

EARTHWOOL® GLASSWOOL INSULATION: INTERNAL (ACOUSTIC) WALL

May 2019



APPLICATIONS



DESCRIPTION

The Earthwool® glasswool insulation: internal (acoustic) wall batt range includes a selection of densities to provide builders, designers, installers and DIYers the opportunity to choose the best acoustic performance for their project. Earthwool® glasswool insulation: internal (acoustic) wall batt will improve the acoustic performance of the building in which it has been installed by absorbing the transfer of unwanted sound from external sources and between adjoining rooms. Super-soft to handle and install, Earthwool® glasswool insulation is made using up to 80% recycled glass and with ECOSE® Technology, a sustainable, bio-based binder that contains no added formaldehyde.

PERFORMANCE

Thermal

Thermal conductivity:
Thermal resistance:

ASTM C 518 and AS/NZS 4859.1: 2002.
ASTM C 653 and AS/NZS 4859.1: 2002.

Fire Hazard Properties (AS/NZ 1530.3)

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

Water Vapour Absorption

Less than 5% by weight.

Microbial Growth

Does not support microbial growth.

Corrosion Resistance

No greater than sterile cotton.

Combustibility (AS 1530.1)

Non-combustible.

BENEFITS

- ✓ Sound absorbing
- ✓ High thermal performance - year round comfort
- ✓ Non - combustible
- ✓ Saves energy - lower energy bills
- ✓ No added formaldehyde
- ✓ Soft to handle and install
- ✓ 50 year warranty
- ✓ Compression packed - more product per pack
- ✓ Odourless.

CERTIFICATION



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ADDITIONAL INFORMATION

Specification Guide

The acoustic insulation shall be Earthwool® glasswool insulation: internal (acoustic) wall batt *kg/m³, *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.

Light Commercial Applications

Earthwool® glasswool insulation: internal (acoustic) wall batt is available in a range of thicknesses. Earthwool® glasswool insulation: internal (acoustic) wall batt can improve Rw 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 insulation: internal (acoustic) wall batt 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 Building Code of Australia (BCA) requirements: B2 - Durability, E3 - External Moisture, F2 - Hazardous Building Materials, and H1 - Energy Efficiency. The Earthwool® glasswool: internal (acoustic) wall batt 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® glasswool 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® glasswool insulation is not classified as hazardous according to the NOHSC criteria.

Environmental

Earthwool® glasswool insulation: internal (acoustic) wall batt represents no known threat to the environment and have zero Ozone Depletion Potential and zero Global Warming Potential.

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.

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.

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SPECIFICATIONS

| Product Code | R-Value (m ² K/W) | Density (kg/m ³) | Thickness (mm) | Width (mm) | Length (mm) | Pieces per Pack | Area per pack (m ²) |
|--------------|------------------------------|------------------------------|----------------|------------|-------------|-----------------|---------------------------------|
| 471045 | 1.4 | 14 | 50 | 580 | 1160 | 38 | 25.57 |
| 471049 | 2.0 | 14 | 75 | 580 | 1160 | 24 | 16.15 |
| 471070 | 2.6 | 20 | 90 | 430 | 1160 | 14 | 6.98 |
| 471071 | 2.6 | 20 | 90 | 580 | 1160 | 14 | 9.42 |
| 471040 | 2.8 | 27 | 90 | 430 | 1160 | 10 | 4.99 |
| 471041 | 2.8 | 27 | 90 | 580 | 1160 | 10 | 6.73 |

Timber frame

| Product Code | R-Value (m ² K/W) | Density (kg/m ³) | Thickness (mm) | Width (mm) | Length (mm) | Pieces per Pack | Area per pack (m ²) |
|--------------|------------------------------|------------------------------|----------------|------------|-------------|-----------------|---------------------------------|
| 529446 | 1.3 | 11 | 50 | 600 | 2700 | 20 | 32.40 |
| 529447 | 1.9 | 11 | 75 | 600 | 2700 | 14 | 22.70 |

Metal frame

| Product Code | R-Value (m ² K/W) | Density (kg/m ³) | Thickness (mm) | Width (mm) | Length (mm) | Pieces per Pack | Area per pack (m ²) |
|--------------|------------------------------|------------------------------|----------------|------------|-------------|-----------------|---------------------------------|
| - | 2.0 | 14 | 75 | 430 | 1160 | 24 | 11.97 |

Baffle stack



Earthwool® glasswool products made with ECOSE® Technology benefit from a no added formaldehyde binder, which is less energy intensive than traditional binders and is based on rapidly renewable, bio-based 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 products made with ECOSE® Technology contain no added dyes or artificial colours.

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