

GreenStuf®

PADS, ROLL FORM AND BUILDING INSULATION BLANKET

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 R-Value of this product. GreenStuf® polyester insulation products have an indefinite life and carry a 50 Year Product Durability Warranty.

The initial performance of this product 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 within 72 Hours following installation. GreenStuf will not settle or reduce its performance over time and if installed in accordance with these manufacturer's instructions, it will meet the 50 year durability clause of the NZBC (B2.3.1(a)).

SAFETY INSTRUCTIONS

GreenStuf 100% polyester insulation is completely safe and user-friendly and no protective clothing, specialist equipment or precautions are required to handle or install this product. GreenStuf is non-irritant, non-toxic, and non-allergenic and therefore there will be no skin, throat or lung irritation on contact or following installation.

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. Please follow these installation instructions.

INSTALLATION TOOLS

For retrofitting insulation, we recommend you have the following: step ladder, lamp and extension cord or torch, sharp scissors or wide blade snap/disposable knife, installing stick – such as a broom handle – used for pushing the insulation into corners and hard to reach places in the ceiling.

INSTALLATION INSTRUCTIONS

We recommend all thermal and acoustic insulation is installed in accordance with NZS 4246:2016 Energy Efficiency – Installing bulk thermal insulation in residential buildings. Copies of this Standard are available from Standards New Zealand.

Cutting to size – always cut GreenStuf slightly oversized to ensure a tight friction fit. GreenStuf rolls can easily be torn across the width by hand. GreenStuf can be cut down the length of the Pad/Roll using an insulation saw, sharp scissors or by compressing the insulation under a timber off-cut and then cutting through with a sharp wide blade disposable knife. Heavier and higher density products can be cut using an 'insulation knife' or insulation saw.



Declare.



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

Walls: GreenStuf Roll Form product thicknesses vary with R-Value. Before you begin ensure you have the correct insulation to fit inside the wall cavity. GreenStuf should be friction fitted inside the timber framing ensuring no gaps. All of the wall space in exterior walls should be insulated (i.e. from the top to the bottom plates).

With a drained cavity wall construction and stud spacings greater than 450mm, NZBC E2/AS1, 9.1.8.5 Wall Framing behind Cavities, requires stud straps to prevent insulation bulging into the cavity. Straps must be run at 300mm centres over the wall underlay.

When retrofitting in exterior walls (without wall underlay) with direct-fixed claddings, use semi-rigid insulation that is at least 20mm thinner than the framing (e.g. for walls with 90mm framing, the insulation shall be no thicker than 70mm).

Ceilings: GreenStuf 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 (i.e. to the top plates of the exterior walls) except around heating flues, non-CA/IC rated recessed lights and non-ducted extractor fans.

Start the installation at the furthest point from the ceiling manhole. Use the 'installing stick' to push the insulation into harder to reach places.

Ensure a 25mm ventilation gap between the roofing underlay and the insulation is maintained at all times.

A minimum gap of 100mm must be left around un-rated recessed down lights and 200mm around unducted vents ceiling, do not cover ceiling vents - simply insulate around them. Ensure a 75mm gap is left around metal heating flues and 50mm for brick/concrete chimneys.

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

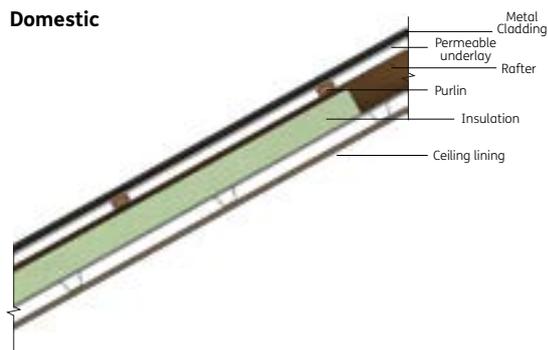
Double-Layer Ceiling Installation: For higher R-Value installations we recommend a 'double-layer' installation to reduce thermal bridging and heat-loss through the timber construction. Lay the first layer between the ceiling joists and over the ceiling battens, and the second layer at right-angles to, and over the top leaving no gaps except around heating flues, chimneys, non CA/IC rated recessed light fittings and non-ducted extractor fans as detailed previously.

Building Insulation Blanket Installation: Autex recommends that all thermal and acoustic insulation be installed in accordance with the manufacturer's instructions (included on each GreenStuf pack) and design detail. Insulation can be laid either between or under the purlins, or between the ceiling joists, but an air-gap of 25mm (minimum) must be provided under the underlay. This is a NZBC requirement under E2 External Moisture. Insulation installed touching the underlay can cause condensation and over time may cause corrosion of the underside of the cladding. If insulation is placed above the rafter and takes up the full purlin depth, air movement is inhibited. To provide sufficient ventilation, it is necessary to use a counter-batten to provide an air-gap between the insulation and underlay.

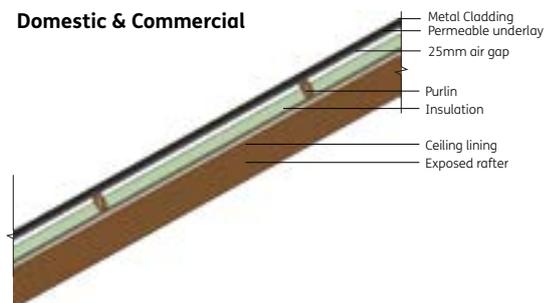
This pack complies with AS/NZS 4859.1 at the nominal weight, net area and nominal thickness recorded on the bale label.

ILLUSTRATIONS OF BUILDING INSULATION BLANKET INSTALLATION

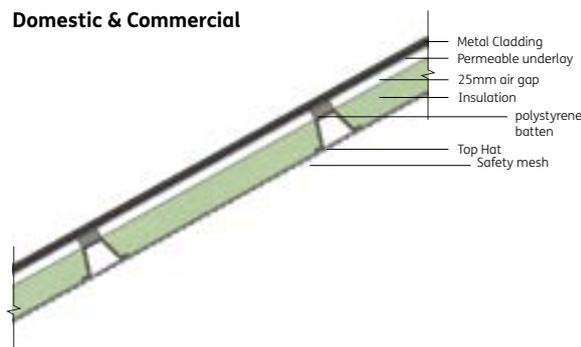
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GreenStuf is manufactured in New Zealand by Autex Insulation, a division of Autex Industries Limited. Autex retains the right to change products and specifications without prior notice. If a specification is critical to end use situation please discuss your requirements with your Autex account manager.

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