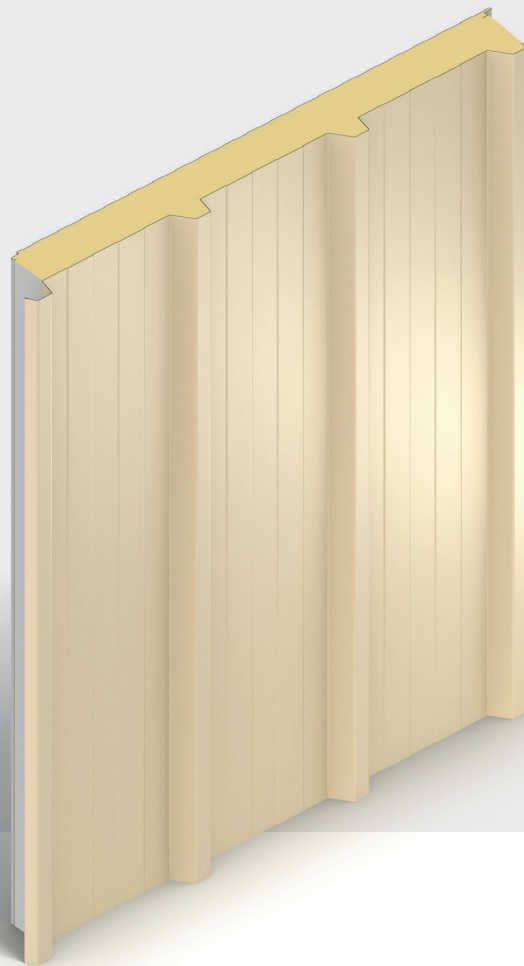


Insulated Panels  
Australia

# KS1000RW Trapezoidal Wall Panel

## Product Data Sheet



# Product Data

## Product Overview

KS1000RW Trapezoidal Wall Panel is a through-fix, single component and versatile insulated panel solution that can be installed in both vertical and horizontal applications.



## Dimensions, Thermal Performance & Weight

A - Core Thickness (mm)	B - Overall Thickness (mm)	Product R-Value (m <sup>2</sup> K/W) at 23°C	Product U-Value (W/m <sup>2</sup> K) at 23°C	Total R-Value (m <sup>2</sup> K/W)		Weight* (kg/m <sup>2</sup> )
				Heat Flow Out (Winter)	Heat Flow In (Summer)	
40	75	1.91	0.52	2.16	1.99	8.5
60	95	2.87	0.34	3.16	2.92	9.1
70	105	3.36	0.29	3.68	3.39	9.2
100	135	4.79	0.20	5.17	4.77	10.4
120	155	5.73	0.17	6.14	5.67	10.9
140	175	6.66	0.15	7.12	6.57	12.7

Declared Thermal Conductivity ( $\lambda$  Value) 0.023 W/mK @23°C (insulant thickness = 40 mm).

Declared Thermal Conductivity ( $\lambda$  Value) 0.022 W/mK @23°C (insulant thickness  $\geq$  60 mm).

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. KS1000RW Trapezoidal Wall Panels are manufactured, tested and packaged in conformance with AS/NZS 4859.1: 2018.

\* Actual weight subject to vary  $\pm$ 10% due to manufacturing and raw material tolerances.

## Available Lengths

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

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

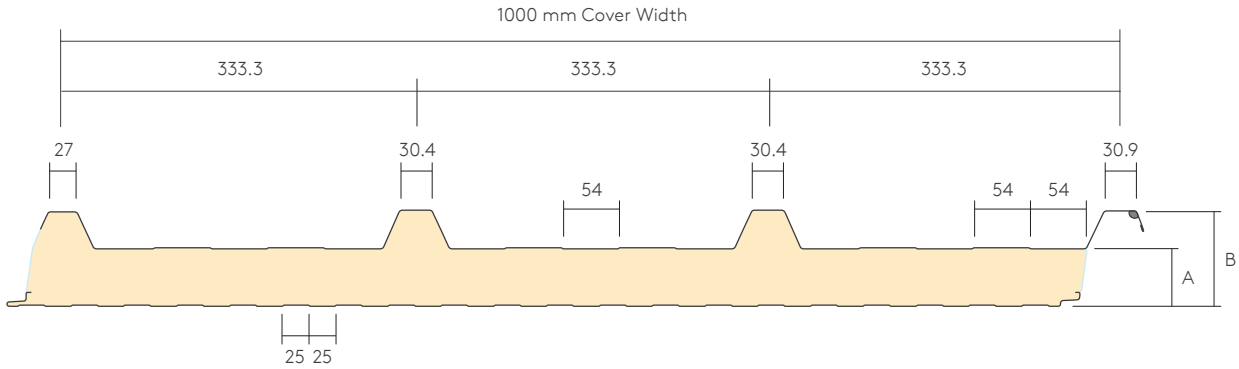
## Product Tolerances

Length < 3 m	$\pm$ 5 mm
Length > 3m	$\pm$ 10 mm
Cover Width	$\pm$ 2 mm
Thickness < 100 mm	$\pm$ 2 mm
Thickness > 100 mm	$\pm$ 2%
Squareness	$\leq$ 0.6% of width

## Fixing Method

Through-fix.

