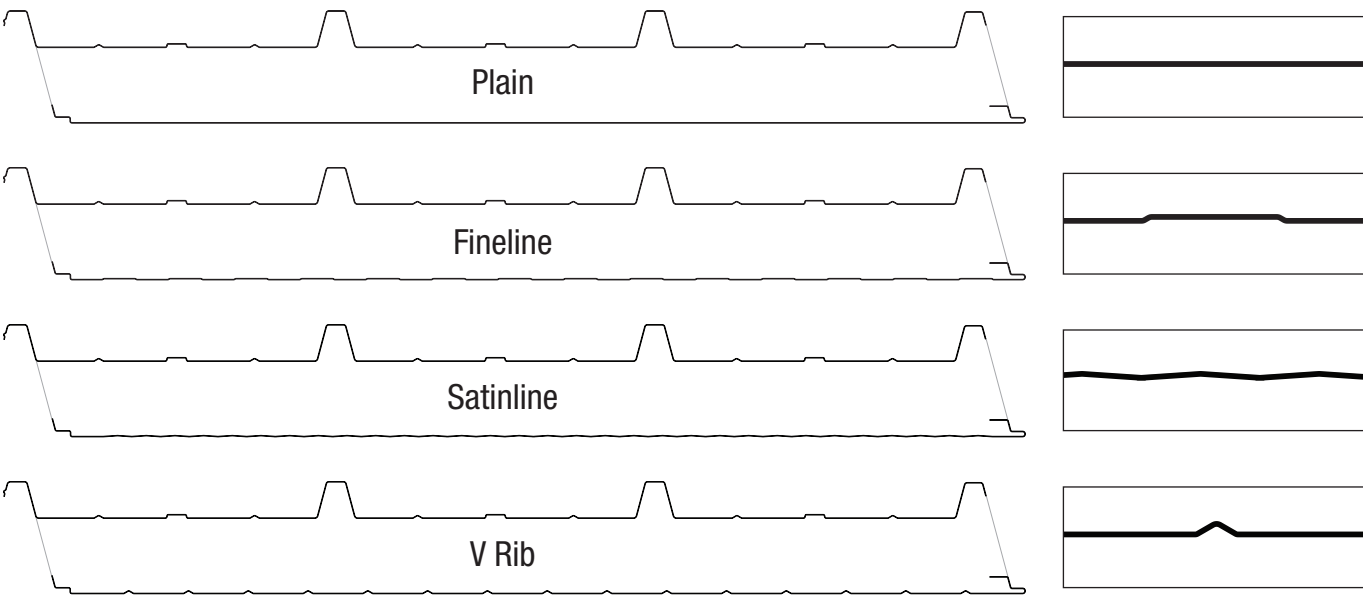
The technical information contained in this document cover a breadth of applications where MetecnoSpan[®] may be used, which may be outside the scope of our Codemark certificate. Data specific to CodeMark certification can be found on MetecnoSpan[®]'s CoC CM40183.

- 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 fittings (lights, etc.). No other dead loads permitted.
 - Non-trafficable maintenance access (concentrated load) of 140kg on any span has been allowed for.
 - 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[®].

