

Insulated Panels
Australia

K-Roc™ Firemaster Wall Panel Product Data Sheet

Building smarter with K-Roc™



Product Data

Product Overview

K-Roc™ Firemaster Wall Panels are ideally suited for the construction of non-load bearing internal partition walls with fire resistance performance requirements.

K-Roc™ Firemaster Wall Panel is a bonded laminated material. It achieves the necessary fire test results, as required by clause C2D10 (6)(g) of the National Construction Code (NCC). Therefore, it can be used wherever a non-combustible material is required by the NCC.



Application

The ideal insulated panel to use in food processing and storage applications, along with data centres, microelectronics and pharmaceutical facilities, where protected zones or clean rooms are often required.

Dimensions, Thermal Performance & Weight

Panel Nominal Thickness (mm)	Product R-Value (m²K/W) at 23°C	Product U-Value (W/m²K) at 23°C	Total R-Value (m²K/W)		Weight* (kg/m²)	
			Heat Flow Out (Winter)	Heat Flow In (Summer)	K-Roc™ Firemaster (1100 mm)	K-Roc™ Firemaster (1200 mm)
75	1.54	0.65	1.78	1.63	16.50	17.50
100	2.05	0.48	2.31	2.12	19.50	20.00
120	2.46	0.40	2.75	2.52	21.50	22.50
150	3.08	0.32	3.39	3.10	25.00	26.00
175	3.59	0.27	3.93	3.60	28.00	29.00
200	4.10	0.24	4.47	4.09	30.75	31.50

The R-Values shown are 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-Roc™ Firemaster Wall Panels are manufactured, tested and packaged in conformance with AS/NZS 4859.1: 2018.

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

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

Available Lengths

Standard lengths: 2.0 m - 12.0 m.
Export of Australia / sea freight to WA: 11.8 m.

Core thickness (mm)	Minimum length (m)	Maximum length (m)
75	2.0	8.5
100	2.0	10.0
120	2.0	12.0
150		
175		
200		

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

Cover Widths

Standard cover widths	1100 mm and 1200 mm
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Fixing Method

Through-fix.

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Profiles

External Profile: Flat.

Internal Profile: Flat.

Flat / Flat



Product Tolerances

Product tolerances in accordance with EN 14509: 2013.

Length (≤ 3 m)	± 5 mm
Length (> 3 m)	± 10 mm
Width	± 2 mm
Thickness (≤ 100 mm)	± 2 mm
Thickness (> 100 mm)	± 2 %
Squareness	≤ 0.6% of width
Flatness* (L = 200 mm)	0.6 mm
Flatness* (L = 400 mm)	1.0 mm
Flatness* (L = 700 mm)	1.5 mm
Bowing	2 mm per metre length up to max. 20 mm

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

Insulation Core

K-Roc™ Firemaster Wall Panels are manufactured with a 115 kg/m³ density mineral wool insulation core with a tolerance of ± 10%.



Certification and Testing

Combustibility

K-Roc™ Firemaster Wall Panel is a bonded laminated material. It achieves the following fire test results, as required by clause C2D10 (6)(g) of the National Construction Code (NCC). Therefore, it can be used wherever a non-combustible material is required by the NCC.

Product	Test Method	Result
Mineral wool core	AS 1530.1 1994 (R2016) Combustibility test for materials	Not deemed combustible
Panel steel skin (uncoated)		Not deemed combustible

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: 1

There are two factory-applied adhesive layers applied during the manufacture of the product. Each adhesive layer does not exceed 1 mm in thickness and the total thickness of the adhesive layers does not exceed 2 mm in thickness.

Test	Test Method	Result
NCC Group Number in accordance with AS 5637.1: 2015	AS 5637.1: 2015 / ISO 9705 2003 (R2016)	Group 1
Smoke Growth Rate Index (SMOGR _{ARC}) (m ² /S ² x 1000)		< 100

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Materials

External Sheet

- Substrate to be G300S steel with Z275 in accordance with AS 1397: 2021.
- Paint coating in accordance with AS / NZS 2728: 2013.

Internal Liner

- Substrate to be G300S steel with Z275 metallic coating in accordance with AS 1397: 2021.
 - Paint coating in accordance with AS / NZS 2728: 2013.
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Coatings

External Sheet and Internal Liner

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

Other Internal Coating Options*

- Kingspan AQUAsafe 25 and Kingspan AQUAsafe 55:
The coating has been developed for use as the internal lining of insulated panels to suit high humidity internal environments.

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

Load / Span

Specific span performance information can be provided by Kingspan Technical Services on a project-by-project basis.

Quality and Durability

K-Roc™ Firemaster 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

K-Roc™ Firemaster Wall Panels are stacked horizontally. The entire length of the pack of panels is shrink wrapped. The number of panels in each pack depends on panel length, weight, and thickness. Typical pack height is 1200 mm. Additional corner and edge protection for container transport is offered upon request.

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.

Accreditations





 Locally made for maximum efficiency.
St Mary's, Sydney.

Contact Details

Australia

Kingspan Insulated Panels Pty Ltd
38-52 Dunheved Circuit | St Marys
NSW 2760 Australia

T: +61 (02) 8889 3000
F: +61 (02) 8889 3099
E: info@kingspanpanels.com.au
kingspanpanels.com.au



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

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