

ecofleece®

The natural



Wool Insulation

Ecofleece® – What is it?

Ecofleece® is available in two product options — natural or recycled. Natural Ecofleece® consists of 100% virgin New Zealand sheep's wool blended with up to 40% polyester fibre. Recycled Ecofleece® consists of coloured sheep's wool sourced from New Zealand wool product manufacturers blended with up to 40% polyester. Recycled is approximately 2/3 the cost of natural. Ecofleece® complies with the insulation standard AS/NZS 4859.1.

Ecofleece® can be installed without the need for protective clothing or equipment, but it is recommended.

Ecofleece® – Products

Ecofleece® insulation is supplied as a blanket ready to roll out over ceiling joists or fitted under or between floor joists. Rolls are cut to length when fitting to wall framing cavities.

Ecofleece® insulation is manufactured to fit between standard framing spacings — see Table 1.

Special runs can be manufactured to order — a roll width of up to 2 m is possible.

Ecofleece natural is manufactured to order. Contact Eco Insulation for further information.

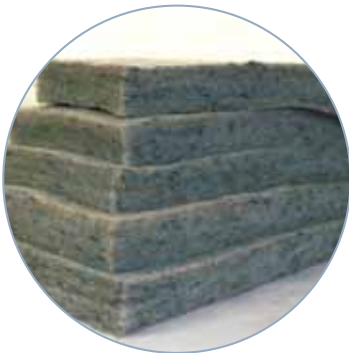
Ecofleece® – Identifying it

Natural Ecofleece® insulation is white in colour. Recycled Ecofleece® insulation is grey.

Individual Ecofleece® packs are labelled to identify the specific R-value, coverage per pack in m², material width, unit number or length of material, nominal thickness, minimum weight and date of manufacture.



BRANZ Appraised
Appraisal No.464 [2005]



ecoinsulation
The natural choice

www.ecoinsulation.co.nz



Ecofleece® – How much do I need?

Coverage per pack of Ecofleece® insulation depends on the product and its thickness. Typical roll lengths and coverage per pack are summarised in Table 1.

Ecofleece® – Where it can't be used

Ecofleece® insulation must not be installed if the moisture content of timber framing exceeds 20%.

In buildings where there is a high humidity, such as swimming pool halls or saunas, Ecofleece® insulation must be isolated from the moisture by a vapour barrier.

Ecofleece® – Sustainability

Ecofleece® and its associated packaging is fully recyclable. Recycled Ecofleece® also reuses wool as an integral part of product manufacture.

Ecofleece® is Enviromark Gold Certified, ensuring continuous improvements in the field of environmental sustainability.

Eco Insulation is committed to the development and fostering of sustainable building products and practices and are members of the Sustainable Business Network and the New Zealand Green Building Council.

Ecofleece® – Finding out more about it

To obtain further information on Ecofleece® insulation, Ecofleece® suppliers or other Eco Insulation products call toll free **0800 400 326** or visit **www.ecoinsulation.co.nz**

Ecofleece® – Thermal performance

Ecofleece® insulation is available in the specific R-values given in Table 1.

To obtain the installed R-value of Ecofleece® insulation, refer to Eco Insulation's thermal graphs which takes account of the construction being used to give an R-value for the completed element. Compliance with the requirements of NZBC H1 and E3 can then be determined.

Ecofleece® – Safety

Ecofleece® insulation is non-irritant, non-allergenic, non-toxic and odourless.

Ecofleece® – Durability

Ecofleece® insulation will meet the 50 year minimum durability of NZBC B2.

Ecofleece® – Moisture

Ecofleece® insulation will provide maximum insulation when it is dry in service. The insulation value will be lost when it is wet. Ecofleece® which has become wet must be removed, dried, re-lofted and reinstated to restore the insulation value.

Ecofleece® insulation does not absorb moisture when tested to ASTM C739.

Wool fibres strive to stay in balance with the surrounding moisture conditions – this is why wool is said to breathe as it absorbs and evaporates moisture reducing condensation problems.

Table 1: Ecofleece® thermal performance and physical properties

	Insulation R-value	Width (mm)	Thickness (mm)	Actual m ² per pack
Wall	1.6*	580	95	20
		780	95	20
	1.8*	380	95	20
		430	95	20
		580	95	20
	2.2	380	95	15
		580	95	15
		780	95	15
Ceiling	1.8*	380	95	20
		430	95	20
		580	95	20
		870	95	20
	2.2	380	133	15
		430	133	15
		580	133	15
		870	133	15
	2.6	380	135	15
		430	135	15
		580	135	15
		870	135	15
	3.0	870	150	12
		580	150	12
Floor	1.8	380	95	20
		430	95	20
		580	95	20
	2.2	430	133	15
		580	133	15

Note 1: * Climate zones 1 and 2 only.

Ecofleece® – Fire performance

When tested to AS 1530.3: 1989, Ecofleece® insulation achieves the following Early Fire Hazard Indices:

- ignitability 0
- spread of flame 0
- heat evolved 0
- smoke developed 5

Ecofleece® – Acoustic performance

Ecofleece® insulation will absorb sound in the 500 Hz to 8 KHz range. Specific absorption data as part of an acoustically rated construction element is not currently available. Refer to Eco Insulation for further information 0800 400 ECO

Ecofleece® – Corrosion

Ecofleece® insulation is non-corrosive to carbon steel when tested to NZS 4222, copper and aluminium.



BRANZ Appraised

Appraisal No.464 [2005]



Rotary Cutter and blade

Head Office

Eco Insulation Ltd
PO Box 305470
Triton Plaza
Albany, 0757
North Shore
Auckland

Auckland showroom
3/52 Arrenway Drive
Albany Heights
North Shore
Auckland 0630

Phone: 09 477 0270
Fax: 09 478 7771
Email: enquiries@ecoinsulation.co.nz

0800 400 ECO
0800 400 326

ecoinsulation
The natural choice

Ecofleece® – Appraisal

Eco Insulation Ltd are the holders of BRANZ Appraisal Certificate No. 464 (2005) Ecofleece®. Ecofleece® insulation is therefore able to meet the relevant requirements of the NZBC namely B2 Durability, H1 Energy Efficiency, E3 Internal Moisture and F2 Hazardous Building Materials.

Ecofleece® – Testing

The following independent testing of Ecofleece® insulation has been undertaken:

- thermal resistance — BRANZ
- fire hazard properties — Applied Physics Laboratory
- corrosivity — Materials Performance Technologies
- insect resistance — Canesis.

Copies of Ecofleece® test reports are available on request.

Ecofleece® – Quality assurance

Eco Insulation's manufacturing systems and materials supply have been audited by BRANZ as part of the Appraisal process.

Eco Insulation's manufacturing systems and materials supply are subjected to regular in-house quality control checks. A quality assurance guarantee is provided when installed by Eco Insulation.

Ecofleece® – Warranties

Eco Insulation will check and certify the installation of their products when their own licensed installer is used.

Ecofleece® – Handling and storage

Ecofleece® insulation must be stored under cover with individual packs stored on end to avoid compression.

Full recovery to design thickness will be achieved after removal from the packaging when the product has been stored for less than six months.

To assist full recovery, 'shaking' the product prior to installation is acceptable.

Ecofleece® – Installation

Installation instructions are inserted into each pack of Ecofleece® insulation. Rotary cutting tools are available from Eco Insulation.

Ecofleece® – Availability

Contact Eco Insulation for your local supplier of Ecofleece®.