## Profile



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

## Insulation Core

KS1000RW Trapezoidal Wall Panels are manufactured with a polyisocyanurate (PIR) core.

## Structural Performance

Please contact Technical Services for project specific support on the spanning performance of the KS1000RW Trapezoidal Wall Panels.

## Certification and Testing

### Fire Performance

#### Reaction to Fire

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: 3
NCC Group Number in accordance with AS 5637.1: 2015	AS 5637.1: 2015 / ISO 9705 2003	Group 2
Smoke Growth Rate Index (SMOGR <sub>ARC</sub> ) (m <sup>2</sup> /S <sup>2</sup> x 1000)		< 100

## Insurer Approvals

KS1000RW Trapezoidal Wall Panels are tested to:

- FM 4880 Class 1 fire rating of building panels or interior finish materials, unlimited height for thicknesses 40 mm to 120 mm.
- FM 4881 Class 1 exterior wall systems, unlimited height for thicknesses 40 mm to 120 mm.

FM approvals are subject to the following certified names:

- For 1000 mm widths: KS1000 RW.

Insurer approvals are large scale testing regimes that provide objective third-party testing, which is underpinned by quarterly, half-yearly and yearly factory surveillance audits (depending on the region) to verify compliance. Insurer approvals are subject to panel thickness, width, orientation, method of assembly, steel coating and manufacturing facility. Please contact Technical Services for project specific details.



## Acoustic Performance

For a sound transmission reduction, KS1000RW Trapezoidal Wall Panels have a weighted sound reduction index (SRI) of  $R_w = 24 - 26$  dB. Results are based on panels with a similar profile and core material.

Frequency (Hz)	63	125	250	500	1000	2000	4000	8000	R <sub>w</sub>
SRI (dB)	20	18	20	24	20	29	39	46	24

\* Please contact Technical Services for project specific support and product specification where  $R_w = 26$  dB is required.

# Product Data

## Materials

### External Weather Sheet

- G300S steel with AM100 or AM150 metallic coating in accordance with AS 1397: 2021.
- Paint Coating in accordance with AS / NZS 2728: 2013.

### Internal Liner

- G300S steel with AM100 metallic coating in accordance with AS 1397: 2021.
- Paint Coating in accordance with AS / NZS 2728: 2013.

## Coatings

### External Weather Sheet

- Colours as per the Kingspan Australia colour range, please contact your local area sales manager for further information.

### Internal Liner

- Kingspan CLEANsafe 15: The coating has been developed for use as the internal lining of insulated panels. Standard colour is "bright white" with an easily cleaned surface.

### Other Internal Coating Options\*

- Kingspan AQUAsafe: The coating has been developed for use as the internal lining of insulated panels to suit high humidity internal environments.
- Kingspan AQUAsafe 25 and Kingspan AQUAsafe 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.

## Seals

All panel joints have a factory applied weather seal fitted on the underside of the sidelap to automatically seal the joint between panels.

## Panel End Cut Back

Minimum Cut Back	50 mm
End Lap Horizontally Laid	75 mm
End Lap Vertically Laid	75 mm
Maximum Cut Back*	200 mm

\* For panels that exceed 13.7 m and / or for cut backs larger than 150 mm, the core material and the steel at the cut back will not be removed and will have to be carried out by the installer.

## Handing

KS1000RW Trapezoidal Wall Panels can be manufactured in both left to right handed (LH) and right to left handed (RH).

## Quality and Durability

KS1000RW Trapezoidal Wall 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

KS1000RW Trapezoidal Wall Panels are stacked weather sheet to weather sheet (to minimise pack height). The bottom panel is protected by either cardboard or MDF boards, depending on the type of packaging chosen. All packs are wrapped with spiral wrap stretch polyfilm. The number of panels in a pack will vary depending on panel thickness, steel configuration and length required. Please contact Kingspan Customer Services 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.

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## 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.

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## Environmental

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

KS1000RW Trapezoidal Wall Panels have Environmental Product Declarations in accordance with the requirements of ISO 14025 and EN 15804: 2012 + A2: 2019 for 40 mm to 120 mm thickness.

KS1000RW Trapezoidal Wall Panels 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 Wall Panels.

A GreenRate Level A license is the highest-ranking level in GreenTag's GreenRate program. As a result, KS1000RW Trapezoidal Wall Panels receives 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.

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## Biological

Kingspan PIR foam core used in the manufacture of KS1000RW Trapezoidal Wall Panels are free from urea formaldehyde.

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## Accreditations



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# Contact Details

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## Australia

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