







# **Technical Data Sheet**

BON0126 Bondor Tech Data Sheets - SolarSpan v44

# **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	200
Typical Mass (kg/m²) based on 0.42/0.6mm skins	10.58	10.94	11.30	11.64	11.98	12.65
SL Grade Total R-value (m <sup>2</sup> K/W)	1.42	2.05	2.68	3.32	3.95	5.22
VH Grade Total R-value (m²K/W)	1.63	2.37	3.1	3.84	4.58	6.06

Note: The above Total R-values are for insulation average temerature of 15°C. Contact Bondor® for other temperatures and different EPS core grades.

# **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	200	
1500	5.16	7.70	9.41	10.98	13.26	17.81	
2700	2.35	3.74	4.63	5.55	6.78	9.28	
3900	1.28	2.00	2.55	3.11	3.67	4.79	
5100	-	1.21	1.53	1.86	2.19	2.85	
6300	-	-	1.04	1.25	1.47	1.91	
7500	-	-	0.76	0.92	1.07	1.38	
8700	-	-	-	-	0.82	1.05	

Multi-span, wind pressure acting outwards						
Span (mm)	Panel Thickness (mm)					
	50	75	100	125	150	200
1500	4.15	5.90	7.61	7.74	7.74	7.75
2700	2.07	2.91	1.00	4.35	4.35	4.35
3900	1.17	1.72	2.41	2.95	3.04	3.05
5100	-	1.11	1.58	1.98	2.35	2.36
6300	-	-	1.10	1.40	1.77	1.93
7500	-	-	-	1.03	1.31	1.64
8700	-	-	-	-	-	1.43







Core	EPS-FR (Expanded Polystyrene with fire retardant)
Width (cover mm)	1000
Thickness (mm)	50, 75, 100, 125, 150, 200
Length	Up to 24m (check for availability)
External Material	0.42mm G550 Colorbond® pre-painted steel
External Finishes	High-Rib Trapezoidal Profile
Exterior Colour Options	Classic Cream <sup>™</sup> , Surfmist <sup>®</sup> , Paperbark <sup>®</sup> , Shale Grey <sup>™</sup> , Dune <sup>®</sup> , Pale Eucalypt <sup>®</sup> , Manor Red <sup>®**</sup> , Basalt <sup>®</sup> ^, Woodland Grey <sup>®</sup> ^**
Internal Material	0.6mm G300 Colorbond® pre-painted steel
Internal Finishes	Plain, Elegance
Interior Colour Options	Classic Cream <sup>™</sup> , Surfmist®
Pitch	2 degree minimum, refer Bondor®
Paint System	AS/NZS 2728 & AS 1397
Accreditations	Codemark Certificate Number CM40145
Acoustic Properties	Rw 24
Material Group Numbers	C1.10 Group 1 & 2
Bushfire Attack Level	BAL-40
Fire hazard properties	AS/NZS 1530.3
Ignitability Index	0
Spread of Flame Index	0
Heat Evolved Index	0
Smoke Index	2-3

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 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.

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.

- 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 1170.
- Deflection limit of span/150 applies, and in accordance with Serviceability Limit State criteria per AS1170.0 TABLE C1.
- Self weight of the panel has been allowed for, plus an allowance of max 25kg/m² uniformly distributed dead loads (e.g. lights, fans, solar panels, etc.).
- Non-trafficable maintenance access (concentrated load) of 140kg (exceeding min. requirements of AS/NZS 1170.1:2002) on any one panel has been allowed for.
- 7. Distributed live load of 0.25kPa (as per AS/NZS 1170.1:2001) has been allowed for. 8. Min. roof slope of 2 degree applies.
- Generic engineering certification of the SolarSpan® Patio System is available for residential patios.
- \*\* Limited availability.

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

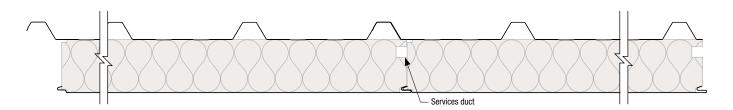




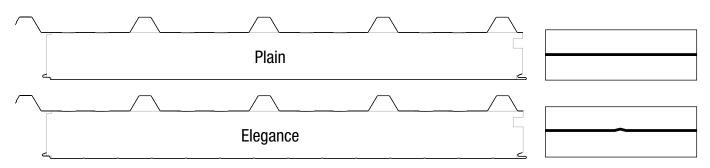




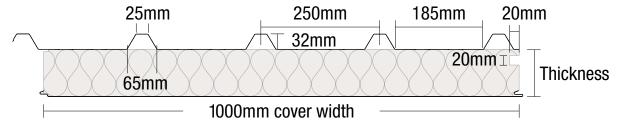
### **Joint**



## **Profiles**



### **Dimensions**



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