

## BREEAM CREDITS USING KNAUF INSULATION GLASS MINERAL WOOL PRODUCTS

BREEAM (Building Research Establishment Environmental Assessment Methodology) is a voluntary standard that defines high performance green buildings which are healthier, more environmentally responsible and are more cost-effective across their full lives. Using independent assessors, BREEAM examines criteria covering a range of issues in sections that evaluate: management processes, health and wellbeing, energy, transport, water, materials, waste, land use and ecology, pollution and innovation.

KNAUF INSULATION **Glass Mineral Wool** products can put you on the right track for the highest result for BREEAM certification.

BREEAM 2018 Credit Category code	Assessment criteria and definition	Knauf Insulation Products contribution	Contributes towards
<b>Hea 02</b> Indoor air quality	<b>Emissions from building products:</b> The insulation materials are one of the 5 product types that needs to meet the emission limits. The following requirements are of application for insulation products: <ul style="list-style-type: none"> <li>• Formaldehyde <math>\leq 0.06 \text{ mg/m}^3</math>;</li> <li>• Total VOC <math>\leq 1.0 \text{ mg/m}^3</math>;</li> <li>• Carcinogens category 1A and B <math>\leq 0.001 \text{ mg/m}^3</math></li> </ul>	Glass Mineral Wool products manufactured using ECOSE® Technology meet the requirements as they have no added formaldehyde and are certified Eurofins Gold <sup>[1]</sup> for Indoor Air Comfort.	1 credit
	<b>Post-construction indoor air quality measurement:</b> The total VOC and formaldehyde are measured and reported (thresholds for averaged formaldehyde concentration level $\leq 100 \mu\text{g/m}^3$ over 30 minutes and for averaged TVOC $\leq 300 \mu\text{g/m}^3$ over 8 hours).	Glass Mineral Wool products manufactured using ECOSE® Technology have no added formaldehyde and have the best possible Eurofins Gold Certificate for Indoor Air Comfort which help towards very low concentrations.	1 credit
<b>Hea 04</b> Thermal comfort	To ensure that appropriate thermal comfort levels are achieved through design, and that controls are selected to maintain a thermally comfortable environment for occupants.	Thermal modelling can be facilitated through products BIM files which are available online at <a href="http://www.knaufinsulation.co.uk">www.knaufinsulation.co.uk</a>	1 credit
<b>Hea 05</b> Acoustic performance	To insure the building's acoustic performance, including sound insulation, meets the appropriate standards for its purpose.	Product performance aims to reduce indoor ambient noise level and reverberation times in order to comply with regulations or good practices standards.	1 - 2 credits
<b>Ene 01</b> Reduction of energy use and carbon emissions	To recognise and encourage buildings designed to minimise operational energy demand, primary energy consumption and CO <sub>2</sub> emissions.	Glass Mineral Wool products manufactured using ECOSE® Technology help reducing all 3 parameters by reducing operational energy demand which feeds through to lower primary energy consumption and CO <sub>2</sub> emissions.	4 credits
<b>Mat 01</b> Building life cycle assessment (LCA)	To reduce the burden on the environment from construction products by recognising and encouraging measures to optimise construction product use and the selection of products with a low environmental impact (including embodied carbon), over the life cycle of the building	Manufacturer EPD data in building LCA tools may be used in the building LCAs submitted for Mat 01. Environmental Product Declarations (EPD) containing these data are available for all Knauf Insulation products.	7 credits for the LCA
<b>Mat 02</b> Environmental Product Declarations (EPD)	To encourage availability of robust and comparable data on the impact of construction products through the provision of EPD.	Product- and manufacturer-specific EN 15804- compliant, 3rd party verified Environmental Product Declarations (EPD) are available for all Knauf Insulation products. This allows maximum points in the Mat 02 scoring for each Knauf Insulation EPD.	1 credit
<b>Mat 03</b> Responsible sourcing of construction products	To recognise and encourage the specification and procurement of responsibly sourced construction (RSC) products.	All Knauf Insulation products are covered by our certification to BES 6001 (BRE Framework Standard for Responsible Sourcing), which is a BREEAM-recognised responsible sourcing certifications scheme.	3 credits
<b>Wst 01</b> Construction waste management	To reduce construction waste by encouraging reuse, recovery and best practice waste management practices to minimise waste going to landfill.	Packaging is recyclable. Product offcuts can also be used as filling on working site. Both can help with achievement of the diversion from landfill benchmark.	1 credits
<b>Pol 05</b> Noise attenuation	To reduce the likelihood of noise, arising from fixed installations on the new development, affecting nearby noise-sensitive buildings.	Attenuation of noise sources by use of acoustic insulation products, such as Earthwool Acoustic Roll.	1 credit

<sup>1</sup> [www.product-testing.eurofins.com](http://www.product-testing.eurofins.com)