

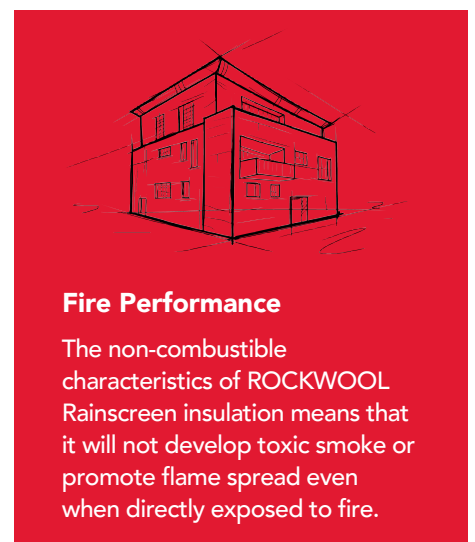
ROCKWOOL Rainscreen

Non-combustible insulation for Ventilated facades

ROCKWOOL Rainscreen is a stone wool insulation developed specifically for use within ventilated cladding systems.

ROCKWOOL Rainscreen is non-combustible – it does not develop toxic smoke nor promote flame spread, even when directly exposed to fire. It also contributes to a building's energy efficiency with its reliable thermal performance. It is moisture repellent, allowing the structure to maintain breathability and dryness. The superior performances of ROCKWOOL Rainscreen ensure that its insulation value can be maintained for a long time.

Compatible with numerous cladding attachment systems, the product can be easily fitted around brackets and other awkward details. When tightly butted, adjacent slabs effectively 'knit' together to provide a continuous insulating layer, reducing heat loss that would otherwise be caused by gaps.



Fire Performance

The non-combustible characteristics of ROCKWOOL Rainscreen insulation means that it will not develop toxic smoke or promote flame spread even when directly exposed to fire.

ROCKWOOL Rainscreen

Technical Data Sheet
Ventilated Facade Insulation
1st November 2023

Technical Parameters

Product Name	ROCKWOOL Rainscreen SL950	ROCKWOOL Rainscreen SL960	Test Standard
Reaction to Fire	Non-combustible Euroclass A1	Non-combustible Euroclass A1	AS 1530.1 EN 13501-1
Fire Hazard Properties	Ignitibility: 0 Spread of flame: 0 Heat evolved: 0 Smoke developed: 0-1	Ignitibility: 0 Spread of flame: 0 Heat evolved: 0 Smoke developed: 0-1	AS 1530.3
Melting Point	1000°C	1000°C	ASTM E794
Thermal Conductivity at mean 15°C	0.034 W/mK	0.033 W/mK	ASTM C518
Water Absorption (partial immersion)	0.5 kg/m ²	0.5 kg/m ²	BS EN ISO 29767
Water Vapor Absorption	Less than 0.04 Vol %	Less than 0.04 Vol %	ASTM C1104/ 1104M
Water Repellency	99 %	99 %	GB/T 10299

Application

ROCKWOOL Rainscreen is suitable for use on the following construction types:

- Steel frame, timber frame or masonry walls in conjunction with a cladding system
- Steel frame or timber frame with a masonry outer leaf

Compliance with the New Zealand Building Code

ROCKWOOL stone wool products when used, installed and maintained in accordance with the requirements outlined in this datasheet, will meet or contribute to meeting the following provisions of the NZBC:

1. Clause B2 DURABILITY: Performance B2.3.1 (a) not less than 50 years and B2.3.1 (b) 15 years.

Where the building is maintained so that provisions of the NZBC E2 and E3 Clauses are met, and where the insulation is not crushed or exposed to conditions that will diminish its thermal performance, ROCKWOOL Stone Wool Insulation can expect to have a serviceable life of at least 50 years. Refer to Installation Guideline and Product Handling and Storage Guideline for more information.

2. Clause E3 INTERNAL MOISTURE: Performance E3.3.1.

ROCKWOOL Stone Wool Insulation contributes to meeting this requirement.

3. Clause F2 HAZARDOUS BUILDING MATERIALS: Performance F2.3.1.

ROCKWOOL Stone Wool Insulation is safe when handled.

4. Clause H1 ENERGY EFFICIENCY: Performance H1.3.1 (a) and H1.3.2 E.

ROCKWOOL Stone Wool Insulation will contribute to meeting the requirements of NZBC Clause H1, Performance H1.3.1 (a) and H1.3.2 E by complying with NZBC Verification Methods H1/VM1, H1/VM2, NZBC Acceptable Solutions H1/AS1, or H1/AS2.

Facings

ROCKWOOL Rainscreen series is available as plain products and additionally with options of foil facing or glass tissue on one side or two-sided.

Packaging and Storage

ROCKWOOL Rainscreen is shrink-wrapped in polyethylene sheets for ease of handling, transportation and storage. Products should be stored in doors or under waterproof covering.

