

# PREMIER INSULATION



## PREMIER GLASSWOOL THERMAL INSULATION INSTRUCTIONS

Premier Glasswool is a resin-bonded Thermal & Acoustic insulation material made using up to 90% recycled glass. It is designed for use in framed walls, ceilings and mid-floor applications in both residential and commercial construction. Our Glasswool is available in blanket and segment form and carries a 50-year product durability warranty.

### COMPLIANCE STATEMENTS

The total R-Value of the building system depends on the building materials, design and installation and may be less than, greater than, or equal to the declared R-Value of the product.

The initial performance of the insulation material may be reduced if it is stored for too long in its compressed packaging. Should this product be found to be compressed at installation, it will recover to its nominal thickness and R-Value between 48 Hours and up to one month following installation. Premier Glasswool Insulation should be removed from its compressed packaging within 6 months from the date of manufacture.

Premier Glasswool Insulation will meet and exceed the 50 year durability clause of the NZBC (B2.3.1(a)) when installed in accordance with these manufacturer's instructions.

Premier Glasswool Insulation is supplied with labelling compliant with AS/NZS4859.1. The nominal thickness, net area, and nominal weight of each pack is recorded on the product bale label.

### INSTALLER SAFETY

Premier Glasswool insulation requires PPE to be worn when installing, to prevent temporary skin irritation or inhalation of fibres.

**CAUTION: Electric cables and equipment partially or completely surrounded with any bulk thermal insulation may overheat and fail. This applies to wiring installed prior to 1989.**

Refer NZS4246:2016 for required insulation clearances to downlights and electrical appliances.

In retrofit situations we recommend that the installation process is performed with the power off.

In accordance with NZS4246:2016 it is advised that all electrical cables are identified.

### INSTALLTION TOOLS

We recommend you have the following installation tools: step ladder, head-torch, wide blade snap/disposable knife or insulation knife/saw, and an installing stick, such as a broom handle for pushing the insulation into corners and hard to reach places in the ceiling.

Protective clothing is recommended, including coveralls, gloves, covered shoes, goggles and dusk mask.

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All Thermal and Acoustic insulation should be installed in accordance with NZS4246:2016 Energy Efficiency – Installing Insulation in Residential Buildings. Standards New Zealand has made this Standard freely available for download from their website.

## Cutting to size

Always cut slightly oversized to ensure a tight friction fit to all surfaces.. Cut with a sharp wide-blade snap/disposable knife. Heavier and higher-density products can be cut using a specialist insulation saw or insulation knife.

Insulate all areas of the wall and ceiling leaving no gaps. Off-cuts should be used to fill small spaces. Small gaps can reduce the overall thermal performance of the construction system. Do not compress insulation unless this is a design specification as this will affect the thermal performance.

## Walls

Premier Glasswool Wall Insulation should be friction fitted inside the framing cavity ensuring no gaps. All of the wall space in exterior walls should be insulated (i.e. from the top to the bottom plates). Ensure framing depth will allow the insulation to be installed without compression to its declared nominal thickness.

NZBC E2/AS1, 9.1.8.5 Wall Framing behind Cavities, requires stud straps to prevent insulation bulging into the cavity where the stud spacing is greater than 450mm. Straps must be run at 300mm centres over the wall underlay.

Retrofitting exterior walls (without wall underlay) with direct-fixed claddings, may require a building consent, and will require semi-rigid insulation that is at least 20mm thinner than the framing (90mm framing will require insulation no thicker than 70mm). Insulation should be placed to the inside of the cavity (touching the interior lining). If walls in roof cavities remain unlined, strapping should be used to secure the insulation (strapping should be installed horizontally, maximum spacing of 300mm).

## Ceilings:

A 25mm ventilation gap must be maintained between the roofing underlay and the insulation at all times. A minimum gap of 100mm must be left around un-rated recessed down lights, 200mm around un-ducted vents, 75mm gap around metal heating flues and 50mm around brick/concrete chimneys. Do not cover ceiling vents. Refer NZS4246:2016 for further information and clearances.

Premier Glasswool Insulation should be friction fitted between the ceiling joists and over ceiling battens where possible, or laid at right angles over the ceiling joists ensuring no gaps. All of the ceiling area should be covered with insulation except around chimneys, heating flues, non CA/IC rated recessed lights and non-ducted extractor fans.

Where possible, insulation should be placed beneath electrical wiring to allow access for maintenance and to prevent possible over-heating.

## Double-Layer Ceiling Installation:

Higher R-Value installations will require a 'double-layer' installation. In Roofs with a Roof Space, lay the first layer between the ceiling joists/truss chords and over the ceiling battens, and the second layer over the joist/chords and fitted tight around the truss members . Install with no gaps except around chimneys, heating flues, non CA/IC rated recessed light fittings and un-ducted extractor fans as detailed previously.

Refer to plans and specifications for insulating to the outer perimeter of the roof where space restrictions may not allow the full thickness of insulation to be installed.

In skillion roof installations, lay both insulation layers in the same direction, one on top of the other. Ensure a 25mm ventilation gap is maintained between the insulation and roofing underlay at all times.