

# Insulation Add-Ons



Mammoth  
Insulation



ACM-Backed  
Earthwool  
Insulation



Custom-Backed  
Earthwool  
Insulation



# Mammoth Insulation

**PRESTIGE**  
GARAGE DOORS



**LIFETIME WARRANTY**  
*On Prestige Welded Aluminium Box Frames*



# Garage Door Panel Insulation

## APPLICATION

Mammoth™ Garage Door Panel insulation is made from 100% lofted thermally bonded polyester fibres. The panels are designed to improve thermal performance of garages to enhance wellbeing and comfort for the occupants.

Mammoth™ Garage Door Panel complies with provisions of the New Zealand Building Code (NZBC): AS/NZS 4859.1 for thermal performance and ISO 9705 for the material Group Number 1-S.

Mammoth™ Garage Door Panel insulation is made using a unique manufacturing process whereby the fibres are completely randomized rather than layered. This provides for differing structural properties which helps achieve high thermal performance.



## PRODUCT FEATURES AND BENEFITS

- Mammoth™ products are safe and easy to work with.
- No precautions are required for handling Mammoth™ Panels. It will not cause irritation when touched and it gives off no fumes or odours.
- Mammoth™ products are chemical free, with no formaldehyde or insecticides.
- Mammoth™ products are backed by a 50 year manufacturer's warranty.
- Mammoth™ Garage Door Panel assists in absorbing noise to create a quieter environment.
- Mammoth™ products are made in New Zealand.



## PRODUCT RANGE

MAMMOTH™ Garage Door Panel	PRODUCT R-VALUE	NOMINAL THICKNESS (mm)
White with Black Facing	1.09	40

Garage Door Panel is designed for thermal applications. The surface may show creases, wrinkles or slight colour variations due to the manufacturing process.

## TECHNICAL DETAILS

Technical Attributes	Standard	Test Result
<b>New Zealand Building Code</b>		
✓ Thermal performance	ASTM C518	R1.09
<b>Product Safety</b>		
✓ Non Toxic	OSH Health and Safety Guidelines <sup>1</sup>	Polyester products 'non-toxic' and 'non-irritant'
✓ Non Irritant	OSH Health and Safety Guidelines <sup>1</sup>	
✓ Respiratory Safe	n/a	Polyester fibres are non-respirable
✓ Fire Performance AS ISO 9705 - 2003 & ISO 9705:1993	NCC BCA Specification C1.10 Clause 3 and Specification A2.4 Clause 4  NZBC Verification Method C/VM2 Appendix A	Group Number: 1 SMOGR <sub>ac</sub> not more than 100 m <sup>2</sup> /s <sup>2</sup> x 1000  Group Number: 1-S Smoke Production Rate not more than 5 m <sup>2</sup> /s
✓ VOC Emission Safe <sup>2</sup>	Total VOC ≤ 0.5mg/m <sup>3</sup> Formaldehyde ≤ 0.06mg/m <sup>3</sup> Total VOC Specific emission rate (mg/m <sup>2</sup> /hr)	< 0.004mg/m <sup>3</sup> - level below detection <sup>3</sup> < 0.009mg/m <sup>3</sup> - level below detection < 0.03mg/m <sup>2</sup> /hr
✓ Glue Free	n/a	Free from all chemical binders
<b>Other</b>		
✓ Non Corrosive	AS/NZS 4859.1	Materials composed entirely of polyester are regarded as non-corrosive and are exempt from testing. Polyester has alkalinity of PH7.8
✓ Vermin Resistant	n/a	Not a food source for vermin (and not treated)

2 Another Mammoth™ product with a similar nominal weight and fibre composition was tested to ASTM D5116 and classed as low VOC emitting.

3 All individual VOCs were less than their threshold limit values. Carcinogens and reproductive toxins were not identified as part of the VOCs.

Mammoth Garage Door Panel is compliant with the Building Code of Australia C1.1 (AS ISO 9705) and the New Zealand Building Code C/VM (ISO 9705) as a surface lining material.

## SPECIFICATION AND INSTALLATION

For further Mammoth™ specifications, please contact Mammoth™ on 0800 MAMMOTH.



**Mammoth™**  
MODERN INSULATION

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- All Mammoth™ products are Red List Free - International Living Future Institute.
- Manufactured by a carboNZero certified organisation.
- Mammoth™ products contain recycled polyester fibres. The recycled fibre used by Mammoth™ comes from recycled plastic bottles.
- Recycling plastic protects the environment by keeping the carbon content locked up in the polyester fibre and reducing landfill waste.
- Mammoth™ products are made in a near zero waste production process and are fully recyclable.

For more information go to **mammoth.co.nz** or contact a Mammoth™ representative





# Earthwool Insulation



with ACM Backing



**LIFETIME WARRANTY**

*On Prestige Welded Aluminium Box Frames*







June 2017

## Earthwool® glasswool: Multi-Use roll

### Description

Earthwool® glasswool: Multi-Use roll is made using recycled glass and with ECOSE® Technology, a revolutionary binder based on rapidly renewable materials instead of petro-based chemicals. ECOSE Technology reduces binder embodied energy and contains no added phenol, formaldehyde, acrylics or artificial colours.

