

InsulStar® High Performance Insulation:



Building For The Future: InsulStar® helps make an estate home in the Hamptons a model of energy efficiency and comfort. A Long Island builder discovers – and utilizes – the many advantages of InsulStar high performance spray foam insulation.

PROBLEM

- > Local municipalities are adopting Energy Star standards for new homes



More and more municipalities on Long Island are adopting energy conservation construction codes and some local groups are proposing that Energy Star standards be made requirements for new construction. Homeowners are also expressing a desire for “greener,” more energy conscious homes that will lessen their “carbon footprint.” Seeing this trend, Westhampton Beach builder Joe Spano, president of JP Spano Building, has been researching and using various energy efficient products in his new homes. For his latest project, a luxury home in the Hamptons, he wanted to make it “as energy efficient as possible” without sacrificing comfort and livability.

SOLUTION

- > Builder, homeowner and architect agree to make home as energy efficient as possible
- > InsulStar chosen for its insulating ability and environmental sustainability
- > InsulStar used throughout the home, from attic to basement



The home in question is a 12,000 sq. ft. estate home with a 4,000 sq. ft. basement. Working with the homeowner and the architect, Craig Arm of East End Design Associates, LLC, Joe decided to build the house “with the mindset of making it as energy efficient as possible. Everything we could think of, we did.” That includes extremely energy efficient windows and geothermal heating. For the insulation, Joe turned to Marty Ciesinski, President of New York Spray Foam.com. Marty introduced Joe to InsulStar when the two worked together previously. Formulated from renewable agricultural resources, InsulStar is an environmentally sustainable product and an Energy Star certified partner (because of its energy savings) and member of the U.S. Green Building Council, making it was the perfect choice for this project.

Joe had Marty install InsulStar throughout the house. “Marty and his group do a great job,” Joe says. Joe made the attic unvented, relying on 5” of InsulStar to control the temperature. “We typically build homes with ventilated attics to release the heat in the warmer months, but in winter months we have a lot of problems. With mechanical equipment that has water, that water is subject to freezing, unless you build an enclosure for it. So the simplest solution was to encapsulate everything with this closed-cell insulation.

A 3” layer of InsulStar was used in the exterior walls, while in the basement a 1” layer was used as a vapor retarder. Comfort level is very important in the basement, and using spray foam eliminates that damp, subterranean feel that plagues many basements. InsulStar virtually eliminates mold, mildew, and moisture issues, creating a healthier overall environment in the home. For sound dampening, a 3” layer of Sealite open-cell insulation was used in the floors.

RESULTS

- > Builder urging homeowners to use InsulStar in more new homes
- > InsulStar also helps with heavy winds found in the area
- > InsulStar will help builders meet new energy efficient requirements



Though this is the first time Joe Spano has used InsulStar throughout a house, he has seen what it can do. “Marty did an attic for us in a home we built near here. There was a small space over the garage that wasn’t feasible to do, and the difference in temperature between the two is incredible.” That experience convinced Joe that InsulStar was the right choice for this house. Now we’re pushing it for the other homes we’re building, at least to encapsulate the attic and some of the space.” By using spray foam and better utilizing energy resources, everybody wins – the homeowner, the builder, the power companies, and the world we live in.

And its insulating quality isn’t the only thing Joe likes about InsulStar. “Batt insulation pulls or moves away from the wall. With InsulStar, it adhere’s to the wall. I was also surprised at how it added rigidity to the frame, which could help with the heavy winds we get here.”

As energy efficiency becomes more of an issue, Joe believes InsulStar will be the insulation of choice. “For the last two or three years, we’ve been doing the geothermal heating, and using InsulStar just adds to the efficiency of that whole system, makes the home that much more efficient.” Given what’s happening with building codes on Long Island, that will definitely be an issue. “Long Island Power Authority is offering more incentives to builders to build energy efficient homes. But in the long run, people here are less concerned about the incentives than the fact that the home is going to be much more efficient and less costly to run. Ultimately this will save the homeowners a lot of money. Joe is building for the future of the home,” says Marty Ciesinski.

INSULSTAR

Learn more at www.InsulStar.com or by calling 1-866-NSULATE (1-866-678-5283).



About InsulStar®



InsulStar is a nominal 2.0 lb/cu ft high density, closed-cell spray polyurethane foam (SPF) from NCFI Polyurethanes. It is a two-part liquid system that is sprayed in place and quickly expands to fill all gaps and voids. It then cures to form a fully adhered, solid, monolithic insulation envelope.

- > 2.0 lb/cu ft high density, closed-cell spray polyurethane foam
- > R-value above R 6 per inch
- > Saves an estimated 40% on energy bills
- > Environmentally friendly
- > Forms seal that blocks air infiltration, noise, dust and pollen
- > Blended with anti-microbial to inhibit mold, mildew and bacterial growth
- > Adds structural rigidity

EFFICIENCY

InsulStar's R-value is above R 6.4 per inch, compared to fiberglass batt at R-3.5. Its ability to stop air infiltration and eliminate convective looping saves the homeowner an estimated 40% on energy bills.

GREEN

In addition to its dramatic energy savings, InsulStar is formulated with renewable agricultural resources and uses a state-of-the-art, environmentally friendly blowing agent with zero Ozone Depletion Potential. NCFI Polyurethanes was awarded the 2004 Stratospheric Ozone Protection Award, an international award from the EPA for their work in developing environmentally friendly SPF systems.

COMFORT

The closed-cell, fully adhered structure of InsulStar forms an air seal that blocks air infiltration, noise pollution, dust and pollen. The low moisture vapor permeance eliminates the need for any additional vapor retarders. This low permeance works to control moisture vapor movement, thereby eliminating the moisture accumulation necessary to support mold growth. Additionally, InsulStar is blended with an anti-microbial to inhibit mold, mildew and bacterial growth.

STRUCTURAL RIGIDITY

InsulStar also adds structural rigidity to the home. In a test conducted by the National Association of Home Builders Research Center, it was concluded that a 2x4 wall sprayed with polyurethane foam insulation had two times the racking strength of a wall filled with fiberglass batt insulation.

ABOUT NCFI

From the carpet you walk on, to the warmth of your home in winter, to the sofa you and your family watch television on, NCFI Polyurethanes has been working hard since 1963 to make your world a more comfortable, secure, affordable place to be. You may not be aware of us, but our products touch millions of lives, and you can rest assured that we're constantly working to make life easier and better for you and your family.

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Winner of 2004 EPA award for protecting the Earth's ozone layer.

high performance
spray foam offers more



A whole new comfort level, for you and for the world.