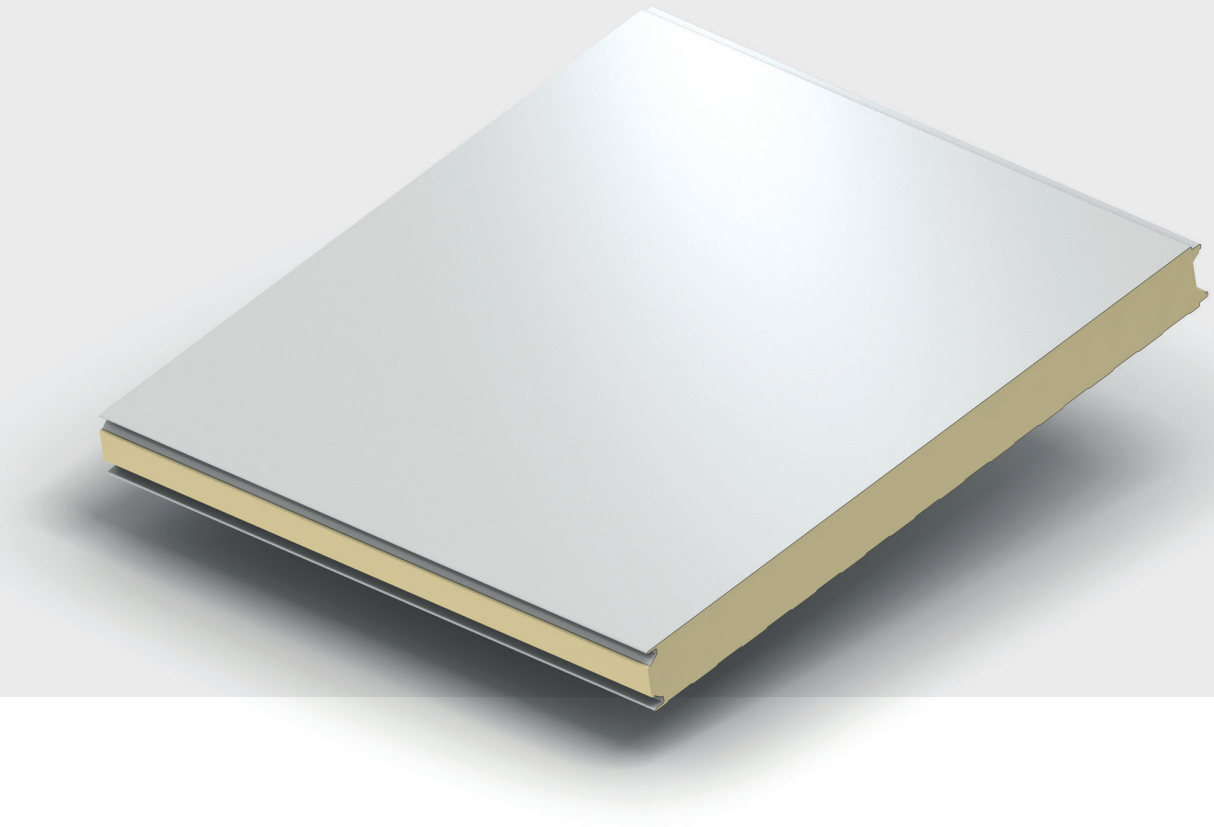
Insulated Panels
Australia

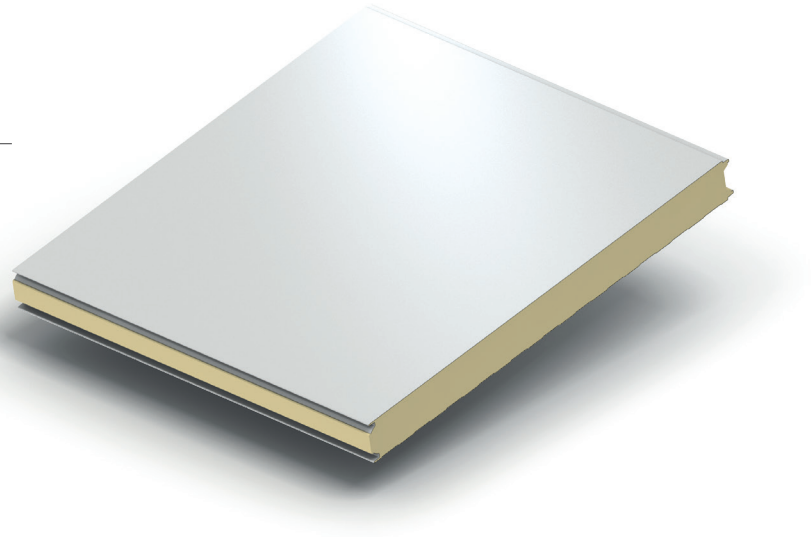
KS1100/KS1200RL Roofliner Panel

Product Data Sheet



Kingspan®

Product Data



Product Overview

KS1100/1200RL Roofliner Panel is an insulated roof panel, designed to be used as an insulated composite panel substrate installed under site applied, fully supported or self-supported aluminium, copper, zinc and stainless steel roof systems. Suitable for buildings with low pitch roofs.

