

Product Specification

Specification Sheets v17 Current as of: 28/04/21

Product	SolarSpan® Insulated Roof Panel
Product Description	SolarSpan® is a long-spanning commercial and residential insulated roof panel system that combines roofing, EPS-FR insulation and a prepainted 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.
Supplier	BONDOR®
Contact Number	1300 300 099
Website	www.bondor.com.au
Product Overview	
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
External 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
Internal Colour Options	Classic Cream™, Surfmist®
Pitch	2 degree minimum, refer Bondor®
Paint System	AS/NZS 2728 & AS 1397
Accreditations	Codemark Certificate Number CM40145
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)
Technical Properties	
Thermal - AS/NZS 48	59.1
Total R-Value (m²K/W)	50, 75, 100, 125, 150, 175, 200mm SL Grade SolarSpan® delivers Total R-value of 1.40, 2.03, 2.65, 3.27, 3.90, 4.52, 5.15 for insulation average temperature of 15°C. Contact us for other temperatures and different EPS-FR core grades.
Acoustics - AS 1191,	AS/NZS 1276 & AS/NZS ISO 717 .1
Rw Value (dB)	SolarSpan® has been tested in accordance with the requirements of AS 1191. The Weighted Sound Reduction Index (Rw) of the panel is calculated using AS/NZS 1276 and AS/NZS ISO 717.1 respectively with acoustic values of Rw 24 - 25 depending on thickness. Refer to Bondor® Australia for your specific application.
Fire	
Fire hazard properties	AS/NZS 1530.3
Ignitability Index	0
Spread of Flame Index	0
Heat Evolved Index	0
Smoke Index	2-3
SMOGRARC	<100
Material Group Numbers AS 5637.1 / AS ISO 9705	SolarSpan® 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.
Bushfire Attack Level AS 3959	SolarSpan® is suitable for use as roof covering for Class 1 and 10 buildings to be constructed in designated bushfire prone areas that have a BAL-40 or less.



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Structural - AS/NZ	S 1170, AS 1562.1, AS4040
Span Tables	Bondor® provides the latest Ultimate Limit State Span Tables developed specifically for Australasian conditions, in accordance with AS/NZS 1170, AS 1562.1 & AS 4040. Refer to Span Tables for detailed design guidelines and Span Tables for both Non-Cyclonic Regions A & B and Cyclonic Regions C and D. Extended Span Tables for Residential Applications and Patio System Engineering are also available. Refer to Span Table Notes for design guidelines relating to fixing, and deflection limits. The panel design shall be specified by the certifying engineer as determined from the Span Tables.
Support Details	The support spacing shall be specified by the structural engineer as determined from the Span Tables.
Safe Handling & I	nstallation
Panel Length	Up to 24m, however site, transport and wind load restrictions can limit panel length.
Storage	Panels should always be kept dry and if placed on site, stored off the ground, slightly inclined, allowing adequate drainage and ventilation of the panel pack. No other materials to be stored I stacked on top of panel pack.
Handling	In the event of manual handling, careful consideration should be given to panel weight and appropriate PPE. Consider using mechanical aides if necessary.
Safety	The contractor is to determine and use safe working methods throughout the installation and construction period, which complies with OHS requirements. A safe work method template (although NOT project specific) is available from Bondor®.
Supporting Frame	The builder is to ensure that the substrates including slabs and kerbs; and sub frames are straight, true and fit for purpose.
Fixing	Fixings are to meet the requirements of Bluescope TB-16 Fasteners for Roofing and Walling Product Selection Guide. Fasteners must be manufactured from high grade carbon steel with a minimum class 4 anti-corrosion coating as per Australian Standards. Refer to Bondor® Roofing Construction Details & Span Tables Notes for design guide relating to screw fixing.
Flashing	Flashings are manufactured from 0.55mm Bluescope COLORBOND® steel and installed to AS 1562.1 or as otherwise specified in the Bondor® Construction Drawings. Aluminium can be used if there is no Group Number requirement.
Sealant	Sealant to be neutral cure and meet recommendations for sealants as per Bluescope TB-9 Sealants for Exterior Finishes. Silicon, polyurethane, butyl mastic and acrylic based sealants may be appropriate if neutral cure and recommended by their manufacturer for use on COLORBOND® steel and for the application. Sealant to be placed between flashings/angles and panel and between panel joints as shown on the Bondor® Standard Construction Details.
Installation	Installation as per the Bondor® Standard Construction Details. Panels are to be cut & trimmed to ensure a flush finish. Panels are to be confirmed square & plumb as per project requirements. Panels are to be cut with a suitable metal cutting circular type saw. Angle grinder is not recommended. Appropriate lifting equipment to be used for roof panels. Roof panels to be installed and fit as close and tight as possible. Ensure appropriate gutter cutbacks for drainage. Roof sheets endlap must be designed and installed with correct roof pitch, water run-off and use approved Securelap End Lap roof system. Fasteners are to be installed without overtightening to prevent distortion of panel surfaces. Ensure weathertight contact of washer se with panel surface. All accessories must be compatible material properties with Bluescope COLORBOND® Steel. Penetrations for outlets, vents, flues etc. are to be flashed & sealed with appropriate materials. Refer Flashing Details above. Gaps to be filled with a suitable sealant or foam filler. Refer to AS1562 & SA HB 39 for roofing/cladding installation & plumbing. Refer to Bondor® Standard Construction Details & Fixing Details above for fastener requirements. Remove all swarf and any foreign matter immediately from all panel surfaces as per Bluescope TB-5 Swarf staining of steel profiles.
Maintenance	Refer to Bluescope TB-4 Maintenance of COLORBOND® and Zincalume® Steel and the relevant Bondor® maintenance information.
Warranty & Discla	imers
Warranty	Bondor® offer a conditional warranty for SolarSpan® for use as commercial and residential architectural roofing panels of up to 30 years for material with up to 20 years for exterior paint systems and for home improvement applications up to 15 years, from install date for projects on an application basis, dependent on project location, design, installation, end use, environmental conditions and maintenance of the product. Please contact the Bondor® sales team with your specific project details for more information on the available conditional warranties.
Disclaimers	Under certain light conditions this product may show an undulating surface which can vary depending on exterior profile and steel gauge selection as well as the environments varying light conditions.