For more information at www.rockwool.com/anz

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Technical Data Sheet
Ventilated Facade Insulation
1st November 2023

Health & Safety

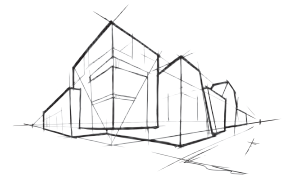
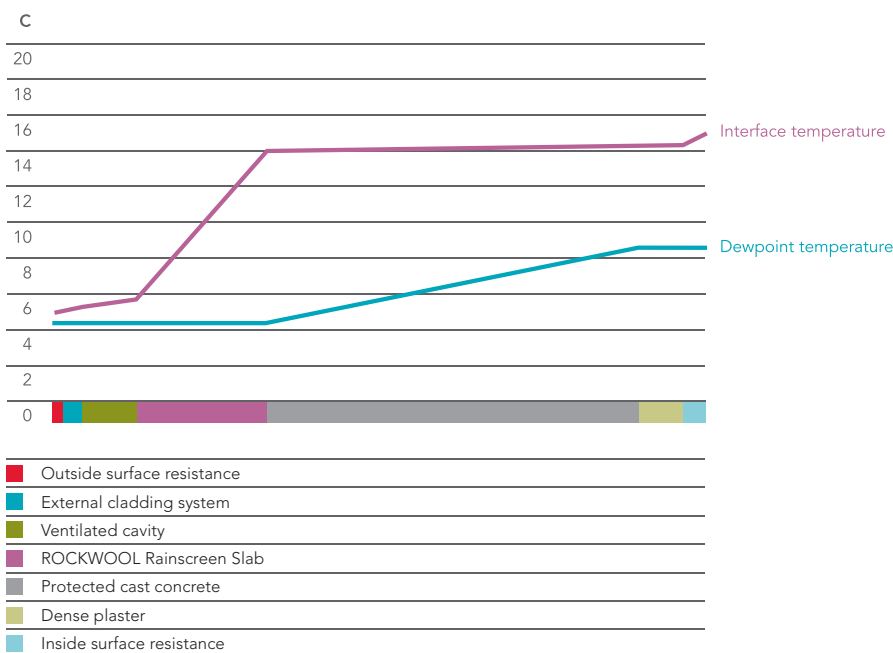
ROCKWOOL stone wool products are manufactured from FBS-1 stone wool. FBS-1 stone wool is safe to use and the fibre component of these products is listed by Safe Work Australia as Man-made Vitreous Fibre (stone wool of low bio persistence as specified under Note Q in the Australian Hazardous Substances Information System and in the Australian Approved Criteria.

Water resistance

ROCKWOOL stone wool insulation repels liquid water due to its fibre orientation and the presence of water-repellent additives.

Condensation control

The vapour resistivity of ROCKWOOL stone wool is 5.9MN/gm. The slabs therefore reduce the risk of condensation, allowing natural drying-out of the structure. See typical relative humidity / temperature graph below.



Product specification

ROCKWOOL Rainscreen SL950

R-Value m ² K/W	Thickness (mm)	Width (mm)	Length (mm)	# Pieces per pack	Area per pack (m ²)
0.75	25	600	1200	12	8.64
0.90	30	600	1200	10	7.20
1.10	38	600	1200	6	4.32
1.45	50	600	1200	6	4.32
2.20	75	600	1200	4	2.88
2.65	90	600	1200	3	2.16
2.95	100	600	1200	3	2.16
3.70	125	600	1200	2	1.44

ROCKWOOL Rainscreen SL960

R-Value m ² K/W	Thickness (mm)	Width (mm)	Length (mm)	# Pieces per pack	Area per pack (m ²)
0.75	25	600	1200	12	8.64
0.90	30	600	1200	10	7.20
1.15	38	600	1200	6	4.32
1.50	50	600	1200	6	4.32
2.25	75	600	1200	4	2.88
2.75	90	600	1200	3	2.16
3.05	100	600	1200	3	2.16
3.80	125	600	1200	2	1.44

ROCKWOOL Rainscreen

Technical Data Sheet
Ventilated Facade Insulation
1st November 2023

Installation

Work on site

ROCKWOOL Rainscreen is supplied in shrink-wrapped polythene packs. The product can be easily cut and shaped using a sharp knife.

Fixings

A suggested fixing pattern is provided; however the adequacy of this or any other fixing pattern should be verified on a per-project basis through assessment by a suitably qualified individual.

The following non-exhaustive list of companies can supply fixings suitable for use with ROCKWOOL Rainscreen: Ejot, Fixfast, Fischer, ITW Construction Products, Hilti.

Exposure

It is recommended that the sequence of construction is programmed in such way that insulation is left exposed for as little time as possible.

While ROCKWOOL insulation is impregnated with a water repelling agent, and is resistant to wind and rain, it is not designed to offer indefinite protection to a substructure. Depending on the nature of the substrate, a protective membrane may be required. Such design issues will require assessment by a suitably qualified individual.

