

Air Force Rolls Out Soy-Backed Carpet

The U.S. Air Force, which operates one of the largest lodging operations in the world, began using carpet made with soy-based backing in 2009. Designated under the federal BioPreferredSM program, biobased carpets are now used throughout Air Force lodging facilities. The Air Force has lodging operations at 93 bases worldwide with more than 31,000 bed spaces. By 2010, the Air Force had installed the soy-backed carpet in about ten percent (or 3,000) of those rooms. The carpet in these facilities is upgraded every six years, and every time that happens, the plan is to install soy-backed carpet.



The soy-backing product, manufactured by Universal Textile Technologies (UTT), replaces more than 90 percent of the petroleum-based polymers in its polyurethane formula with biobased polymers derived from domestically grown soybeans.

Soy-Based Spray Foam Insulation Helps with Base Greening/LEED Certification

Fort Belvoir Army Base in Fairfax County, Virginia accomplished what no other military base in the country had achieved by mid-2010 — attain the Leadership in Energy and Environmental Design (LEED) Platinum certification for new construction. According to Tom Boylan, Development Associate with Clark Realty Capital, LLC, the base's green building initiative includes the use of spray foam insulation that incorporates soy and is manufactured by BioBased Technologies. They selected the soy insulation because of its environmental attributes and because it contributed to LEED certification.

Under the U.S. Army's Residential Communities Initiative, Clark Pinnacle (a joint venture between Clark Realty and Pinnacle) and the Department of the Army formed a 50-year public-private partnership to develop, rehabilitate and construct 2,070 homes on 576 acres of U.S. Army Garrison Fort Belvoir. The project includes 2,070 homes in 12 villages and five neighborhood centers, three of which were built by spring 2010. These neighborhood centers are used by residents for large gatherings, parties, and meetings and also include some office space.

The Fairfax Village Neighborhood Center, that will also serve as an education center for the "green" building efforts underway on base, was insulated with spray polyurethane foam insulation that integrates soy as a replacement for a portion of the petroleum. A display in the Center explains

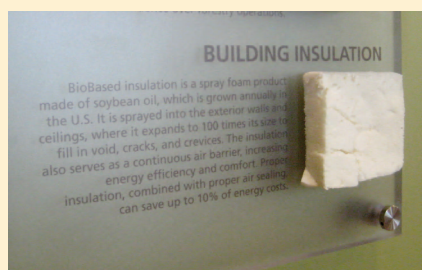
the sustainability benefits of the insulation to visitors. This building is the first new construction military facility to achieve LEED Platinum.

The LEED Green Building Rating SystemTM was developed by the U.S. Green Building Council (USGBC) www.usgbc.org. This internationally recognized green building certification system provides third-party verification that a building or community was designed and built using environmentally sound strategies. LEED ratings are based on energy savings; water efficiency; CO2 emissions reduction; improved indoor environmental quality; and stewardship of resources and sensitivity to their impacts.

More information about these efforts at Fort Belvoir can be found at: www.greenbelvoir.com.

Fort Carson, a United States Army installation located south of Colorado Springs in El Paso County, Colorado, completed the renovation of a 5,000-square foot medical clinic in the summer of 2009. General Contractor John J. Kirilin Special Projects, LLC installed spray foam insulation that incorporates soy in all exterior walls and in the ceiling. According to Senior Project Manager Tobin Allen, using the soy-based product helped in achieving LEED certification. In addition, because a closed cell version of the spray foam insulation was used, it reduced the thickness required to achieve a higher R value (the higher the number, the better the insulation's effectiveness).

Spray polyurethane foam, that integrates soy as a replacement for a portion of the petroleum, insulates the Fairfax Village Neighborhood Center at Fort Belvoir Army Base in Virginia.



A display in Fort Belvoir's Fairfax Village Neighborhood explains the sustainability benefits of the biobased insulation to visitors.

Soy-Based Transformer Coolant Biodegrades Quickly

Dozens of U.S. military facilities have switched to or installed new equipment that comes with a biobased transformer coolant fluid-Envirotemp® FR3®. The world's largest naval station — Naval Station Norfolk — is one such facility that has switched to the product made from soybean oil because it is better for the environment. Because the Station is located on a peninsula and its transformers are located on a waterway, personnel were

concerned about the environmental impact if a transformer should leak. As a result, they sought a solution that would not harm marine life.

Because FR3 fluid is soy-based and does not contain petroleum hydrocarbons, silicones or halogens, it typically biodegrades quickly in case of leak or spill. Tests show that FR3 fluid is 99 percent degraded in 21 days when tested per an Environmental Protection Agency method. In comparison, mineral oil is only 25 percent degraded in 21 days. In addition, the biobased fluid is considered non-toxic when evaluated by multiple standard test methods.

To read the full profile visit:
<http://www.soybiobased.org/u-s-military-facilities>.



The huge rusting radiators of the 16 transformers at the Lamberts Point Deperming Station were replaced with new stainless steel ones. A total of 6,000 gallons of mineral oil was removed and replaced with biobased Envirotemp® FR3® transformer coolant fluid.

FACT FILE

For more information about BioBased Insulation®, contact Jennifer Wilson with BioBased Technologies®, 1-800-803-5189, jwilson@biobased.net or visit: <http://www.biobased.net/>.

For more information on the soy-backed carpeting, contact Doug Giles with UTT, 706-279-3801 X6104, dougiles@universal-textile.net or visit: <http://www.universal-textile.net/>.

For more information on Envirotemp® FR3®, contact David Bingenheimer with Cooper Power Systems, 262-524-441, david.bingenheimer@cooperindustries.com or visit: <http://www.cooperpower.com/index.cfm>.

America's farms are just beginning to tap their potential as a source for natural, renewable biobased products that offer benefits to worker health, the environment, America's economy and energy security. To learn more about the many biobased products made from soybeans, go to www.soybiobased.org. Because of the potential for biobased products to create new markets for soybeans, U.S. soybean farmers have invested millions of dollars to research, test and promote biobased products. Much of this work was done through the United Soybean Board (USB), which is composed of 68 U.S. soybean farmers appointed by the U.S. Secretary of Agriculture to invest soybean checkoff funds. As stipulated in the Soybean Promotion, Research and Consumer Information Act, USDA's Agricultural Marketing Service has oversight responsibilities for the soybean checkoff.

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Calculations based on research by Environmental Defense Fund and other members of the Paper Task Force.

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