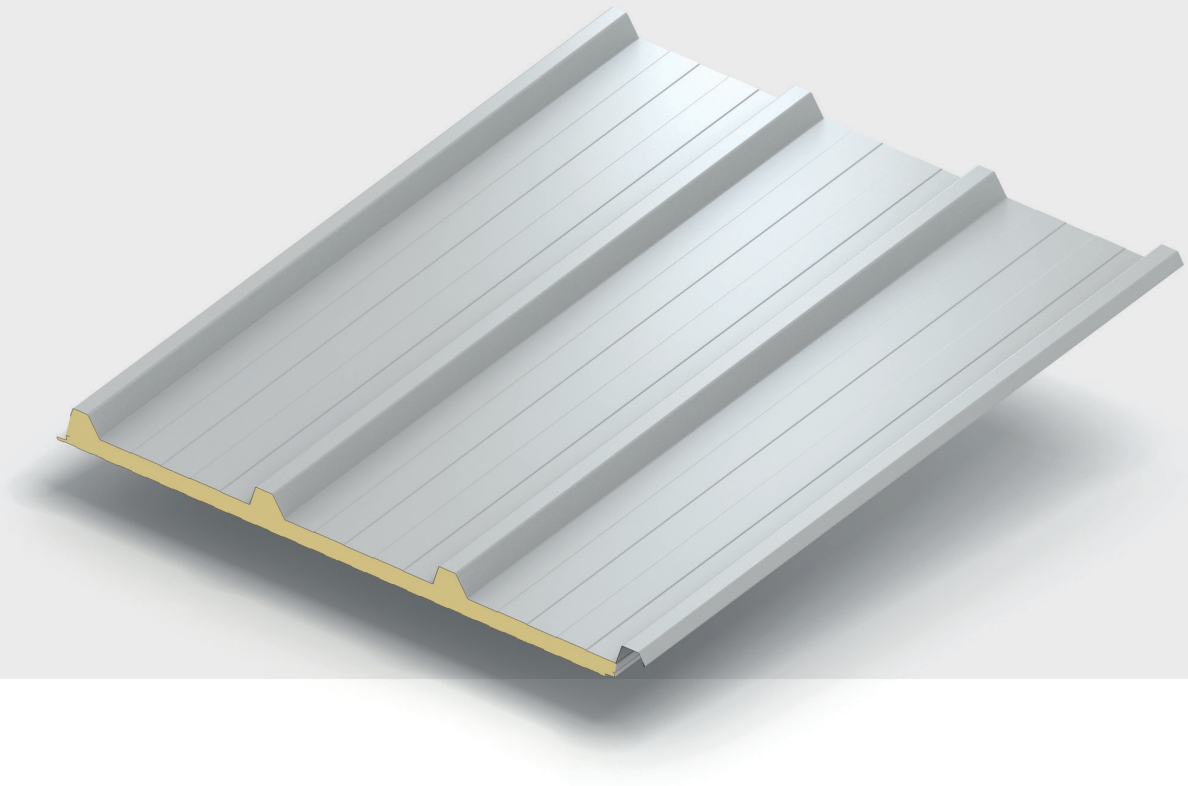
Insulated Panels
Australia

K-Clad Roof Panel
Product Data Sheet

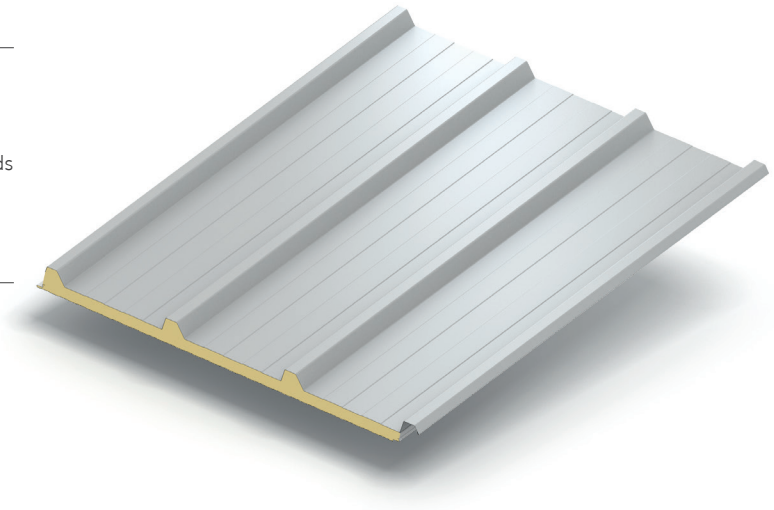


Kingspan®

Product Data

Product Overview

K-Clad Roof Panel is a single-component system, a viable alternative to the traditional multi-part construction methods of non-Section J buildings. K-Clad Roof Panels provide benefits in areas such as thermal comfort, condensation control, spanning capability, build speed and durability.



Application

K-Clad Roof Panel is designed to be used for a variety of non-Section J buildings applications such as large scale logistics facilities, agricultural facilities requiring storage of temperature sensitive goods and agricultural products. The trapezoidal panels are through-fix and can be installed on roof pitches of 3° or more after deflection. Specifications are available for roof slopes less than 3° on request from Technical Services.

Dimensions, Thermal Performance & Weight

A - Core Thickness (mm)	B - Overall 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)	
30	65	1.30	0.77	1.51	1.45	8.00

Declared Thermal Conductivity (λ Value) 0.023 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. K-Clad Roof 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 - 12.0m
Export of Australia / Sea freight to WA	11.8m

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

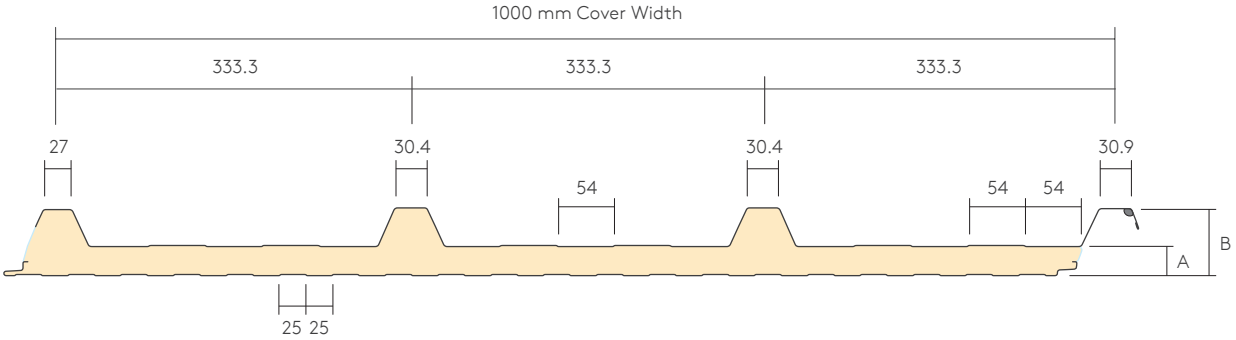
Product Tolerances

Length < 3 m	± 5 mm
Length > 3m	± 10 mm
Cover Width	± 2 mm
Thickness	± 2 mm
Squareness	≤ 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

K-Clad Roof Panels are manufactured with a polyisocyanurate (PIR) core.

Structural Performance

Please contact Technical Services for project specific support on the spanning performance of the K-Clad Roof 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: 3
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

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 CLEAN*safe* 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.

Please contact Technical Services for further information regarding substrates and coatings.

Product Data

Seals

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

Panel End Cut Back

Minimum Cut Back	50mm
Standard End Lap	150mm
Eaves Cut Back	75mm
Maximum Cut Back*	200mm

* For cut backs larger than 150mm, 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

K-Clad Roof Panels can be manufactured in both left to right handed (LH) and right to left handed (RH).

Quality and Durability

K-Clad Roof 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

K-Clad Roof 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.

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.

K-Clad Roof 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, K-Clad Roof Panel 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.

Biological

Kingspan PIR foam core used in the manufacture of K-Clad Roof Panels is free from urea formaldehyde.

Accreditations

GLOBAL GREENTAG CERTIFIED
GreenRate | Level A
trust brands™

Green Building Council Australia
Member 2023-2024

100% We buy GreenPower®

AUSTRALASIA EPD®
ENVIRONMENTAL PRODUCT DECLARATION

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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