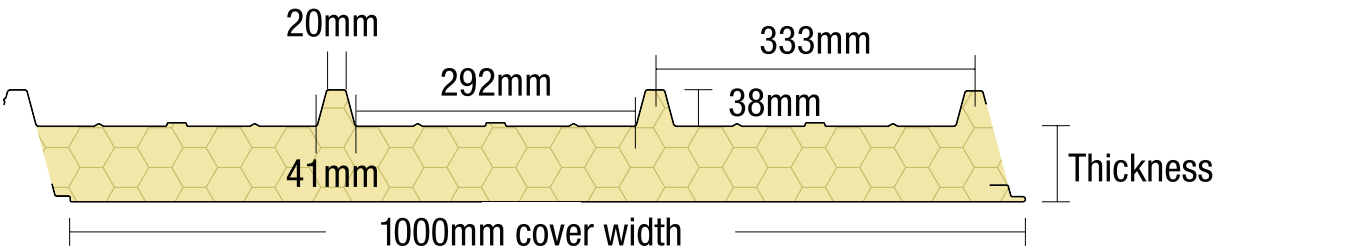
Joint



Profiles



Dimensions



Bondor[®] National Network

BRISBANE / EXPORT 103 Ingram Road Acacia Ridge QLD 4110 T: 07 3323 8500 F: 07 3323 8501	MELBOURNE 6 Dunmore Drive Truganina VIC 3029 T: 03 8326 8000 F: 03 8326 8099	SYDNEY 49 – 53 Newton Road Wetherill Park NSW 2164 T: 02 9609 0888 F: 02 9729 1114
PERTH 17 Gauge Circuit Canning Vale WA 6155 T: 08 9256 0600 F: 08 9256 0620	ADELAIDE 70 – 72 Rundle Road Salisbury South SA 5106 T: 08 8282 5000 F: 08 8282 5099	LAUNCESTON 7 Connector Park Drive Kings Meadows TAS 7249 T: 03 6335 8500 F: 03 6335 8544

To connect to your nearest Bondor[®] branch simply call 1300 300 099 or visit www.bondor.com.au

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Leaders in Thermal & Architectural Building Solutions



EPS-FR

Technical Data Sheet

Version 53
Current as of: 29/08/22



Product Description

SolarSpan® is a long-spanning commercial and residential insulated roof panel system that combines roofing, EPS-FR insulation and a pre-painted ceiling in one durable, functional and attractive roof panel. This all-in-one roofing solution is manufactured using Australian-made COLORBOND® steel for durability and is installed in a variety of applications including educational facilities, multi-residential housing and retail facilities and is tested for use in cyclonic regions.

Panel Properties							
Panel Thickness (mm)	50	75	100	125	150	175	200
Typical Mass (kg/m²)	10.6	10.9	11.3	11.6	12.0	12.3	12.7
SL Grade Declared λ (W/m.K) at 23°C	0.042	0.042	0.042	0.042	0.042	0.042	0.042
SL Grade Declared R-value (m²K/W) at 23°C	1.20	1.80	2.40	3.00	3.60	4.25	4.85
SL Grade Total R-value (m²K/W) at 15°C (Winter)	1.40	2.03	2.65	3.27	3.90	4.52	5.15
SL Grade Total R-value (m²K/W) at 30°C (Summer)	1.38	1.98	2.57	3.17	3.76	4.35	4.95
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)
SL Grade EPS-FR Core / 0.42mm 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	175	200
1500	5.16	7.70	9.41	10.98	13.26	15.51	17.81
2700	2.35	3.74	4.63	5.55	6.78	7.99	9.28
3900	1.28	2.00	2.55	3.11	3.67	4.23	4.79
5100	-	1.21	1.53	1.86	2.19	2.52	2.85
6300	-	-	1.04	1.25	1.47	1.69	1.91
7500	-	-	0.76	0.92	1.07	1.22	1.38
8700	-	-	-	-	0.82	0.94	1.05

Multi-span, wind pressure acting outwards							
Span (mm)	Panel Thickness (mm)						
	50	75	100	125	150	175	200
1500	4.15	5.90	7.61	7.74	7.74	7.74	7.75
2700	2.07	2.91	4.00	4.35	4.35	4.35	4.35
3900	1.17	1.72	2.41	2.95	3.04	3.04	3.05
5100	-	1.11	1.58	1.98	2.35	2.35	2.36
6300	-	-	1.10	1.40	1.77	1.93	1.93
7500	-	-	-	1.03	1.31	1.57	1.64
8700	-	-	-	-	-	1.20	1.43



Core	EPS-FR (Expanded Polystyrene with fire retardant)
Width (cover mm)	1000
Thickness (mm)	50, 75, 100, 125, 150, 175, 200
Length	Up to 24m (check for availability)
External Material	0.42mm G550 COLORBOND® steel
External Finishes	High-Rib Trapezoidal Profile
Exterior Colour Options	Classic Cream™, Surfmist®, Paperbark®, Shale Grey™, Dune®, Pale Eucalypt®, Manor Red®**, Basalt®^, Woodland Grey®^**
Internal Material	0.6mm G300 COLORBOND® steel
Internal Finishes	Plain, VJ
Interior Colour Options	Classic Cream™, Surfmist®
Pitch	2 degree minimum
Paint System	AS/NZS 2728 & AS 1397
Acoustic Properties	Rw 24 - 25 depending on thickness
Material Group Numbers	C1.10 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	2-3
SMOGR _{HC}	< 100

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

a. AS5637.1 / AS ISO 9705 - BCA Group Number (Spec C1.10)
EPS-FR steel skinned insulated building panels conform to the requirements of the BCA Specification C1.10 as either Group 2 or Group 1 depending on panel thickness and construction details. Refer Bondor® for more information.

