



### JM CORBOND III® SPF RECEIVES ALL-AMERICAN HONORS

## HOW JOHNS MANVILLE CORBOND III SPF CONTRIBUTED TO THE COUNTRY'S FIRST HOME BUILT ENTIRELY FROM U.S. PRODUCTS.

"What can we do, like every other family is doing, to be productive and give back?"

Contractor Anders Lewendal decided the answer was to create jobs, while at the same time build a quality home. He figured out a way to do both, and he found the people of Bozeman, Montana, receptive to his solution.

"Local stores and lumberyards have a lot more American flags in front of their products right now," Lewendal said. "People are taking notice."

Lewendal likes the reaction he's received because he believes in the prospects of his homebuilding philosophy. Just a few blocks from downtown Bozeman on East Cottonwood Street, his skills as a contractor and his knowledge as a former economics major merged together to form the nation's first documented home sourced entirely from domestic materials.

"The point wasn't nationalistic," he said. "It was to use American products if they were the best, and if it made sense."



#### IS AN AMERICAN-MADE HOME REALLY POSSIBLE?

"I'm finding out it's not that hard," Lewendal said.

He was able to source an American-made product for every one of his needs, though he only refers to the home as "predominantly" all-American. Apparently, it's hard to verify the origin of smaller components such as microchips used in furnaces and appliances.

To begin, 150 companies from 40 different states were involved in the project, and Lewendal vetted each one to ensure products were authentically manufactured here in the United States. From screws to light bulbs, he investigated every material. At one point, he even called a plant manager to verify the status of a homegrown product.

"I had him walk out to the line and pour out 5,000 nails in a box, and he shipped them to me," Lewendal said.

#### THE ALL-AMERICAN HOME BY THE NUMBERS

- 2,280 square feet
- 3 bedrooms
- Initial sourcing considerations included 150 companies from 40 states
- Desired thermal resistance of R-31
- Total construction costs of \$300,000

#### DOES THE "BUY AMERICAN" PHILOSOPHY ACTUALLY WORK?

Lewendal estimates the average home constructed in the United States is made with approximately 75 percent domestic products, and he thinks that even a 5 percent increase will have major effects on the economy and job creation.

"I'm not suggesting that builders start building all-American every time," he said. "I'm asking them to pay attention to the value and to look at each item to see if you can get a better value made locally."

He fully admits that a home built completely of American-made products isn't as efficient and doesn't make sense, and he cites a lack of production in the nut and bolt industry as a major inhibitor to building 100 percent domestic. Still, he wanted to try it at least once.

"Entirely American? It's probably not the most efficient way to go. Mostly American? Entirely possible," he said. "We're interested in buying a higher percentage of valuable American products, not hitting every little last one."



JM CORBOND III: THE ROLE OF INSULATION IN THE ALL-AMERICAN HOME

One of the domestic products Lewendal cites as making sense is JM Corbond III SPF. It met Lewendal's requirements for the all-American home by providing the most efficient wall system, for its industry acceptance, its long-term cost-effectiveness, and because it's local.

The process of achieving an R-value of R-31 in the all-American home included insulated panels on the outside, with up to 2.5 inches of JM Corbond III SPF sprayed in the interior wall cavities. Cellulose was blown in to fill the remaining 2-inch by 6-inch space. Dave Smith, a local spray foam applicator who works on many of Lewendal's builds, said this was the first time he ever used the 1-inch insulated board on the outside of a home.

"We actually sat down and went over many combinations with him, and it's really: 'What are we getting out of this for the cost?'" Smith said. "That's how Anders [Lewendal] approaches it."

A major component to that decision was the consistency and efficiency of JM Corbond III SPF. Lewendal knew he could count on spray foam insulation to increase thermal resistance, and he knew Smith's competence with the material was a major factor.

"There isn't a builder out there who won't tell you foam is a better insulation," Smith said. "I don't think there's any doubt that foam is better."



# THE REASONS JM CORBOND III SPF WAS THE INSULATION OF CHOICE

#### **IT'S ALL-AMERICAN**

Aside from a child's trampoline that the occupants of the all-American home purchased from Canada, Lewendal's vision became reality. And when he began thinking about resources for his materials, using JM Corbond III SPF was an easy choice. After all, it's manufactured in Belgrade, Montana, just a short drive from Bozeman.