### Application

Earthwool glasswool: Multi-Use roll provides a cost-effective thermal and acoustical barrier for energy-efficient construction. The consistent quality, low dust, and clean-cutting resilient glasswool makes installation fast.

Earthwool glasswool can be used for cavity walls, floors, ceilings, attics, basements and crawlspaces. It is highly resilient, recovering quickly to full thickness. It also greatly reduces the transmission of noise in the home.

### Performance

#### Thermal Conductivity

ASTM C 518 and AS/NZS 4859.1: 2002.

#### Thermal Resistance

ASTM C 653 and AS/NZS 4859.1: 2002.

### Technical Data

#### Water Vapour Absorption (ASTM C 1104)

- Less than 5% by weight.

#### Corrosion Resistance (ASTM C 665)

- No greater than sterile cotton.

#### Microbial Growth (ASTM C 1338)

- Does not support microbial growth.

#### Fire Hazard Properties (AS/NZS 1530.3)

- Ignitability: 0, Spread of flame: 0, Heat Evolved: 0, Smoke Developed: 0-1.

#### Combustibility (AS 1530.1)

- Non-combustible.

## Earthwool® glasswool: Multi-Use roll

### Specification Compliance

AS/NZS 4859.1: 2002 Materials used in the Thermal Insulation of Buildings and comply with the Australian Building Code requirements: B2 - Durability, E3 - External Moisture, F2 - Hazardous Building Materials, and H1 - Energy Efficiency.

The Earthwool glasswool: Multi-Use roll range is an acceptable solution in terms of the Australian Building Code. This product is designed for use in timber and metal frame applications in new and existing domestic and commercial buildings.

### Bio-solubility

The formulation used for Earthwool insulation has been independently assessed to meet the requirements of the stringent Note Q standard (and is therefore consistent with the highest Australian and New Zealand industry standards), and also assessed by Knauf Insulation against the criteria of the Australian Safety and Compensation Council ASCC Approved Criteria for Classifying Hazardous Substances [NOHSC: 1008 3rd Edition]. As a result of this assessment, Earthwool insulation is not classified as hazardous according to the NOHSC criteria.

### Environmental

Earthwool glasswool: Multi-Use roll represent no known threat to the environment and have zero Ozone Depletion Potential and zero Global Warming Potential.

### Features and Benefits

#### Proven Performance

- Preferred by professional installers concerned with quality, appearance and productivity.
- Excellent acoustical properties reduce sound transmission in the home when properly installed in walls, ceiling and floor systems.

#### Durability

- Earthwool insulation is odourless, rot proof, non-hygroscopic, does not sustain vermin and will not encourage the growth of fungi, mould or bacteria.

#### Superior Handling

- Highly resilient insulation recovers quickly to full thickness for a snug fit and superior finished aesthetics.
- Consistent quality materials feel good, cut easily and install fast.
- Low dust for easier handling and increased productivity.

Knauf Insulation's Earthwool glasswool insulation products with ECOSE® Technology benefit from a formaldehyde-free binder based on rapidly renewable materials instead of petro-based chemicals. The technology has been developed for Knauf Insulation's glass and rock mineral wool products, enhancing their environmental credentials without affecting the thermal, acoustic or fire performance. Earthwool glasswool insulation products made with ECOSE Technology contain no dye or artificial colours – the colour is completely natural.

### Specification Guide

The insulation shall be Earthwool glasswool: Multi-Use roll R\*, \*mm thick, BRANZ appraised to meet the provisions of the NZBC. The product will be non-combustible, CFC/HCFC free, zero ODP and GWP, glasswool insulation with high post-consumer recycled glass content and with ECOSE® Technology. It will be manufactured under Quality Assurance Standards ISO 9001:2008 and ISO 14001:2004 by Knauf Insulation and shall be installed in accordance with the instructions issued by them.

\*architect to insert details of products used.

For more information please visit  
[www.knaufinsulation.co.nz](http://www.knaufinsulation.co.nz)



## Earthwool® glasswool: Multi-Use roll

### Convenient Packaging, Easier Handling

- Earthwool glasswool insulation is packaged in a strong, white poly bag that offers excellent protection from abuse, dust and moisture.
- Earthwool glasswool insulation packages feature easy to follow installation instructions.
- MasterBag insulation units (containing multiple packs) ensure reduced handling costs with improved compression – more square metres per bag, more square metres per truck load, fewer trips to the job site and less warehouse space for storage.

### Superior Service and Support

- Knauf Insulation is focused on providing first class customer service, producing high quality product and 'in full on time' deliveries.
- Knauf Insulation recognises the need to establish, develop and support a professional network of distributors and re-sellers in order to service a growing insulation market.
- Knauf Insulation is committed to providing a comprehensive range of relevant sales and marketing literature and web-based technical information to support specifiers and customers.

	Thickness (mm)	Width (mm)	R-Value (m <sup>2</sup> K/W)	Length (mm)	Pieces per Pack	Area per Pack (m <sup>2</sup> )
Multi-Use Roll	90	430	2.2	19000	1	7.74
	90	580	2.2	19000	1	10.44



	Thickness (mm)	Width (mm)	R-Value (m <sup>2</sup> K/W)	Length (mm)	Pieces per Pack	Area per Pack (m <sup>2</sup> )
Multi-Use Roll	90	580	2.6	12500	1	7.25



### Knauf Insulation Ltd

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### Technical Support

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