

“I would certainly recommend this type of insulation. It has worked really well in our cottage. It provides a high degree of warmth and it will help seal the cottage effectively underneath, which also provides protection against mice and insects.”

- Linda Luffman
Cottage owner, Muskoka, Ontario

Cottage Comfort Improved with Elastochem Spray Foam Insulation Using Honeywell Solstice® Liquid Blowing Agent

THE CHALLENGE

This picturesque A-frame cottage located in Muskoka, Ontario is used seasonally from early Spring through late Fall. With no insulation underneath the raised structure and minimal insulation elsewhere, the Luffman family often experienced uncomfortable temperatures, cold floors, and occasionally mice and insects in their cottage.

THE SOLUTION

A new closed-cell spray polyurethane foam (ccSPF) insulation system developed by Elastochem Specialty Chemicals, Inc., formulated with Honeywell Solstice® Liquid Blowing Agent (LBA) was applied between the joists underneath the floor of the crawl space.

“When we bought the cottage, it was partially insulated but not to a high degree because it wasn’t really winterized,” said Bill Luffman, who has owned the cottage with his wife Linda for about 16 years. “For under our floor, we looked at a number of different types of insulation – batt insulation and board insulation – but we found they required a lot of labor and weren’t suited to being exposed to the elements. It had to be something that was resilient.” Linda Luffman added, “In our cottage, like many cottages, we tend to get mice and some insects. Anything that would help prevent that was also an important consideration. Spray foam was by far the best choice.”

Reduced Global Warming Potential

The Luffmans chose Elastochem’s new ccSPF wall system, Insulthane® Extreme, which is formulated with Honeywell Solstice LBA. “With the big push in the U.S. and Canada to move towards products with a lower global warming potential, ccSPF made with Solstice LBA is a perfect solution,” said Laura Reinhard, global business manager, Spray Foam for Honeywell. “Solstice LBA has an ultra-low global warming potential of one, which is about 1000 times better than HFC alternative products. So not only is it better for the environment than HFC alternatives, it is also demonstrating superior overall foam performance comparatively.”

CASE STUDY RESULTS



The applicator wore proper protective equipment and followed safety procedures throughout the installation.



The new wall system sprayed flawlessly, adhered well and had a smooth finish.

Like many of the lakefront cottage owners in the Muskoka region, Bill and Linda Luffman share a common appreciation for nature and recognize the importance of environmental preservation. That was an important consideration as they evaluated insulation options. “At the end of the day, it’s good to know that we chose a product that is safe to use, that allows us to use less energy and has improved environmental impact,” said Linda Luffman.

Exceptional Performance and Ease of Installation

Marc Kast, director of sales and marketing, Elastochem, was on-site during the installation. He was pleased with how the new ccSPF system performed and Honeywell’s support throughout its development. “Working with Honeywell has been an absolute pleasure. It’s been a seamless transition from the old blowing agent technology to the new one. The foam is reacting beautifully. We are getting a nice, smooth and even surface with no issues whatsoever. It’s just a consistent, easy to use, contractor-friendly product.”

Muhammed Alibashev, an experienced contractor from Toronto-based FOAMIT, agreed with Kast’s observations after spraying the foam. “I was in a crawl space where it is often difficult to see the foam. This foam was very visible with minimal dripping or leakage anywhere since it adhered to the cavity so well. I was able to maximize my spraying time with much less cleaning needed for the tip of my spray gun chamber.”

Alibashev noted other benefits including:

- a consistent spray pattern
- improved yields
- minimal temperature adjustments required
- lower odor during installation

Mary Bogdan, senior principal scientist, Honeywell Fluorine Products, added, “This was a particularly challenging job. It proved to be an extreme application environment due to the weather, the temperature, and the humidity. The spray foam system worked very well and looks wonderful.”

Safety: A Top Priority

Throughout the installation, safety guidelines were closely followed. Bogdan said, “Safety is always of key importance. The spray areas were taped off with plastic and well ventilated. Only the applicator, who wore full protective equipment which included a fullface respirator with supplied air, was allowed in the spray area during installation. The contractor did a great job.”

A Winning Solution

From a contractor perspective, Alibashev summed up his experience, “From the beginning to the end of the spray foam job, everything was consistent and smooth. The material worked in my favor the whole way.” Bill Luffman added, “We’ve been back to the cottage since the insulation was installed and we find, as the weather has gotten colder, the floors are much warmer. It is a great benefit and we would recommend closed-cell foam to other home and cottage owners.” That is a winning solution.



Not only is the ccSPF insulation providing warmth and comfort to the family inside, it’s helping keep severe weather and pests outside.

SOLSTICE LBA – Ideal Replacement for HFC Foam Blowing Agents

With a new manufacturing facility that started up in May 2014, Solstice LBA is an ideal replacement for HFC-245fa and HFC-365 because of these key advantages:

- Ultra-low global warming potential (GWP) of 1 (99.9% better than HFC alternatives)
- A slightly lower molecular weight so less material can be used in a system
- A higher boiling point and lower vapor pressure, which improves handling and yields smoother foam surfaces
- Improved thermal performance

In addition, Solstice LBA is:

- Nonflammable (ASTM E-681)
- Listed under the U.S. EPA’s Significant New Alternatives Policy (SNAP) program to replace ozone depleting substances
- Listed on the TSCA inventory
- Not a volatile organic compound (VOC), as determined by the U.S. EPA



Contact Honeywell to Learn More

To learn more about the benefits of Solstice LBA for your next project, call 1-800-631-8138 or visit www.honeywell-solstice.com.

Honeywell Advanced Materials

115 Tabor Road
Morris Plains, NJ 07950
www.honeywell-blowingagents.com

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