

## **EARTHWOOL® GLASSWOOL INSULATION: BAFFLE STACK**

May 2022









Enhanced moisture resistance with DriTherm® technology. Earthwool® insulation is silicone treated, which provides moisture resistance for over 50 years.

### **APPLICATIONS**





### **DESCRIPTION**

Earthwool® glasswool insulation: baffle stack is designed to provide an acoustic barrier for use in the Ceiling Attenuation Class (CAC) system to reduce flanking sound transmission through the ceiling path. In high rise buildings and offices, Earthwool® glasswool insulation: baffle stack is commonly used over acoustic partitions and compressed. It also greatly reduces the transmission of noise in the home and office. 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**

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

- ✓ High thermal performance year round comfort
- Sound absorbing
- ✓ 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**











## **EARTHWOOL® GLASSWOOL INSULATION: BAFFLE STACK**

May 2022

## **SPECIFICATIONS**

#### Installation

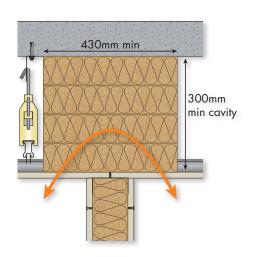
Earthwool® glasswool insulation: baffle stack should be installed as a layer stack above acoustic partition walls and must be installed with enough compression to ensure stack stability and a tight fit to all surfaces including slab, roof or floor above. There are to be no gaps in the stack and small 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 insulation: baffle stack can be installed to a height of 1 m 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 1 m.

Product Code	<b>R-Value</b> (m²K/W)	Thermal Conductivity (W/mK)	<b>Density</b> (kg/m³)	Thickness (mm)	Width (mm)	<b>Length</b> (mm)	<b>Area</b> per pack (m²)	<b>Pieces</b> per pack
683655	2.5	0.035	20.1	90	430	1160	7.0	14
683656	2.5	0.035	20.1	90	580	1160	9.4	14
683646	2.5	0.032	30.7	90	430	1160	5.0	10
683647	2.8	0.032	30.7	90	580	1160	6.7	10

## Earthwool® glasswool insulation: baffle stack construction

For walls with a STC or Rw rating of up to 45, Earthwool® glasswool insulation: 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 a STC or Rw rating of up to 50, the Earthwool® glasswool insulation: 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.



<b>Wall Type</b> STC / Rw	Ceiling Type	Wall Type	Baffle Width	Knauf Insulation Baffle Stack		
≤43	Ceiling tiles		Wall thickness			
≤45	10mm Plasterboard	Timber stud	+ 320mm	Earthwool® glasswool insulation with a minimum density of 14kg/m³, fitted with a minimum compression of 10%		
≤50	13mm plasterboard or two layers of 10mm plasterboard	& steel stud	Minimum baffle width 430mm			





# **EARTHWOOL® GLASSWOOL INSULATION: BAFFLE STACK**

May 2022

### **ADDITIONAL INFORMATION**

#### **Specification Compliance**

Complies with the New Zealand Building Code requirements: B2 – Durability, E3 – Internal Moisture and F2 – Hazardous Building Materials. Earthwool® glasswool insulation 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 insulation: baffle stack 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.

#### **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.

#### **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.



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.

#### **Knauf Insulation Ltd**

PO Box 217063, Botany Junction, Auckland, 2164, New Zealand

Customer Service: Tel: 0800 562 834

Technical Advisory Centre: tech.nz@knaufinsulation.com

All rights reserved, including those of photomechanical reproduction and storage in electronic media. Extreme caution was observed when putting together and processing the information, texts and illustrations in this document. Nevertheless, errors cannot quite be ruled out. The publisher and editors cannot assume legal responsibility or any liability whatever for incorrect information and the consequences thereof. The publisher and editors will be grateful for improvement suggestions and details of possible errors pointed out.