Subjecting ROCKWOOL Rainscreen to any level of exposure is contingent on a visual inspection of the insulation prior to the installation of the cladding. In the unlikely event that any slabs have become physically damaged or otherwise contaminated, they should be replaced.

Once the weatherproof layer is installed, the resulting ventilated cavity will ensure that any wetted slabs will naturally dry out, regaining all of their original performance and properties.

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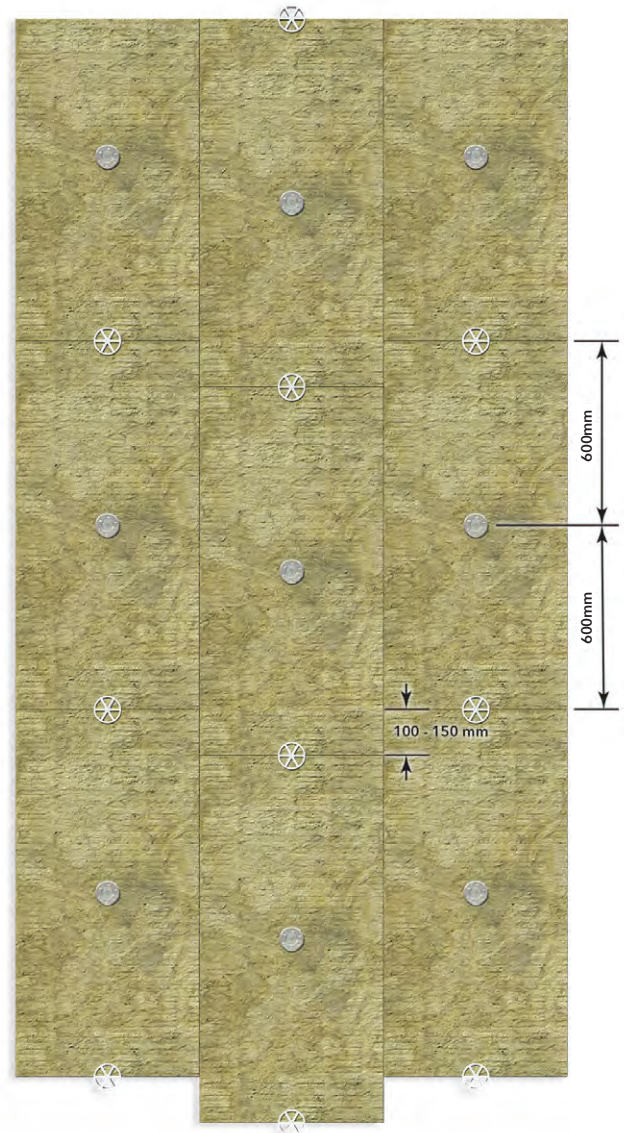
Technical Data Sheet
Ventilated Facade Insulation
1st November 2023

Steel frame, timber frame or masonry wall cladding systems:

- The ROCKWOOL insulation slabs should be close-butted at all vertical and horizontal joints. The horizontal joints of the insulation should be staggered in accordance with good practice.
- Fixings should have a minimum head diameter of 70mm. A typical fixing pattern has three fixings per square metre with one metal fixing at the centre of every slab (see Figure 1).
- The ROCKWOOL insulation slabs should be cut and tightly fitted around cladding support elements.
- For a typical installation, a breathable membrane is placed between the sheathing board and the product. A vapour control layer is placed between the plasterboard and the frame (when required).

Steel frame or timber frame with a brick outer leaf:

- The ROCKWOOL insulation slabs should be close-butted at all vertical and horizontal joints, and at corners. The horizontal joints of the insulation of the slabs should be staggered, in accordance with good practice.
- The ROCKWOOL insulation slabs should be carefully cut to fit around any protrusions into the cavity.
- A vapour control layer is placed between the plasterboard and the frame (when required). A breathable membrane is placed between the sheathing board and the product.
- The ROCKWOOL insulation slabs should be installed to coincide with the frame, with retaining discs used in conjunction with the wall ties at no more than 600mm horizontally and 450mm vertically.
- After each section of the leading leaf is built, excess mortar should be removed from the cavity face and mortar droppings cleaned from exposed edges of the installed board, before installation of the next run of boards. Use of a cavity board or a cavity batten will protect the installed board edges and help to keep the cavity clean as the following leaf is built.



Key

 Metal fixing

 Polypropylene fixing



Disclaimer: The information contained in this data sheet is only applicable for New Zealand and is believed to be correct at the date of publication and is subject to change after the date of printing. This data sheet was designed for general information purpose only. It's contents should not be construed as representing all performance for these insulation materials. You should not act or reply on any of the information contained herein without seeking professional advice. We make no representations as to accuracy, completeness, correctness, suitability or validity of any information in this document and will not be liable for any errors, omissions, or delays in this information or any losses, injuries or damages arising from it use. All information is provided on a as-is basis.

For more information at www.rockwool.com/anz

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