The technical information contained in this document cover a breadth of applications where SolarSpan® may be used, which may be outside the scope of our Codemark certificate. Data specific to CodeMark certification can be found on SolarSpan®'s CoC CM40145.

- SPAN TABLE NOTES:
1. Extended span tables including cyclonic regions C&D, multi-span, wind pressure acting inwards and 0.5mm interior skin are also available. Refer Bondor®.
 2. Fixing with 14g tek screws (or equivalent) at each rib 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.
 5. Self weight of the panel has been allowed for, plus an allowance of max 25kg/m² 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, in roof pans only. Avoid stepping on the ribs.
 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.
 8. Generic engineering certification of the SolarSpan® Patio System is available for residential patios.

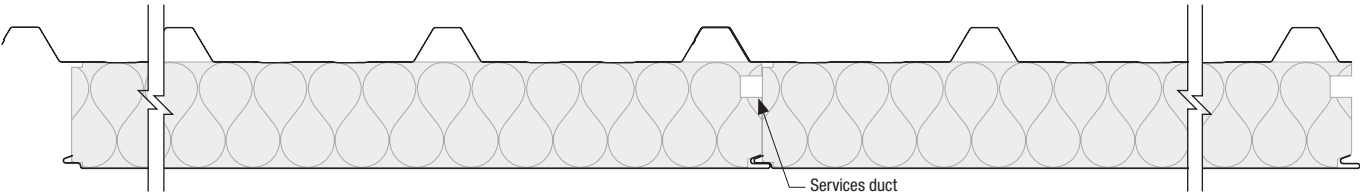


EPS-FR

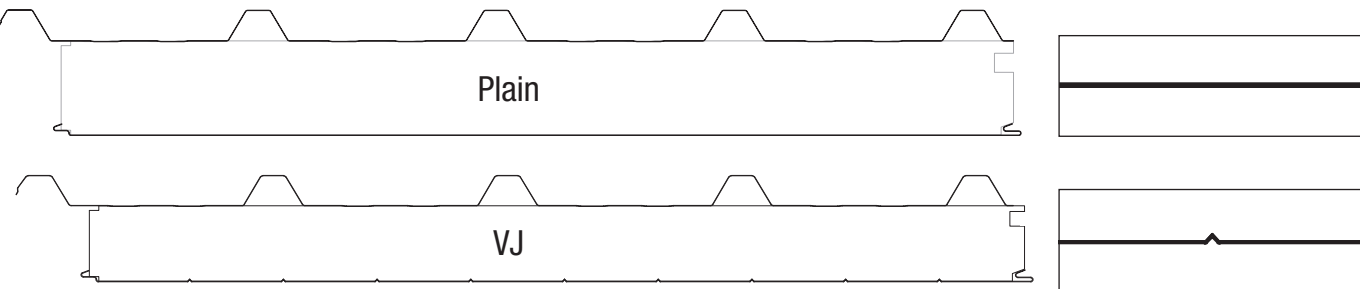
Technical Data Sheet

Version 53
Current as of: 29/08/22

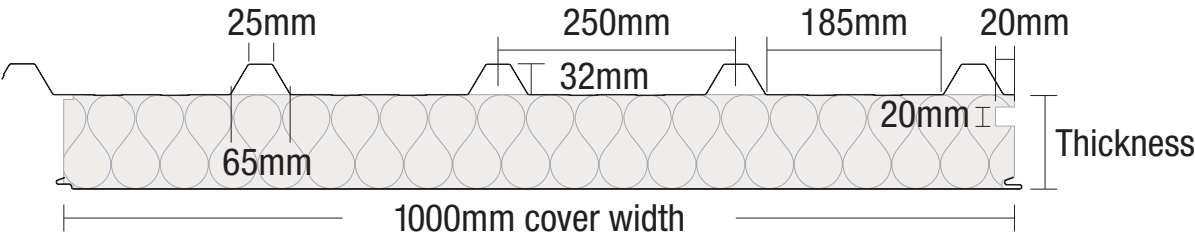
Joint



Profiles



Dimensions



Bondor® National Network

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F: 02 9729 1114

PERTH
17 Gauge Circuit
Canning Vale WA 6155
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Leaders in Thermal & Architectural Building Solutions

PRODUCT DESCRIPTION

Smoothpanel® is a versatile and high performing insulated wall and ceiling panel used in controlled environments such as cold storage, food preparation areas and clean rooms, but extends its use to transportable offices, wall partitions and many other applications.

