



January 2015

Earthwool® glasswool insulation: Baffle stack

Ceiling attenuation class (CAC) system

Description

Earthwool glasswool insulation is made from highly resilient, inorganic glass fibres bonded 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 found in traditional glasswool insulation.

Application

Earthwool glasswool: Baffle stack is designed to provide a cost-effective barrier for use in the CAC system to reduce flanking sound transmission through the ceiling path. In high rise buildings and offices, Earthwool glasswool: Baffle stack is commonly used over acoustic partitions and compressed.

The consistent quality, low dust, and clean-cutting resilient glasswool makes installation fast. Earthwool glasswool insulation is highly resilient, recovering quickly to full thickness. It also greatly reduces the transmission of noise in the home and office.

Performance

Acoustic

Will contribute to the NZBC's acceptable construction practices to achieve the required acoustic performance.

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 Resistance (AS 1530.1:1994)

- Non-combustible.



EARTHWOOL® GLASSWOOL
the feel good glasswool insulation

with **ECOSE®** TECHNOLOGY

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Installation

Earthwool glasswool: Baffle stack should be installed as a layer stack above acoustic partition walls and must be installed with enough compression to ensure stack stability and a tight fit to all surfaces including slab, roof or floor above. There are to be no gaps in the stack and small pieces should be used to fill around services, ducting and structural components. Depending on the project, it may be necessary to consult with an HVAC Installer/Engineer prior to installation to ensure no loss of effective air movement to the active return of the air conditioning system.

Earthwool glasswool: Baffle stack can be installed to a height of 1m without specialist design considerations. Above this height, consideration must be given to the stack stability and weight loading restrictions on the ceiling tiles and grid system. Other options are available for spaces above 1m.

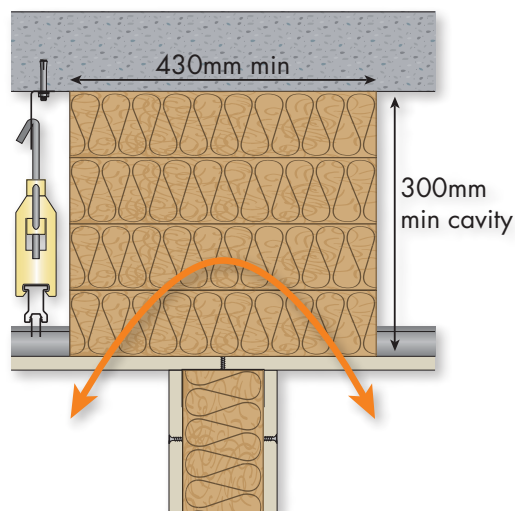
Performance

Wall Type STC / Rw	Ceiling Type	Wall Type	Baffle Width	Knauf Insulation Baffle Stack
≤43	Ceiling tiles	Timber stud & steel stud	Wall thickness + 320mm	Earthwool glasswool with a minimum density of 14kg/m ³ , fitted with a minimum compression of 10%
≤45	10mm plasterboard		Minimum baffle width 430mm	
≤50	13mm plasterboard or two layers of 10mm plasterboard			

For walls with an STC or Rw rating of up to 45, Earthwool glasswool: Baffle stack will provide a continuation at the equivalent STC or Rw rating when installed with a single layer of 10mm plasterboard ceiling lining.

For walls with an STC or Rw rating of up to 50, the Earthwool glasswool: Baffle stack will provide a continuation at the equivalent STC or Rw rating when installed with a single layer of 13mm plasterboard or two layers of 10mm plasterboard ceiling lining.

Earthwool glasswool: Baffle stack construction



Knauf Insulation's Earthwool glasswool products with ECOSE® Technology benefit from a formaldehyde-free binder based on rapidly renewable materials instead of petro-based chemicals which is up to 70% less energy intensive. 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 dye or artificial colours – the colour is completely natural.



For more information please visit
www.knaufinsulation.co.nz

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Specification Compliance

Complies with the New Zealand Building Code requirements: B2 – Durability, E3 – Internal Moisture and F2 – Hazardous Building Materials.

The Earthwool glasswool: Baffle stack is an acceptable solution in terms of the New Zealand Building Code.

Bio-solubility

The formulation used for Earthwool glasswool insulation has been independently assessed to meet the requirements of the stringent Note Q international 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: Baffle stack insulation is free from CFCs, HCFCs and any other material with ozone depletion potential in its manufacture and content and represents no known threat to the environment.
- Earthwool glasswool insulation's manufacture has a low impact on the environment and is classified as Zero ODP and Zero GWP.

Features and Benefits

Proven Performance

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

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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.

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