



## UNDERFLOOR

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

### APPLICATIONS

GreenStuf Underfloor is designed for use in residential and commercial exposed joist floors.

GreenStuf Underfloor is available in a range of widths and performance options and can be installed in new and existing buildings with enclosed and semi-enclosed floor spaces. In open sub-floor spaces, it is recommended that a suitable lining material is applied.

In addition to the above recommendation, 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:** When installed in accordance with the manufacturer's instructions, GreenStuf insulation will satisfy the 50 year durability clause New Zealand Building Code (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 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, architects and building designers are advised to consult an engineer or the relevant NZ standards before specifying thermal and acoustic insulation products.

For information and assistance please contact your Autex account manager.

**Fire Regulations:** GreenStuf insulation may not be suitable for all applications, as stipulated in the NZBC. Please consult a fire engineer when specifying GreenStuf insulation or contact your Autex account manager for further information.



**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 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: 0.01 mg/m<sup>3</sup> (7 days).  
 GECA/GreenGuard Limit: 0.25 mg/m<sup>3</sup> (7 days).  
 Cetec Pty Ltd (Report: RCV080408)

**Vermin:** GreenStuf 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.

PRODUCT (R-value)		NOMINAL THICKNESS (mm)	PACK SIZE	PRODUCT WEIGHT (gsm)	DENSITY (kg/m <sup>3</sup> )	m <sup>2</sup> /PACK
R1.5 Underfloor	✓	100mm	450mm x 8.9m x 5 Rolls per Pack	750gsm	7.5kg/m <sup>3</sup>	20m <sup>2</sup>
			500mm x 10m x 4 Rolls per Pack	750gsm	7.5kg/m <sup>3</sup>	20m <sup>2</sup>
			600mm x 8.34m x 4 Rolls per Pack	750gsm	7.5kg/m <sup>3</sup>	20m <sup>2</sup>
R1.8 Underfloor	✓	100mm	450mm x 7.78m x 5 Rolls per Pack	1,025gsm	10.3kg/m <sup>3</sup>	17.50m <sup>2</sup>
			500mm x 8.75m x 4 Rolls per Pack	1,025gsm	10.3kg/m <sup>3</sup>	17.50m <sup>2</sup>
			600mm x 7.29m x 4 Rolls per Pack	1,025gsm	10.3kg/m <sup>3</sup>	17.50m <sup>2</sup>

Other widths and pack sizes may be available on request. MOQ may apply.

**Non-Corrosive:** GreenStuf polyester is considered non-corrosive based on AS/NZS 4859.1 Standard for insulation.

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

**Fire ratings:**

ISO 9705: 1993

Classification: Group 1-S

Smoke Production Rate: <5.0m<sup>2</sup>/s

As required by NZBC C/VM2

*FI 4895 issued 11<sup>th</sup> July, 2012 and FAR 4045-2 issued 8<sup>th</sup> October, 2013*

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 (Test conducted on GreenStuf Thermal Insulation)*

IEC 60695-11-5 (Downlight Fire Test Standard)

GreenStuf has been tested and assessed as complying with IEC 60695-11-5 Needle-flame Test.

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

**Installation:** GreenStuf Underfloor insulation is designed for use in suspended floors. Autex recommends that all thermal and acoustic insulation be installed in accordance with the manufacturer's instructions (included on each GreenStuf Underfloor pack) and NZS 4246 Energy Efficiency - Installing Insulation in Residential Buildings. Visit [www.greenstuf.co.nz](http://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 can be downloaded from our website: [www.greenstuf.co.nz](http://www.greenstuf.co.nz)

**Specification & Substitution:** Autex specification documents are available through Masterspec or can be downloaded from our website [www.greenstuf.co.nz](http://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.

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

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

**Environmental:** All GreenStuf products are manufactured using 100% polyester fibre and contain a minimum of 50% previously recycled fibre (from PET plastic). GreenStuf products are manufactured under Autex's Zero Waste Programme where all manufacturing waste is recycled back into the production process.

GreenStuf products are Global GreenTag GreenRate Level A certified and can be used to contribute to Green Star and Homestar accreditation.

GreenStuf is also Declare certified to be Red List chemical free and can be used in Living Building Challenge projects. For more information, please contact your Autex account manager, or visit our website [www.greenstuf.co.nz](http://www.greenstuf.co.nz)



**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.nz](http://www.autex.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.