Panel Properties							
Panel Thickness (mm)	50	75	100	125	150	200	250
Typical Mass (kg/m²)	11.3	11.6	12.0	12.3	12.7	13.3	14.0
SL Grade Declared λ (W/m.K) at 23°C	0.042	0.042	0.042	0.042	0.042	0.042	0.042
SL Grade Declared R-value (m²K/W) at 23°C (AU)	1.20	1.80	2.40	3.00	3.60	4.85	6.05
SL Grade Total R-value (m²K/W) at 6°C	1.45	2.10	2.74	3.38	4.03	5.31	6.60
SL Grade Total R-value (m²K/W) at 15°C (Winter)	1.41	2.04	2.66	3.28	3.91	5.16	6.41
SL Grade Total R-value (m²K/W) at 30°C (Summer)	1.34	1.94	2.53	3.13	3.72	4.91	6.09
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)

SL Grade EPS-FR Core / 0.6mm 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	250
1500	3.39	5.09	6.79	8.48	10.18	13.58	16.97
2700	1.86	2.83	3.77	4.71	5.66	7.54	9.43
3900	0.95	1.57	2.09	2.62	3.14	4.19	5.24
5100	0.54	0.92	1.22	1.53	1.84	2.45	3.06
6300	0.33	0.60	0.80	1.00	1.20	1.60	2.01
7500	-	0.42	0.57	0.71	0.85	1.13	1.42
8700	-	0.30	0.42	0.53	0.63	0.84	1.05

Multi Span, wind pressure acting outwards							
Span (mm)	Panel Thickness (mm)						
	50	75	100	125	150	200	250
1500	2.72	4.07	5.43	6.79	8.15	9.92	9.92
2700	1.51	2.26	3.02	3.77	4.53	5.51	5.51
3900	1.04	1.57	2.09	2.61	3.13	3.82	3.82
5100	0.61	0.92	1.22	1.53	1.84	2.45	2.92
6300	0.40	0.60	0.80	1.00	1.20	1.60	2.01
7500	0.28	0.42	0.57	0.71	0.85	1.13	1.42
8700	-	0.32	0.42	0.53	0.63	0.84	1.05

*Refer notes 1-4.

SPAN TABLE INTERNAL COLD STORAGE

SL Grade EPS-FR Core / 0.6mm Steel Skins. Maximum span (mm):

Single Span, internal cold storage 0°C or more							
Span (mm)	Panel Thickness (mm)						
	50	75	100	125	150	200	250
Walls (Non-Load Bearing)	-	5700	7100	8300	9300	10800	12000
Walls (Load Bearing)	-	5100	6500	7500	8200	9500	10700
Ceilings	-	5100	6300	7200	7800	9000	9900

Multi Span, internal cold storage 0°C or more							
Span (mm)	Panel Thickness (mm)						
	50	75	100	125	150	200	250
Walls (Non-Load Bearing)	-	6500	7500	8900	9100	10500	11700
Walls (Load Bearing)	-	6000	6900	7700	8400	9700	10900
Ceilings	-	5300	6000	6900	7500	8600	9600

*Refer notes 3-10.



Certificate CM40189



Core	EPS-FR (Expanded Polystyrene with fire retardant)
Width (cover mm)	1200
Thickness (mm)	50, 75, 100, 125, 150, 200, 250
Length	Up to 16m (check for availability)
External Material	BlueScope COLORBOND® Steel 0.6mm G300 CRP Grade
External Finishes	Plain, Ribbed, Satinline
Exterior Colour Options	COLORBOND® IntraMax™ or other standard & non-standard colours
Internal Material	BlueScope COLORBOND® Steel 0.6mm G300 CRP Grade
Internal Finishes	Plain
Interior Colour Options	COLORBOND® IntraMax™
Paint System	AS/NZS 2728 & AS 1397
Acoustic Properties	Rw 24 - 25 depending on thickness
Material Group Numbers	C1.10 Group 1 & 2 ^a
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	2-3

a. AS 5637.1 / AS ISO 9705 - BCA Group Number (Spec C1.10)
SmoothPanel® EPS-FR steel skinned insulated building panels conform to the requirements of the BCA Specification C1.10 as either Group 2 or Group 1 depending on the thickness and construction detail.

