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## Earthwool® glasswool insulation: Acoustic

### Description

Earthwool glasswool: Acoustic batts are 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: Acoustic batts provide 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: Acoustic batts can be used in timber and metal frame applications in residential and commercial structures.

Knauf Insulation offers Earthwool glasswool insulation in a wide range of sizes and R-Values. Earthwool glasswool insulation 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**  
the feel good glasswool insulation

with **ECOSE®**  
TECHNOLOGY

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### Light Commercial Applications

Earthwool glasswool: Acoustic batts are available in a range of thicknesses. Earthwool glasswool: Acoustic batts can improve  $R_w$  ratings in wood stud construction by 3 to 5 points and in metal stud construction by 8 to 10 points, depending on the complexity of the wall configuration and the thickness/density.

Earthwool glasswool: Acoustic batts can be used for exterior and interior walls, floors, crawlspaces and a variety of ceiling applications.

### Specification Compliance

AS/NZS 4859.1: 2002 Materials used in the Thermal Insulation of Buildings and comply with the New Zealand Building Code requirements: B2 - Durability, E3 - External Moisture, F2 - Hazardous Building Materials, and H1 - Energy Efficiency. The Earthwool glasswool: Acoustic range is an acceptable solution in terms of the New Zealand 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: Acoustic batts 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 glasswool 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 acoustic insulation shall be Earthwool glasswool: Acoustic batts \*kg/m<sup>3</sup>, \*mm thick, BRANZ appraised to meet the provisions of the NZBC. The product will be non-combustible, CFC/HCFC free, zero ODP and GWP, Global GreenTag Cert™ Level A certified, 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.

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### 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)	Density (kg/m <sup>3</sup> )	R-Value (m <sup>2</sup> K/W)	Width (mm)	Length (mm)	Pieces per Pack	Area per Pack (m <sup>2</sup> )
<b>Timber frame</b>	50	14	1.4	580	1160	38	25.57
	75	14	2.0	580	1160	24	16.15
	90	20	2.6	430	1160	14	6.98
	90	20	2.6	580	1160	14	9.42
	90	27	2.8	430	1160	10	4.99
	90	27	2.8	580	1160	10	6.73
<b>Metal frame</b>	50	11	1.3	600	2700	20	32.40
	75	11	1.9	600	2700	14	22.70
<b>Baffle stack</b>	75	14	2.0	430	1160	24	11.97



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