

2014 Green Awards

Winners Showcase Innovation and Sustainability

BY TARA TAFFERA



SOLID TO THE CORE

WFI Global LLC

U-Core+

There are many green attributes to WFI Global's *U-Core+*, developed in 2013, but there is one point that may be of particular interest to fenestration manufacturers. The injectable insulating foam for vinyl and fiberglass window cavities can help companies improve thermal performance by 3-8 percent, compared to windows without this type of insulating foam, according to the company.

WFI also says this is the first window foam certified as a USDA Biobased Product, meaning the foam has 2.7 times the bio-content required for certification as a USDA BioPreferred product.

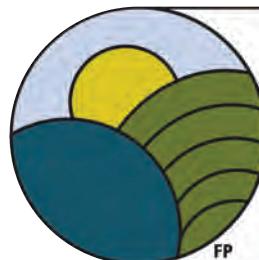
Why is this important? Bio-content helps reduce greenhouse gases, says president Terry Walker. "The USDA is the only government agency that certifies a plastic insulating foam as green based on measurable renewable resource content criteria. This achievement in using bio-content is important for many window fabricators and consumers who

are concerned about the environment."

Others think it is important as well.

"As our brand name suggests, the issues of sustainability and social responsibility are very important to us," says Mark Davis, executive director, Earthwise Group LLC. "Therefore, our choice of WFI as our foam insulation supplier was greatly influenced by the fact that their product not only enhances the thermal performance of our windows and doors, it's also been certified as 'Bio-Preferred' by the United States Department of Agriculture for renewable carbon content."

Soybean products are used in *U-Core+* to replace some petroleum-based components of the polyurethane foam, Walker points out. "Since soybeans and other bio-content are renewable agricultural materials, they are better for the environment than petroleum. In addition, soybean production reduces greenhouse gases, which lowers global warming potential, in contrast to petroleum products,"



**USDA
CERTIFIED
BIOBASED
PRODUCT**
PRODUCT 19%

he says.

The thermal performance benefits will also help reduce the homeowner's heating and cooling costs, while helping the fabricator meet the new Energy Star U-value requirements.

Finally, for those companies truly focused on sustainability, Walker says that lower fill weights reduce the overall carbon footprint.

"Field evaluations using the same foam dispensing equipment to fill the same extrusions show that *U-Core+* requires up to 30 percent less foam fill weight, compared to other foams," he says. "With less foam needed to achieve strong thermal performance, the use of unrenewable petroleum components is reduced—helping the environment and potentially reducing costs for the fabricator."