



## SPEARHEADING GREEN BUILDING WITH THERMASMART PRO

In our ever-intensifying need to make scarce resources meet future demands, efficient and sustainable building has an immense role to play. Importantly, green building starts with a green energy infrastructure. Not only the energy performance of a building is important, but also the safety and lifetime of the distribution systems that serve them play a crucial role.

At Thermaflex, we've been developing an insulation material that tackles all those challenges. Now perfected and in full implementation, [ThermaSmart PRO](#) is the insulation innovation we've been waiting for, sweeping all facets of sustainable building design. Let's dive into the 2 frontrunners in green building practice: LEED and BREEAM certification.

### LEEDing the way

Green building criteria and credits differ for each certification system, depending on the best fit for specific projects. Used across 25 countries, and adapted to various climates, LEED (or [Leadership in Energy & Environmental Design](#)) recognizes best-in-class building strategies and practices according to 5 different rating systems.

To receive LEED certification, building projects satisfy prerequisites for energy performance as well as building and material lifecycle impact. Green building rating is carried out along some of the following key areas of human and environmental health. Here is how ThermaSmart Pro suits them:



#### Innovation & Design

The high flexibility makes for a quick and easy, yet full-proof installation, even in the most difficult space conditions. The smooth grey color of the material also ensures a high aesthetic appeal, making it ideal for indoor energy systems.



#### Energy & Atmosphere

A high, and stable energy performance is ensured throughout the long lifecycle of ThermaSmart PRO. This is ensured by the closed-cell structure of the polyethylene foam and its high resistance to mechanical damage, wide temperature ranges, and water permeation. This performance fulfils **the ER prerequisite**, and even achieves the **EA credit**.



#### Material & Resources

ThermaSmart PRO materials have been selected in line with our vision of a circular economy. It is environmentally friendly, both in manufacture and in use, and 100% recyclable upon reclaim. That also means all cut-offs during installation can be reclaimed and recycled, keeping waste to a minimum. Also here, ThermaSmart is fully in line with the **MR prerequisite** and achieves the **EQ credit**.



### Indoor Environmental Quality

Healthy materials make for a healthy indoor climate. The non-toxicity of ThermaSmart PRO and its premium prevention against condensation (and thus corrosion) make a vital contribution to sustainably raising occupant comfort, while ensuring a healthy living or working environment.



### Sustainable sites

We believe that thermal energy systems should live as long as they building they serve. Our innovation answers perfectly to that ambition, and even outlives most buildings, completely free of maintenance. Our commitment to making scarce resources meet future demands has led us to achieve 100% Cradle to Cradle Certified™ Bronze for our full ThermaSmart PRO range (check it out on their [Product Registry](#))

## BREEAM: Expert environmental building assessment

BREEAM (or [Building Research Establishment Environmental Assessment Method](#)) assessment process evaluates the procurement, design, construction and operation of a building development based on comparable, but less stringent performance benchmarks. The key difference: assessments are carried out by independent, licensed assessors, and developments rated and certified on a scale of Pass, Good, Very Good, Excellent and Outstanding.

BREEAM credits express sustainable value categories from energy to ecology. Low impact design and carbon emissions reduction, design durability and resilience, adaption to climate change, ecological value and biodiversity protection stand key. Within every category projects score credits for achieving targets, which determines the final rating. Also here, ThermaSmart PRO exceeds key assessment categories with the use of safe, recyclable and zero-impact materials at sustainable energy efficiency. The latter also offers crucial value in regard to CO2 savings by maximizing the use of energy. Lastly, reclaim plays a valuable part here, as also material waste in installation and end-of-lifetime is taken into account.

Concretely, the following BREEAM credits can be hauled in with ThermaSmart PRO:

**For construction and renovation:**

- MAT 1
- MAT 3
- MAT 5 (Cradle to Cradle™ secured)
- HEA 9
- ENE 1
- WST 1

**Site development:**

- BR 01
- BR 04
- BR 05
- BR 06

**In-use:**

- ENE 065
- MAT 016
- MAT 019
- MAT 020
- MAT 021
- MAT 022

Materials ingredient reporting and Cradle to Cradle Certified™ products are all incorporated in the LEED v4 and BREEAM assessment, and make a significant contribution to securing green credits for building projects. Both recognize the rigor required to complete the Bill of Materials and chemical inventory that form the basis of the Cradle to Cradle Certified™ material health assessment.

Our efficiency and environmental management systems, [ISO 9001 and ISO 14001 certified](#), ensure optimal production processes in regard to the resource efficiency and environmental impact of our production. Third party-verified Life Cycle Analyses (LCAs) and [Environmental Product Declarations](#) (EPDs) of our full ThermaSmart Pro range offer full transparency of the lifecycle impact of our components, acting as a firm basis for designers, architects, engineers and building owners to make well-informed choices for LEED and BREEAM projects.