Group 1
Panel up to 250mm thick with steel 'wall-wall' and 'wall-ceiling' angles fixed with steel rivets or screws at maximum 300mm centres is classified as Group 1.

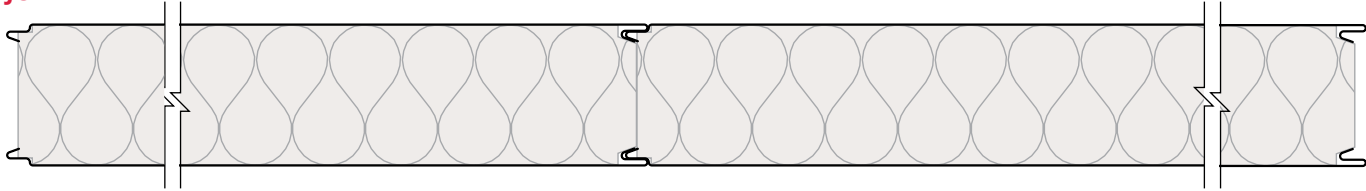
Group 2
Panel up to 150mm thick with aluminium 'wall-wall' and 'wall-ceiling' angles fixed with aluminium rivets or screws at 300mm centres is classified as Group 2. Panel thicker than 150mm requires steel 'wall-wall' and 'wall-ceiling' angles fixed with steel rivets or screws at 300mm centres to be classified as Group 2.

The technical information contained in this document cover a breadth of applications where SmoothPanel® may be used, which may be outside the scope of our Codemark certificate. Data specific to CodeMark certification can be found on SmoothPanel®'s CoC CM40189.

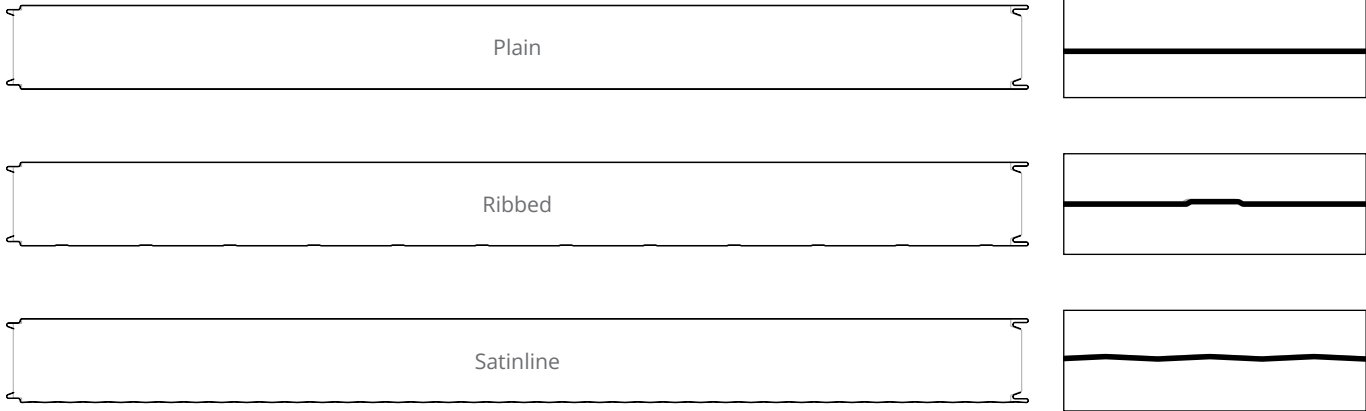
SPAN TABLE NOTES:

- Extended span tables including cyclonic regions C&D and 300mm thick panel are also available. Refer Solaris®.
- Fixing with min. 14g tek screws (x4 off) or mushroom head bolts (x2 off) per fixing point 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.
- This span table applies for cold storage constructed wholly within a larger enclosed building. Pressure relief port is to be provided for a freezer in accordance with Solaris® recommendation.
- Panel thicknesses of not less than 100mm are recommended for chillers, not less than 150mm for freezers and not less than 200mm for blast freezers, depending on structural considerations. Check 'R' value for insulation requirements.
- Fixing with mushroom head bolts (x1 off) minimum per panel per line of support is required.
- Self weight of the panel has been allowed for, plus an allowance of up to 10kg/m2 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 for.
- Distributed live load of 0.25kPa (as per AS/NZS 1170.1) has been allowed for.

JOINT



PROFILES



DIMENSIONS

