

EARTHWOOL® GLASSWOOL INSULATION: WALL

July 2025

Application



Description

The Earthwool® glasswool insulation: wall batt range includes a selection of R-values and densities to provide builders, designers, installers and DIYers the opportunity to choose the best thermal and acoustic performance for their project. Earthwool® glasswool insulation: wall batt will absorb the transfer of unwanted sound from outside to inside the building. In addition to sound absorption, Earthwool® glasswool insulation: wall batt will improve the thermal comfort and energy efficiency of the building in which it has been installed thus keeping it cool in summer and warm in winter.

The super-soft and easy to handle benefits of Earthwool® glasswool have been further enhanced with TwinTech®. TwinTech® heralds another advancement in insulation manufacture - the dual forming technique ensures there is a smooth finish on both sides of the insulation, which improves product handling and appearance. Earthwool® glasswool is made using up to 80% recycled glass and with ECOSE® Technology, a sustainable, plant-based binder that contains no added formaldehyde.

Knauf Insulation glasswool is silicone treated with DriTherm® Technology, which provides improved moisture resistance.



Performance

Thermal performance	AS/NZS 4859.1 (2018)		
Combustibility (AS 1530.3)	Non-combustible		
Fire Hazard Properties (AS/NZ 1530.3)	Ignitability: 0 Spread of Flame: 0 Heat Evolved: 0 Smoke Developed: 2-3		
MATERIAL PROPERTY	RESULT	REQUIREMENT PER ASTM C665-17	PASS/FAIL
Water Vapour Sorption (Mass %) (ASTM C1104)*	4	<5	Pass
Corrosiveness - Aluminium (rating scale 15-40) (ASTM C665)*	25	<21	Pass
Corrosiveness - Copper (rating scale 15-40) (ASTM C665)*	30	<21	Pass
Corrosiveness - Steel (ASTM C1617)*	1 ppm	<5 ppm	Pass
Fungi Resistance (ASTM C1338)*	No growth	Growth < Comparative	Pass
Water Vapour Absorption	Less than 5% by weight when tested for 96 hours at 120°F (49°C) and 95% humidity.		
Microbial Growth	Does not support microbial growth		

*Test samples were 8kg/m³ and 32kg/m³ unfaced Knauf Insulation glasswool, with ECOSE binder.

Certification



KNAUF INSULATION



Please scan the QR Code to view the complete list of certifications on our website.

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Benefits

- ✓ DriTherm® Technology - silicone treated glasswool for increased durability
- ✓ TwinTech® - smooth finish on both sides
- ✓ High thermal performance - year round comfort
- ✓ Sound absorbing
- ✓ Non-combustible
- ✓ No added formaldehyde
- ✓ Soft to handle and install
- ✓ Compression packed - more product per pack
- ✓ Odourless

Specifications

45mm Frame

Product Code	R-Value (m ² K/W)	Thermal Conductivity (W/mK)	Thickness (mm)	Width (mm)	Length (mm)	Area per pack (m ²)	Pieces per pack
781975	1.3	0.035	45	450	1160	12.5	24

All dimensions are nominal.

90mm Frame

Product Code	R-Value (m ² K/W)	Thermal Conductivity (W/mK)	Thickness (mm)	Width (mm)	Length (mm)	Area per pack (m ²)	Pieces per pack
683644	2.2	0.041	90	580	1160	19.5	29
683645	2.4	0.037	90	580	1160	13.5	20
683655	2.6 ^{HD} Soundshield	0.035	90	430	1160	7.0	14
683656	2.6 ^{HD} Soundshield	0.035	90	580	1160	9.4	14
683646	2.8 ^{SHD} Soundshield Plus	0.032	90	430	1160	5.0	10
683647	2.8 ^{SHD} Soundshield Plus	0.032	90	580	1160	6.7	10

All dimensions are nominal. | HD = High Density, SHD = Super High Density

140mm Frame

Product Code	R-Value (m ² K/W)	Thermal Conductivity (W/mK)	Thickness (mm)	Width (mm)	Length (mm)	Area per pack (m ²)	Pieces per pack
683648	3.2	0.044	140	580	1160	14.8	22
683641	3.6	0.039	140	580	1160	10.9	15
691267	4.1 ^{SHD} Soundshield Plus	0.034	140	580	1160	6.1	9
779911	4.4 ^{SHD} Soundshield Plus	0.032	140	580	1160	4.0	6

All dimensions are nominal. | SHD = Super High Density

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Additional Information

Specification Guide

The wall insulation shall be Earthwool® glasswool insulation: wall batt R*, *mm thick, BRANZ appraised to meet the provisions of the NZBC. The product will be non-combustible, Red List Free as labelled by Declare, Global GreenTag 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 9001:2015 by Knauf Insulation and shall be installed in accordance with the instructions issued by them.

*architect to insert details of products used.

Specification Compliance

AS/NZS 4859.1: 2018 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, as appraised by BRANZ. The Earthwool® glasswool insulation: 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 NZ Work-Safe requirements. Earthwool® glasswool is classified as a non-hazardous substance in line with the NOHSC: 1008 3rd Edition.

Environmental

Earthwool® glasswool insulation: wall batt represents no known threat to the environment and comes with GreenTag Level A certification, Declare label and a certified Environmental Product Declaration. Earthwool® glasswool has low VOC and benefits from ECOSE® Technology.

Proven Performance

- Earthwool® glasswool insulation is preferred by professional installers concerned with quality, appearance and productivity.
- Earthwool® glasswool insulation has excellent acoustical properties reduce sound transmission in the home when properly installed in walls, ceiling and floor systems.

Installation Guidance

- When installing wall insulation, it is important to install insulation in accordance with AS3999 (bulk thermal insulation installation) and Knauf Insulation's instructions.

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.
- DriTherm® Technology – silicone treated glasswool for increased durability.

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 products 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.

Corrosion Testing

Corrosion testing evaluates whether a material's chemical composition could cause corrosion. Knauf Insulation's glasswool products have been independently tested and demonstrate that they are non-corrosive ensuring reliable performance.



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, plant-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.

Knauf Insulation Ltd

PO Box 512, Silverdale, Auckland, 0944, New Zealand

Customer Service: Tel: 0800 562 834

Technical Advisory Centre: tech.nz@knaufinsulation.com

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