Dimensions, Thermal Performance & Weight

Panel Nominal Thickness (mm)	Product R-Value (m^2K/W) at 23°C	Product U-Value (W/m^2K) at 23°C	Total R-Value (m^2K/W)		Weight* (kg/m^2)
			Heat Flow Out (Winter)	Heat Flow In (Summer)	
50	2.23	0.44	2.48	2.34	11.5
75	3.44	0.29	3.74	3.50	12.3
100	4.60	0.22	4.96	4.62	13.1
125	5.76	0.17	6.17	5.74	14.3
150	6.93	0.14	7.39	6.86	15.0
200	9.25	0.10	9.82	9.10	16.9

Declared Thermal Conductivity (λ Value) 0.022 W/mK @23°C.

Declared Product R-Value is calculated in accordance with AS/NZS 4859.1: 2018 as required for compliance to the National Construction Code.

The R-Values shown above are the total R-Values for the building element as required by the Energy Provisions of the National Construction Code, calculated in accordance with AS/ NZS 4859.2: 2018. KS1100/1200RL Roofliner Panel is manufactured, tested and packaged in conformance with AS/NZS 4859.1: 2018.

* Actual weight subject to vary ±10% due to manufacturing and raw material tolerances.

Available Lengths

Standard lengths	2.0m - 13.7m
Longer lengths (non-standard)	13.7m - 16.1m
Export of Australia / Sea freight to WA	11.8m

Note: Additional costs and transport restrictions may apply for non-standard lengths.

Cover Widths

KS1100/1200RL Roofliner Panel is available in a choice of two cover widths.

KS1100RL	1100 mm
KS1200RL	1200 mm

Fixing Method

Through-fix.

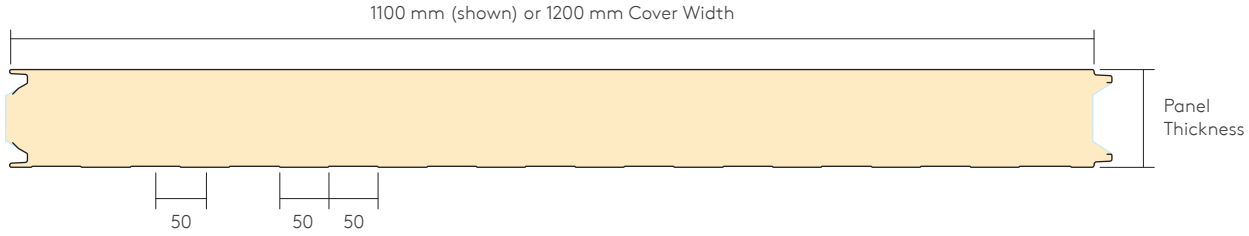
Product Tolerances

Length < 3 m	± 5 mm
Length > 3m	± 10 mm
Cover Width	± 2 mm
Thickness < 100 mm	± 2 mm
Thickness > 100 mm	± 2%
Squareness	≤ 0.6% of width
Flatness*	
L = 200 mm	0.6 mm
L = 400 mm	1.0 mm
L > 700 mm	1.5 mm
Bowing	2 mm per metre length upto maximum 20 mm

* Flatness shall be measured at least 100 mm from the edge of panel and 200 mm from the end of panel.

Profile

Flat Profile (External Facing), Rib Profile (Internal Facing).



Note: Dimensions are nominal. Actual dimensions will vary due to manufacturing tolerances. Precise dimensions must always be measured from actual samples.

Insulation Core

KS1100/1200RL Roofliner Panels are manufactured with a polyisocyanurate (PIR) core.

Structural Performance

Please contact Technical Services for project specific support on the spanning performance of the KS1100/KS1200RL Roofliner Panel.

