Proof-Positive: Sprayfoam Insulation Saves Energy and Reduces Environmental Impact

SPFA releases pioneering, comprehensive Life Cycle Assessment showing energy and environmental benefits far outweigh impacts over the entire lifespan of spray foam insulation.

Fairfax, VA (PRWEB) November 14, 2012 -- The Spray Polyurethane Foam Alliance (SPFA), representing the complete value chain of spray polyurethane foam, announced today the release of a pioneering report detailing a full life cycle assessment (LCA) of spray foam insulation. This comprehensive, ISO-compliant LCA is a full cradle-to-end of life study that includes scenarios of spray foam use for residential and commercial applications in three representative U.S. climate zones.

The study is based on current operations data from spray foam manufacturers and installers and has been critically reviewed and vetted by a panel of independent LCA, insulation industry, and building science experts. The study covers primary energy from non-renewable resources, plus five critical environmental impacts related to air and water pollution. The embodied-energy phase study was conducted by PE International, Inc., while the use-phase studies on residential and commercial structures were performed by Sustainable Solutions Corporation.

“The spray foam insulation LCA led by SPFA stands out in terms of completeness, credibility and value to the industry. It is comprehensive and the results show that reduced energy and environmental impacts in both residential and commercial insulation installations far outweigh the impact associated with making the insulation,” said Dr. Richard Duncan, SPFA Technical Director.

The results of the study show that the energy and environmental benefits from spray foam insulation use in new residential construction and commercial roofing retrofits far outweigh the embodied energy and embodied environmental impacts. They also show that the energy and impacts “invested” to make, install, transport, and dispose of the insulation at end of life are minimal compared to the substantial use-phase benefits.

“The insulation industry is very competitive and a fully-independent, professionally vetted LCA demonstrating product benefits is essential in the landscape we are all working in,” said Kurt Riesenberg, SPFA Executive Director. He added “With all of the national attention upon energy efficiency, sustainability, and the so-called ‘green-ness’ of building products today, quantifying the energy and environmental attributes of a product is a critical ingredient to continued success. I could not be any more proud of the diligent work performed by our staff and members over the time it took to create this invaluable study.”

The SPF LCA brings with it many benefits, including potential credits for LEED-qualified buildings, quantifiable evidence of performance, and an apples-to-apples comparison capability on key points among competing insulation materials under the new North American Product Category Rules for Insulation. The LCA is expected by SPFA to be a resource for building professionals around the world.

“It’s a benchmark by which we expect to continue leading the insulation industry, and hope for others to follow,” said Riesenberg.

The summary documents of the LCA are available on the SPFA website at www.sprayfoam.org under Recent News & Media.
The Spray Polyurethane Foam Alliance (SPFA) is the premiere organization representing contractors, manufacturers, and the complete value chain of SPF on safety, technical, educational, advocacy, promotional and other issues. SPFA is a 501(c)6 membership-based technical trade association representing the leading SPF companies in the United States and abroad. SPFA offers superior training and new professional certification opportunities to the industry’s installers and contractors. SPFA delivers an annual convention and expo serving SPF professionals, utilizes its exceptional partnerships in industry to deliver various services for its members, and provides a unified voice for SPF on insulation, roofing and other installations.

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