

Thermal Roll Form

GreenStuf® Thermal Roll Form is 100% polyester thermal insulation blanket/rolls manufactured to order and pre-cut to nominated width for walls, roof-ceilings, floor and mid-floor applications.

Applications

GreenStuf® Thermal Roll Form is designed for the thermal (and acoustic) insulation of buildings in accordance with NZBC H1 Energy Efficiency, and G6 Acoustic Design requirements. GreenStuf® Thermal Roll Form can be used as a roof blanket, in ceilings, under floors, internal and external walls and in mid-floor cavities. To ensure Building Code compliance Autex Insulation recommends that Architects and building designers consult the relevant NZ Standards before specifying thermal and acoustic insulation products:

NZBC H1/AS1 Energy Efficiency, 2.0 Building Thermal Envelope NZBC G6/VM1 Airborne and Impact Sound NZS 4218: Energy Efficiency - Small Building Envelope

NZS 4243: Energy Efficiency - Large Buildings - Thermal Envelope NZS 4246: Energy Efficiency - Installing Insulation in Residential Buildings

Technical

Durability: GreenStuf® has a 50 Year Durability Warranty. **Hazardous Building Materials:** GreenStuf® is non-hazardous.



NZBC Compliance: GreenStuf® thermal insulation when installed in accordance with the manufacturer's 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 Effeciency.

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%.

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PRODUCT (R-Value)	BRANZ Appraised Appraisal No.380 [2008]	NOMINAL THICKNESS (mm)	PACK SIZE A range of standard widths are available ex-stock, product made to arder will require MOQ. Pack size may vary, dependant on splits/widths required.	m²/PACK
R1.0 Roll Form	√	45mm	Nominated width rolls	30m²
R1.5 Roll Form	✓	100mm	Nominated width rolls	25m²
R1.8 Roll Form	✓	100mm	Nominated width rolls	25m²
R2.2 Roll Form	✓	150mm	Nominated width rolls	20m²
R2.4 Roll Form	✓	140mm	Nominated width rolls	20m²
R2.6 Roll Form	✓	140mm	Nominated width rolls	17m²
R2.8 Roll Form		140mm	Nominated width rolls	20m²
R2.9 Roll Form	✓	185mm	Nominated width rolls	17m²
R3.2 Roll Form	✓	190mm	Nominated width rolls	17m²
R3.4 Roll Form	✓	200mm	Nominated width rolls	15m²
R3.6 Roll Form	✓	210mm	Nominated width rolls	14m²
DOUBLE LAYER INSTA	ALLATION			
R1.8 + R1.8 (R3.5)	1	190mm	As per Roll Form bales as above	
R2.2 + R1.8 (R3.8)	✓	240mm	As per Roll Form bales as above	
R2.2 + R2.2 (R4.2)	✓	285mm	As per Roll Form bales as above	
R3.2 + R2.2 (R5.2)	✓	325mm	As per Roll Form bales as above	

Acoustic Performance: GreenStuf® insulation will assist sound reduction by reducing the resonating noise inside the construction cavity. Actual performance will vary with different construction systems. For acoustic design assistance please contact your Autex Account Manager.

VOC Emission Safe:

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

Cetec Pty Ltd (Report:RCV080408)

Non-Flammable: GreenStuf® 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.

Certificates available from our website.

Non-Corrosive: GreenStuf® polyester is pH7.8 (pH 7 is neutral).

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

Vermin: GreenStuf® is naturally resistant to insect and vermin attack.

Installation: Autex Insulation recommends that all thermal and acoustic insulation be installed in accordance with the manufacturer's instructions (included in each GreenStuf® pack) and NZS 4246 Energy Efficiency - Installing Insulation in Residential Buildings.

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.

Double Layer: 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 in our installation instructions.

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

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.

TISO 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® 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 45% 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 NZ and HomeStar accreditation. GreenStuf® is also Declare certified to be Red-List Free and can be used in Living Building Challenge projects.

All product declarations are independently verified under 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.



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