



## 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 Efficiency.

**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%.

PRODUCT (R Value)			NOMINAL THICKNESS	PACK SIZE <small>A range of standard widths are available ex-stock, product made to order will require MOQ. Pack size may vary, dependant on splits/widths required.</small>	m <sup>2</sup> /PACK
R1.0 Roll Form		✓	45mm	Nominated width rolls	30m <sup>2</sup>
R1.5 Roll Form		✓	100mm	Nominated width rolls	25m <sup>2</sup>
R1.8 Roll Form		✓	100mm	Nominated width rolls	25m <sup>2</sup>
R2.2 Roll Form		✓	150mm	Nominated width rolls	20m <sup>2</sup>
R2.4 Roll Form		✓	140mm	Nominated width rolls	20m <sup>2</sup>
R2.6 Roll Form	✓ (wall)	✓	140mm	Nominated width rolls	17m <sup>2</sup>
R2.9 Roll Form		✓	185mm	Nominated width rolls	17m <sup>2</sup>
R3.2 Roll Form		✓	190mm	Nominated width rolls	17m <sup>2</sup>
R3.4 Roll Form	✓	✓	200mm	Nominated width rolls	15m <sup>2</sup>
R3.6 Roll Form	✓	✓	210mm	Nominated width rolls	14m <sup>2</sup>
DOUBLE LAYER INSTALLATION					
R1.8 + R1.8 (R3.5)	✓	✓	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 Representative.

**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)*

**Non-Flammable:** GreenStuf® is classified non-flammable.

**Fire ratings:**

ISO 9705: 1993

Classification: Group 1-S

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

As required by NZBC C/VM2

*Tested 20 Aug 2012, BRANZ (FI 4973)*

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 Representative or by visiting our website: [www.autex.co.nz](http://www.autex.co.nz)

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

**Take Back Programme:** 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.

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

Distributed by Ecoplus Systems  
Phone 0800 4 ECOPLUS  
[www.ecoplus-systems.com](http://www.ecoplus-systems.com)

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 Representative.

GreenStuf® is a registered trademark of Autex Industries.

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ISO 9001 AND ISO 14001 CERTIFIED