

Insulated Panels  
New Zealand

# H1 Energy Efficiency Building Regulation Changes

## Kingspan's Insulated Panel Solutions



# An Easy Way to Meet New H1 Energy Efficiency Building Regulation Changes

## Kingspan Insulated Panels

**Kingspan's insulated roof panels provide a simple single piece warm roofing solution, available in a wide range of thicknesses/ R values with solutions available for all climate zones.**

With new energy efficiency requirements coming into permanent effect in November 2022, Kingspan Insulated panels offer a simple warm roofing solution for meeting the increased thermal requirements.

Being a single piece solution, they are easy to specify and detail and provide a significantly faster installed solution than multi-layer solutions that may involve multiple suppliers products. Panels are available in a range of core thicknesses/R values, to provide suitable options for all climate zones.

In addition to providing the required thermal performance, Kingspan KS1000RW Trapezoidal Roof Panels are CodeMark™ certified (SAI Global) to the NZ Building Code, giving specifiers peace of mind. Kingspan panels utilise a high performance PIR core which is insurer-approved and for GreenStar rated projects we can provide an ecospecifier global greentag certificate (GreenRate Level A) and Environmental Product Declarations (EPDs) are also available.

With an extensive suite of datasheets, design details and specifications, combined with a dedicated and experienced sales/technical team based in New Zealand, Kingspan provides a comprehensive support package to designers and contractors.

Contact Kingspan for further information and assistance on your upcoming projects.



Architectural Profiles (APL) featuring KS1000RW Trapezoidal Roof Panel 70mm, R3.64 (GreenTag Level A)



Remarkables Skifield Base building featuring KS1000RW Trapezoidal Roof and Wall Panel 100mm, R5.13

# NZBC New H1 Regulations

## Solution: KS1000RW Trapezoidal Roof Panel

### KS1000RW Trapezoidal Roof Panel



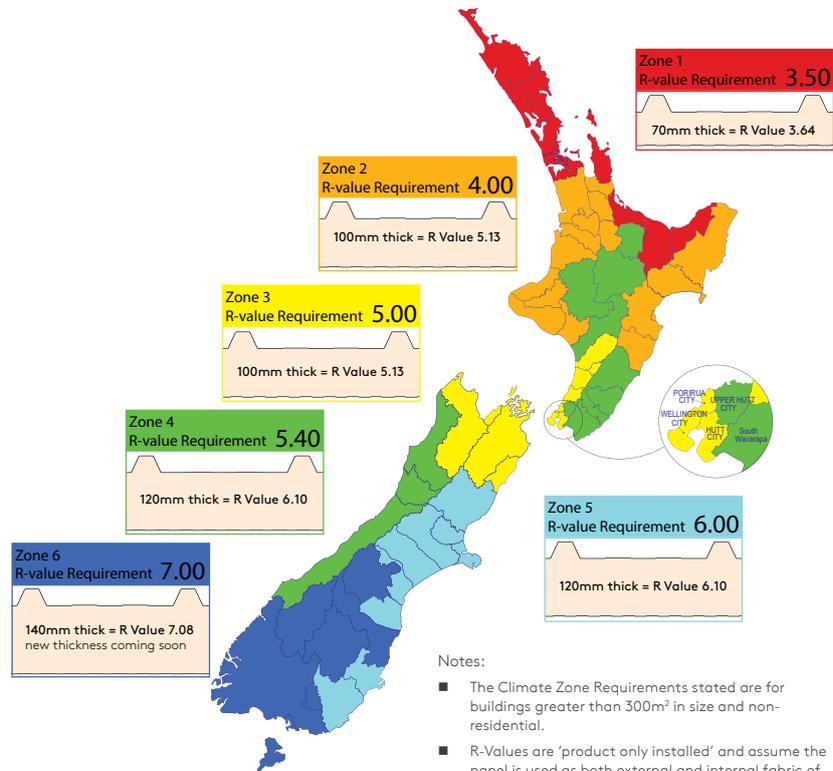
KS1000RW Trapezoidal Roof Panel is a through fix insulated panel, with a trapezoidal profile and 1000mm cover width, allowing for fast track and cost effective installation on all building types. Standard specification is suitable for roof slopes 4° and above (after deflection) – alternative specifications available include high humidity, low temp and low pitch (min 3°).

- Insurer-approved Kingspan FIREsafe™ PIR insulated panel system.
- CodeMark™-approved to the New Zealand Building Code
- Variety of thicknesses/R-values to meet thermal regulations
- ecospecifier global green tag certified to GreenRate Level A
- Environmental Product Declaration (EPD) available

Panel thickness (mm)	Product INSTALLED R-Value @ 15° *	Product ONLY R-Value @15° **
30	1.62	1.5
40	2.12	2.0
60	3.12	3.0
70	3.64	3.52
100	5.13	5.01
120	6.10	5.98
140	7.08	6.96

\* Product installed value assumes that the panels are installed with both external and internal faces exposed on both sides – Air Films have been included in the R-value, Rsi 0.03/Rso 0.09 as per NZS4214.

\*\* Product Only is the R value to be used by consultants when incorporating the product into a specific assembly calculation (for example external roof – external air film, product only, 400mm air gap, 50mm fibreglass batt, 10mm plasterboard, internal air film).



Notes:

- The Climate Zone Requirements stated are for buildings greater than 300m<sup>2</sup> in size and non-residential.
- R-Values are 'product only installed' and assume the panel is used as both external and internal fabric of the building.
- R-values calculated according to AS/NZS4859 Part 1&2:2018 (at 15°C) with air films added in accordance with NZS4214.

### Non-residential Solutions Buildings greater than 300m<sup>2</sup>

Climate Zone	Required Roof R-Value	Minimum Thickness (mm)	Required Wall R-Value	Minimum Thickness (mm)
1	3.50	70	2.20	60
2	4.00	100	2.40	60
3	5.00	100	2.70	60
4	5.40	120	3.00	60
5	6.00	120	3.00	60
6	7.00	140	3.20	60

### Residential Solutions Buildings less than 300m<sup>2</sup>

Climate Zone	Required Roof R-Value	Minimum Thickness (mm)	Required Wall R-Value	Minimum Thickness (mm)
1	6.60	140	2.00	40
2	6.60	140	2.00	40
3	6.60	140	2.00	40
4	6.60	140	2.00	40
5	6.60	140	2.00	40
6	6.60	140	2.00	40

Please note that the transition date for new wall, floor and roof insulation requirements in new residential builds (<300m<sup>2</sup>) has been extended by six months to May 1, 2023. This applies to all six climate zones. Insulation changes to commercial and communal non-residential (assembly care only) buildings announced last year will proceed as planned.

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# Contact Details

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For the product offering in other markets please contact your local sales representative or visit [www.kingspanpanels.com](http://www.kingspanpanels.com)

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