# GreenStuf.

## Underfloor

GreenStuf<sup>®</sup> Underfloor is 100% polyester thermal insulation rolls, precut to fit exposed timber joists.

## Applications

GreenStuf<sup>®</sup> Underfloor is designed for use in residential and commercial exposed joist floors.

GreenStuf<sup>®</sup> Underfloor is available in a range of widths and performance options and can be installed in new and existing buildings with enclosed, semi-enclosed and open sub-floor spaces. In certain situations wind wash in the sub-floor space has the potential to affect the installed total thermal performance of the floor.

Where wind wash is a concern we suggest selecting the highest R-Value GreenStuf® Underfloor suitable for the building to maintain maximum thermal performance of the floor system. For more information or advice please contact your local Autex Account Manager on 0800 428 839.

## Technical

**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 contribute to meeting H1 Energy Efficiency.

GreenStuf<sup>®</sup> 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 Buildinas



Acoustic Performance: GreenStuf® Underfloor will assist in reducing airborne sound from floors (including booming from footfall) by absorbing reverberant noise under the floor.

Durability: GreenStuf® has a 50 Year Durability Warranty.

**Moisture:** GreenStuf<sup>®</sup> 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%.

Hazardous Building Materials: GreenStuf® is non-hazardous.

#### **VOC Emission Safe:**

VOC concentration:	
GECA/GreenGuard Limit:	
Cetec Pty Ltd (Report:RCV080408)	

0.01 mg/m³ (7 days). 0.25 mg/m³ (7 days).

**Vermin:** GreenStuf<sup>®</sup> is naturally resistant to insect and vermin attack.

**ISO Standards:** Autex is committed to Quality and Environmental best practice through our ISO 9001 & ISO 14001 certified Quality and Environmental Management Systems. **Non Corrosive:** GreenStuf® polyester is pH7.8 (pH7 is neutral).

PRODUCT (R Value)	BRANZ Appraised Appraisel No.734 [2011]	NOMINAL THICKNESS (mm)	PACK SIZE	m²/PACK	
R1.5 Underfloor	$\checkmark$	100mm	450mm x 8.9m x 5 Rolls per Pack	20m²	
			500mm x 10m x 4 Rolls per Pack	20m²	
			600mm x 8.34m x 4 Rolls per Pack	20m²	
R1.8 Underfloor	$\checkmark$	100mm	450mm x 7.78m x 5 Rolls per Pack	17.50m²	
			500mm x 8.75m x 4 Rolls per Pack	17.50m²	
			600mm x 7.29m x 4 Rolls per Pack	17.50m²	
Other widths and pack sizes may be available on request. MOQ may apply.					

### Non Flammable: GreenStuf<sup>®</sup> is classified non flammable. Fire ratings:

ISO 9705: 1993 Classification: Group 1-S Smoke Production Rate: <5.0m²/s As required by NZBC C/VM2 Issued 11th March 2013, BRANZ (FAR 4045)

#### 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 *APL Report 98055* 

IEC 60695-11-5 (Downlight Fire Test Standard) GreenStuf® has been tested and certified non-flammable and complies with the requirements of IEC 60695-11-5.

For more information please refer to our Insulation and Downlights Facts Sheet available from our website or your local Autex Account Manager.

**Non Toxic, Non Allergenic, Non Irritant:** There are no known hazards with the use or handling of GreenStuf® polyester.

**Installation:** GreenStuf<sup>®</sup> Underfloor insulation is designed for use in suspended floors. Autex Insulation recommends that all thermal and acoustic insulation be installed in accordance with the manufacturer's instructions (included on each GreenStuf<sup>®</sup> Underfloor pack) and NZS 4246 Energy Efficiency - Installing Insulation in Residential Buildings.

Visit www.greenstuf.co.nz to view an installation video.

**MSDS:** Material Safety Data Sheets (MSDS) are available on request from your Autex Account Manager or by visiting our website: www.greenstuf.co.nz

**Specification & Substitution:** Autex specification documents are available through Masterspec® or can be downloaded from our website (www.greenstuf.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.

**ISO Standards:** Autex is committed to Quality and Environmental best practice through our ISO 9001 & ISO 14001 certified Quality and Environmental Management Systems.

**Take Back Programme:** GreenStuf<sup>®</sup> is recyclable. Autex will gladly recycle used, uncontaminated GreenStuf<sup>®</sup> insulation to help keep it out of landfill. For more information on recycling GreenStuf<sup>®</sup> contact Autex on freephone 0800 428 839.

**Packaging Recycling:** GreenStuf<sup>®</sup> packaging is recyclable LDPE 4. Please refer to your local recycling centres for drop off and collection services.

**Environmental:** All GreenStuf<sup>®</sup> products are manufactured using 100% polyester fibre and contain a minimum of 45% previously recycled fibre (from PET plastic). GreenStuf<sup>®</sup> products are manufactured under Autex's Zero Waste Programme where all manufacturing waste is recycled back into the production process.

GreenStuf<sup>®</sup> products are Global GreenTag GreenRate Level A certified and can be used to contribute to Green Star NZ and HomeStar accreditation. GreenStuf<sup>®</sup> is also Declare certified to be Red-List Free and can be used in Living Building Challenge projects.

All Autex product declarations are independently verified under the auditing process of our ISO 14001 Environmental Management System. For more information, please contact your Autex Account Manager, or visit our website www.greenstuf.co.nz.



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.

GreenStuf® is a registered trademark of Autex Industries. GS\_NZ\_DS\_Underfloor-Data-Sheet\_UUL17\_GK



#### Insulation

Autex Industries Ltd 702 - 718 Rosebank Rd Private Bag 19988, Avondale 1746, Auckland New Zealand Phone +64 9 828 9179 Fax +64 9 828 5810 Freephone 0800 428 839 www.autex.co.n2

ISO 9001 AND ISO 14001 CERTIFIED