



GreenStuf® UNDERFLOOR

Autex GreenStuf® is a range of quality 100% polyester thermal insulation products for ceilings, walls and floors. GreenStuf® is a soft thermally bonded bulk-fibre insulation manufactured from polyester fibres.

GreenStuf® UNDERFLOOR is a non-irritant thermally efficient insulation material designed for insulating under exposed joist floors. GreenStuf® UNDERFLOOR is supplied as lofted green-tinted insulation rolls pre-cut to fit standard exposed timber joist floors.

Features and Benefits

- GreenStuf® is completely safe and user-friendly so no protective clothing is required to handle or install the product.
- GreenStuf® UNDERFLOOR will reduce heat loss through floors providing a warmer and more comfortable indoor environment. GreenStuf® UNDERFLOOR will also assist in reducing drafts caused by joins in the floor substrate.
- GreenStuf® UNDERFLOOR is incredibly easy to install by simply stapling into place between the joists. No trimming, no clips, no mess and no fuss.
- GreenStuf® does not contain any added chemicals such as formaldehyde based binders, and the fibres are not of a respirable size supporting safer indoor air quality.
- GreenStuf® will not slump or settle over time (50+ year durability rating) and is not affected by moisture, mould or mildew, and is naturally resistant to insect and vermin attack.
- GreenStuf® is manufactured using a minimum of 45% previously recycled polyester fibre (from PET plastic) and is reusable and recyclable at end of life – supporting the philosophies of Environmentally Sustainable Design (ESD).



Applications

GreenStuf® UNDERFLOOR is designed for the thermal insulation of existing and new timber framed buildings in accordance with NZBC H1 Energy Efficiency requirements.

To ensure Building Code compliance Autex Insulation recommends that Architects and building designers consult the relevant NZ Standards before specifying thermal insulation products.

NZBC H1/AS1 Energy Efficiency, 2.0 Building Thermal Envelope

NZS 4218: Energy Efficiency - Small Building Envelope

NZS 4243: Energy Efficiency - Large Buildings - Thermal Envelope

NZS 4246: Energy Efficiency - Installing Insulation in Residential Buildings

PRODUCT (R Value)	NOMINAL THICKNESS	PACK SIZE
R1.5 UNDERFLOOR	100mm	580mm x 10.78m x 4 Rolls per Pack (25m ²)
R1.8 UNDERFLOOR	100mm	580mm x 10.78m x 4 Rolls per Pack (25m ²)

NZBC Compliance

GreenStuf® thermal insulation when installed in accordance with the manufacturers instructions will satisfy the 50 year durability clause NZBC B2.3.1 (a). GreenStuf® meets the relevant clauses of NZBC E3 Internal Moisture, F2 Hazardous Building Materials, and will assist in meeting H1 Energy Efficiency.

Early Fire Hazard Test Results

GreenStuf® is a self-extinguishing product and meets all NZ Building Code requirements as tested under AS1530.3

Ignitability Index (0-20)	0	Heat Evolved Index (0-10)	0
Spread of Flame Index (0-10)	0	Smoke Developed Index (0-10)	3

Tested 15 April 1998, APL Report 98055

Environmental:

GreenStuf® products are manufactured in NZ by Autex Industries Limited and are produced using 100% polyester fibre without the need for any chemical binding agents or adhesives. GreenStuf® does not contain, release or use any restricted ozone depleting substances in its composition or manufacture.

There are no known hazards with the use or handling of Autex polyester insulation materials. GreenStuf® is non-toxic, non-allergenic, and non-irritant.

GreenStuf® contains a minimum of 45% previously recycled fibre (from PET plastic) and is completely recyclable at end of life. GreenStuf® is manufactured under Autex's Zero Waste Policy where manufacturing waste is recycled or reprocessed into other products.

GreenStuf® polyester fibres are not of a respirable size and will never become a potential airborne health risk providing for safer indoor air quality.

Indoor Environment Quality (IEQ)/ VOC Emissions:

Autex polyester well exceeds the leading world standards established by 'Good Environmental Choice Australia' (GECA) and The GreenGuard Environmental Institute.

GreenGuard VOC standards are the recommended maximum levels established by the US National Toxicology Program (NTP), the International Association for Research on Cancer (IARC) and the World Health Organisation (WHO).

Autex GreenStuf® polyester has been tested by Cetec Pty Ltd (Report: RCV080408) for chemical emission as follows:

VOC concentration: 0.01 mg/m³ (7days)
 GECA/ GreenGuard Limit: 0.25 mg/m³ (7days)

Durability:

Autex Greenstuf® is manufactured in NZ under strict ISO 9001 quality control systems. GreenStuf® will not slump, sag or reduce its performance over time. This ensures full performance is maintained (50+ year BRANZ Durability Rating).

Autex provides a 50 year durability warranty against product failure in normal use situations. For more information please contact your Autex Representative.

Corrosiveness:

When tested in accordance with NZS 4222, GreenStuf® insulation is classified as non-corrosive. GreenStuf® polyester is pH7.8 (where pH7.0 is neutral).

Moisture:

GreenStuf® is not affected by moisture. Exposure to an atmosphere of 50°C at 90% relative humidity for four days showed moisture absorption by weight of less than 0.03%. Should GreenStuf® ever get wet full thermal performance will be restore on drying out.

MSDS:

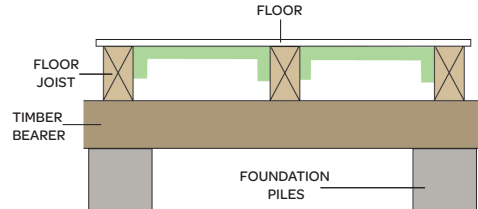
Material Safety Data Sheets (MSDS) are available on request from your Autex Representative or by phoning Autex Customer Services freephone 0800 428 839.

Acoustic Performance:

GreenStuf® insulation will assist in reducing airborne sound (including booming from footfall) from floors by absorbing reverberant noise under the floor. For further information on acoustic design please contact your Autex Representative.

Installation:

Autex Insulation recommends that all thermal and acoustic insulation be installed in accordance with the manufacturers instructions (included on each GreenStuf® UNDERFLOOR pack) and NZS 4246 Energy Efficiency - Installing Insulation in Residential Buildings. GreenStuf® UNDERFLOOR is supplied as a 580mm wide blanket for installation between joists.



Vermis:

GreenStuf® is naturally resistant to insect and vermin attack and does not contain chemical deterrents. Birds and vermin will live and nest in all bulk-fibre insulation materials if allowed access. In higher risk areas Autex suggests enclosing the underfloor insulation and sealing all gaps.

Specification & Substitution

Autex specification documents are available through Masterspec® or can be downloaded from our website (www.autex.co.nz).

Substitution of any products in NZBC compliant systems should not be accepted and we recommend this be made clear in all specification and tender documents.

BRANZ Appraisal:

GreenStuf® products are independently appraised for NZBC compliance by BRANZ. Copies of the current certificate (Appraisal No. 380-2008) are available online at www.branz.co.nz or from your Autex Representative.



General:

GreenStuf® is manufactured in NZ by Autex Insulation, a division of Autex Industries Limited, an ISO 9001 certified company. 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 Representative.

GreenStuf® is a registered trademark of Autex Industries. "Healthwise" and "Proudly made in NZ" logos are registered trademarks of Autex Industries.

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