

## Evaluation of the contribution to BREEAM prerequisites/credits

This document describes the main requirements relating to the **EUROBATEX** product range, useful for achieving the main credits of the BREEAM certification.

The evaluation of the main contributions is reported below:

BREEAM Categories		BREEAM Requirements	Points	EUROBATEX Compliance or contribution
Man 02	Life cycle costs and useful life planning.	The credit requires an analysis of the cost of the life cycle and of the planning of the service life of the components and elements of the building in order to obtain their complete information throughout the life cycle.	3	<p><b>EUROBATEX</b> life cycle information can be part of the building's LCC analysis. The following data may be useful for the study:</p> <ul style="list-style-type: none"> <li>● service life: &gt; 50 years as the service life of the plant systems and the building</li> <li>● technical considerations: insulation thicknesses are available for all common pipe diameters up to an external diameter of 168 mm for pipes; temperature range: from -50 °C to + 110 °C</li> <li>● costs: during installation and use (no costs during use)</li> <li>● comparison with natural rubber: better temperature resistance - less heat/cold losses and high constant quality</li> </ul>
Hea 02	Air quality: minimize the sources of polluting air	Installation of appropriate components, materials and products that allow to ensure a healthy indoor environment. The materials must meet the emission levels of volatile organic compounds (VOC) in accordance with ISO test standards 10580, ISO 16000-9, CEN / TS 16516 or CDPH Standard method v1, respecting the VOC emission limits.	3	<p><b>EUROBATEX</b> meets the required standards for insulation listed in the tables 17 and 18 of the BREEAM International NC 2016 manual, through tests carried out by third parties. The products have been tested, on behalf of the CEFEP Association of which <b>EUROBATEX</b> is a member, according to the standards:</p> <ul style="list-style-type: none"> <li>● ISO 16000-3/6/9/11: 2010 in conjunction with the German test and evaluation scheme AgBB (2012),</li> <li>● DIBt (2010)</li> <li>● French legislation on VOC emission class labelling.</li> </ul> <p>The tested <b>EUROBATEX</b> products comply with the limit values of AgBB and DIBt Regulations. For the french regulation the class is A+.</p>
Hea 04	Thermal comfort	The credit requires an analysis in order to assess that the internal environment maintains comfortable conditions for users of the building according to ISO 7730: 2005.	3	<p><b>EUROBATEX</b> contributes to the energy performance of the building as part of the construction systems relating to the insulation of ducts and pipes.</p> <p><b>EUROBATEX</b> contributes, with thermal conductivity parameters that vary in relation to the thickness of the product: from <math>\lambda</math> 0.035 W/mK to <math>\lambda</math> 0.033 W/mK evaluated at the temperature of 0° C.</p>
Hea 05	Acoustic performance	The credit requires specific acoustic requirements to be met using a qualified technician for the design and post-construction phases.	4	<b>EUROBATEX</b> contributes by isolating plant components such as pipes and ducts, adding benefits to the acoustic insulation of energy systems.
Mat 01	Life cycle impacts	The credit requires an LCA study of the building to be carried out considering the contribution of the various construction materials used.	5	Useful data for life cycle assessment (LCA) can be found within the EPD certification. The <b>EUROBATEX</b> range has an EPD type III product certification in accordance with the ISO 14025 standard.
		The credit requires that at least five products out of ten categories of materials, including insulating products, have Environmental Product Declarations (EPDs). The EPD must comply with ISO 14025, ISO 21930 or EN 15804.	2	The use of <b>EUROBATEX</b> insulating material can help obtain credit. In fact, <b>EUROBATEX</b> has products certified with EPD compliant with ISO 14025 and ISO 15804 standards.
Mat 03	Responsible procurement for buildings	Building materials must demonstrate a reliable origin by considering the entire supply chain and key production processes.	4	<p><b>EUROBATEX</b> confirms the reliable origin of its materials by purchasing raw materials from ISO14001 certified suppliers for:</p> <ul style="list-style-type: none"> <li>● supply chain process (polymer)</li> <li>● key process (production of insulation material)</li> </ul>
Mat 06	Material efficiency	In order to minimize the environmental impact, it is necessary to use more efficient materials during the design, procurement, construction, maintenance and end-of-life of buildings.	1	<p><b>EUROBATEX</b> as part of the building's energy system has the following efficiency characteristics:</p> <ul style="list-style-type: none"> <li>● a service life of over 50 years</li> <li>● it can only be damaged by extraordinary impacts or during installation</li> <li>● various packaging: suitable dimensions and type of packaging (2 m tubes, tubes and sheets). Packaging waste is reduced</li> </ul>
Ene 01	Reduction of energy consumption and carbon emissions	The credit requires the design of buildings to minimise primary energy demand and CO <sub>2</sub> emissions. An energy simulation is required to evaluate the energy consumption of the building.	15	<p><b>EUROBATEX</b> contributes to the improvement of energy performance thanks to the optimal thermal conductivity of its products. The parameter depends on the thickness of the product and varies from <math>\lambda \leq 0.033</math> W/mK to <math>\lambda \leq 0.035</math> W/mK, evaluated at a temperature of 0 °C</p>
Ene 05	High energy efficient cold storage rooms	The greenhouse gas emissions of cold storage systems should be reduced by improving their energy efficiency.	3	The insulation of cold room pipes contributes to the improvement of the energy efficiency of the system.