Smith, who purchased his application equipment from JM Corbond's local Belgrade facilities, agrees that JM Corbond III SPF is the best domestic spray foam insulation. From the quality of the product to the attentiveness of the support team, it seemed like a logical fit to meet the criterion of being American-made, while also providing a valuable return on investment.

"For us, it was the fact that they're local," Smith said. "It really has to do with the support we got locally."

#### IT'S EASY TO INSTALL

Because of the application process, Lewendal and Smith both agree that JM Corbond III SPF is cost-effective in the long run because it provides design flexibility, it doesn't shrink or settle, and it's economical to install. JM Corbond III SPF also has a wide temperature-application range and a thickness per pass that leads to a productive work site.

#### IT PROVIDES A WIDE RANGE OF RESULTS

JM Corbond III SPF provides a high R-value, it adds strength to the structure and its formula is consistent from barrel to barrel. Lewendal also likes its versatility as an effective air and moisture barrier.

"[Lewendal] is really into the air exchange, the efficiency of it all, as he tries to get the lowest air exchange number he can out of a house," Smith said. "He really looks for the tightness. And then, of course, at the end he'll look at how much R-value are you getting on a cost basis, and what's the most effective. Where can you get the most bang for your buck?"

Based on his past use of JM Corbond III SPF, Lewendal knew he could expect high performance as part of the overall insulation solution. He knew it would function as promoted.

"People talk about the advertised value, not the nominal real rate. I have all the confidence that we're getting a real R-value out of the Corbond board on the outside, and the 2 inches of foam sprayed inside that, which will seal up the thermal envelope," Lewendal said.

## Cost-efficiency for the Long Term: JM Corbond III SPF Performance Advantages

- Wide Temperature Thresholds: JM Corbond III SPF has a wide application, including a cold weather benchmark of 25 degrees fahrenheit.
- Easy to Install: JM Corbond III SPF sprays at 3 inches per pass, allowing for greater productivity.
- **Significant Coverage:** JM Corbond III SPF integrally attaches to hard-to-reach cavity spaces and will not shrink or settle.
- More Economical: JM Corbond III SPF has the highest yield of any closed-cell foam building insulation.
- Wide-ranging Properties: JM Corbond III SPF offers superior thermal performance (R-19 at 3 inches or R-38 at 6 inches), as well as advanced air isolation, exceptional moisture control, resistance to mold and mildew, and improved air quality.
- **High Quality:** Look for JM Corbond III SPF's unique Lavender® color, which represents JM's commitment to uncompromised quality and performance.

For more information about JM Corbond III SPF or to inquire about purchasing, please call or visit specJM.com.



#### IT GIVES YOU ACCESS TO PREMIUM TRAINING AND SUPPORT

"What's different about Corbond is the educated applicator. Everyone who applies Corbond goes through a training regimen and knows exactly how to mix the A and B parts and what temperatures it can work with," Lewendal said. "That's not true of all companies."

A main reason Lewendal prefers to work with JM is their ability to train professionals with quality application skills, as well as the access to a first-class troubleshooting service. If applicators install spray foam when it's too cold, for example, the urethane could pop off the wall causing major issues. Professionals properly trained by the manufacturer were a key component to the success of the all-American home.

"A lot of it is a technical- and service-related reason, not just product," Lewendal said. "Although I think the product is probably superior also."

## ABOUT ANDERS LEWENDAL CONSTRUCTION

Anders Lewendal Construction is dedicated to providing not only a top-quality home, but also top-quality service. Their experience throughout the years helps them provide both. With an excellent background in both homebuilding and economics, Lewendal's projects are often praised as being "on time and on budget."

Johns Manville Insulation Systems 717 17th Street Denver, CO 80202 (800) 654-3103 specJM.com

Better Living from the Inside Out.

### ABOUT JOHNS MANVILLE

In their 150-year history, Johns Manville has been at the forefront of insulation production. They were the first manufacturer to have a complete line of certified Formaldehyde-free™ fiber glass building insulation, and because they are dedicated to providing a one-stop hybrid solution, they are the only manufacturer to make both spray foam and fiber glass insulation products.

With a dedication to quality and a reputation for being the best to work with, JM's best-in-class insulation solutions are the logical choice for energy-efficient construction.

- JM was the first to make a complete line of Formaldehyde-free™ fiber glass building insulation.
- JM is the only manufacturer to manufacture both spray foam and fiber glass insulation.
- JM has 150 years of industry experience.