Certification and Testing

Fire Performance

Test	Test Method	Result
Ignitability	AS/NZS: 1530.3: 1999	Ignitability Index: 0
Flame Spread		Spread of Flame Index: 0
Heat Release		Heat Evolved Index: 0
Smoke Release		Smoke Developed Index: 2
NCC Group Number in accordance with AS 5637.1: 2015	AS 5637.1: 2015 / ISO 9705 2003	Group 2
Smoke Growth Rate Index (SMOGRA$_{RC}$) (m^2/S^2 x 1000)		< 100

Acoustic Performance

For a sound transmission reduction, KS1100/1200RL Roofliner Panels have a weighted sound reduction index (SRI) of R_W = 24dB. Results are based on panels with a similar profile and core material.

Frequency (Hz)	63	125	250	500	1000	2000	4000	8000	Rw
SRI (dB)	20	18	20	24	20	29	39	46	**24**

For specific acoustic information contact Technical Services.

Materials

External Weather Sheet and Internal Liner

- G300S steel with Z275 metallic coating in accordance with AS 1397: 2021.
- Paint Coating in accordance with AS / NZS 2728: 2013.

Coatings

External Weather Sheet and Internal Liner

- Standard: Off White. Other colours are available on request. Please contact your local area sales manager for further information.

Other Internal Coating Options*

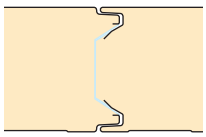
- Kingspan AQUA*safe*: The coating has been developed for use as the internal lining of insulated panels to suit environments that require long term corrosion resistance and durability, facilities such as washrooms / fabric manufacturing, agricultural and livestock facilities.
- Kingspan AQUA*safe* 25 and Kingspan AQUA*safe* 55: The coating has been developed for use as the internal lining of insulated panels to swimming pool internal environments.

* Please contact Technical Services for further information regarding substrates and coatings. Internal coatings subject to availability and panel cover width.

Product Data

Panel Joint

The tongue and groove joint achieves excellent thermal performance. The panel side joint can accommodate vapour or hygiene safe seals.



Quality and Durability

KS1100/1200RL Roofliner Panels are manufactured from the highest quality materials using state-of-the-art production equipment to rigorous quality control standards, complying with ISO 9001 standard, ensuring long-term reliability and service life. The panels are also being manufactured under Environmental Management System Certification ISO 14001 and Occupational Health and Safety Certification ISO 45001.

Packaging

KS1100/1200RL Roofliner Panels are stacked horizontally. The entire pack is shrink wrapped. The number of panels in each pack depends on panel length, weight, and thickness. Typical pack height is 1200mm. Other types of packaging are available upon request, please contact Kingspan Customer Service team for further information.

Delivery

All deliveries (unless indicated otherwise) are by flatbed road transport to project site. Off loading is the responsibility of the client. Export orders are transported in shipping containers. WA orders are transported in shipping containers, unless road freight is opted for.

Site Installation Procedure

Site assembly instructions are available from Technical Services. Kingspan recommend that the appointed contractor attend the product installation training course prior to installation, which is provided by Kingspan Field Services.

Environmental

Kingspan Insulated Panels manufacturing facility in Australia sources 100% certified renewable electricity and procures steel that is made from 15-25% recycled content.

KS1100/KS1200RL Roofliner Panels have Environmental Product Declarations in accordance with the requirements of ISO 14025 and EN 15804: 2012 + A2: 2019 for 50mm to 200mm thickness.

KS1100/KS1200RL Roofliner Panel is certified with a Global GreenTag GreenRate™ Level A certification to Version 4.0 of the Global GreenTag International Product Certification Standard, under the certified name Kingspan Roof Panels.

A GreenRate Level A license is the highest-ranking level in GreenTag's GreenRate program. As a result, Kingspan Roof Panels receive the maximum recognition by the Green Building Council of Australia's Green Star® building rating tools scheme. The recognition provides assurance to green building projects that the product has demonstrated a maximum commitment to low toxicity, compliance to relevant social and environmental laws in the country of operation, fit for purpose certification, availability of replacement parts, a design for recycling and/or reuse and healthy VOC levels.

Biological

Kingspan PIR foam core used in the manufacture of KS1100/1200RL Roofliner Panels is free from urea formaldehyde.

Accreditations

GLOBAL GREENTAG CERTIFIED
GreenRate | Level A
trust brands

FPA AUSTRALIA GOLD MEMBER Fire Protection Association Australia

Green Building Council Australia
Member 2022–2023

100% We buy GreenPower®

Contact Details

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Please scan for the most up to date version of this Product Data Sheet.

For the product offering in other markets please contact your local sales representative or visit www.kingspanpanels.com

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