FIBAR ENGINEERED WOOD FIBER PLAYGROUND SURFACES: HELPING YOU GO GREEN

HOW

At **Fibar**[®], we meet the needs of growing communities and developments by providing green products and a **LEED**[®] Sustainability Analysis prepared by a **LEED** Green Associate.

Through the Leadership in Energy and Environmental Design (LEED) Green Building rating system – and in conjunction with the U.S. Green Building Council (USGBC) (<u>www.usgbc.org</u>) – we can help you meet the everchanging demands of being an environmentally conscious owner, operator, developer, and community leader.

WHAT

Green Building and Green Development is the choice that owners, operators, developers, and community leaders make in an effort to consider the environment during the planning, construction and subsequent occupancy of a project. "Green Building and Green Development" is a term to describe the design, construction, occupancy, and maintenance of a project or development that significantly reduces or eliminates the impact on the environment. This can include reuse or recycling of materials, use of rapidly renewable resources, regional purchasing, and water conservation.

WHY

The benefits of green building and green development can include improved air and water quality, reduction of landfill waste through recycling, and in some cases, tax incentives. All of these items are important to consider when planning your project. At Fibar, we bring our expertise to the table to help everyone become a little greener.

FIRST STEP

Contact us to discuss how we can help at 800-342-2721 or by email at <u>info@Fibar.com</u>. Or visit <u>www.Fibar.com/playgrounds</u>.



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SUSTAINABILITY ANALYSIS

By their nature, Fibar[®] products help to meet the goals of LEED, which the U.S. Green Building Council describes as "a third-party certification program and the nationally accepted benchmark for the design, construction, and operation of high-performance green buildings." Products themselves are not LEED certified, but many products can help a building project qualify under the LEED rating system.

TERMS USED IN LEED PROGRAMS

Pre-Consumer Recycled Content

This refers to the recycling of scraps, trimmings, and other by-products that were never used in the consumer market, and were produced by manufacturers and processors.

Post-Consumer Recycled Content

Recycled products that have completed their designed use in the consumer market and would be disposed of as waste. They are collected in recycling progams and include such items as paper, aluminum cans, plastic bottles, and tires.

Regional Material

Products that are extracted, processed and manufactured regionally, within 500 miles of the project site.

Heat Island Effect

This is defined by USGBC as "thermal gradient differences between developed and undeveloped areas."

To learn more about earning LEED credits, check out these websites: • USGBC: U.S. Green Building Council: www.usgbc.org • USGBC: LEED Rating Systems: www.usgbc.org/LEED

www.nrdc.org/buildinggreen/leed.asp

We can help. Contact 800-342-2721, info@Fibar.com, or www.Fibar.com.

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ANALYSIS OF COMPONENTS

Materials & Resources: MR2: Recycled Content

Fibar® Engineered Wood Fiber (EWF) is a loose-fill product that is shipped in bulk so there are no package wrappings or pallets to dispose of in dumpsters or landfills.

Materials & Resources: MR4: Regional Materials:

Fibar EWF is 100% pre-consumer recycled material. The wood fiber is obtained from the end cuts of wood mills and truss plants, and manufactured from chipped wood from land clearing. This material is then processed to make Fibar engineered wood fiber, a totally natural product with no chemical additives.

Materials & Resources: MR5: Regional Materials

Fibar EWF is acquired, processed and manufactured at over 65 locations throughout the United States and Canada. As such, shipment of the engineered wood fiber is generally within 100 miles of most projects, but occasionally up to 500 miles for some remote projects.

Water Efficiency: WE1: Water Efficient Landscaping

FibarDrain (rollout drainage matrix), when used in conjunction with FibarFelt (geotextile fabric), obviates the need for crushed stones and plastic pipes to provide drainage for playgrounds. It forms an innovative part of FibarSystems to provide a unique method of safety surfacing for playgrounds. Water from the FibarSystems could be stored in a cistern or underground storage tank to use for landscape irrigation.

Water Efficiency: WE2 Innovative Wastewater Technologies

The water from the FibarSystems could be stored in a cistern or underground storage tank for non-potable uses inside the building.

ACCESSORIES

Materials & Resources: MR4: Recycled Content

FibarGuard Black Playground Borders are made of rugged high-density polyethylene that is 25% post-consumer recycled materials.

Materials & Resources: MR5: Regional Materials

FibarGuard Black Playground Borders are shipped from southern Texas.

Materials & Resources: MR4: Recycled Content

FibarMat wear mats are made from recycled SBR rubber, 100% post-consumer recycled material.

Materials & Resources: MR5: Regional Materials

FibarMat wear mats ship from Pennsylvania.

Materials & Resources: MR4: Recycled Content

FibarDrain is manufactured with 40% preconsumer recycled materials.

Materials & Resources: MR5: Regional Materials

FibarDrain is shipped from North Carolina.

Materials & Resources: MR4: Recycled Content

FibarFelt is made with 20% pre-consumer materials.

Materials & Resources: MR5: Regional Materials

FibarFelt ships from South Carolina, Illinois, California.

GREEN GLOSSARY: TERMS AND PHRASES

CARB Compliant: Meets the standards of the California Air Resources Board. CARB found that one of the major sources of formaldehyde exposure is through the inhalation of resin emissions from composite wood products.

Carbon Footprint: A measure of the resources used for each person or organization based on the land required for food, clothes and sustenance. Although not precise, this is a common metric in environmental and sustainability reports. This is also called the Ecological Footprint.

CFPA: Chlorine Free Products Association — an independent not-for-profit accreditation and standard setting organization that promotes sustainable manufacturing practices, advanced technologies free of chlorine chemistry and consumer education on alternatives, and helps develop world markets for sustainably produced third-party certified products and services. See <u>www.chlorinefreeproducts.org</u>.

Conservation: The preservation and responsible use of our natural resources to ensure they endure.

CRS: The Center for Resource Solutions — a not-forprofit company working to build a robust, renewable energy market by increasing the demand for and supply of renewable resources. CRS administers the Green-e Renewable Electricity Certification program, which certifies renewable power products sold by marketers, utilities and energy service providers in wholesale and retail markets. See <u>www.resource-solutions.org</u>.

Environmental Impact: Measurement of the total impact that an activity has on the environment. This includes production, transportation and energy.

OFEE: The Office of the Federal Environmental Executive — created in 2003 to assist the federal government with the application of sustainable environmental practices.

EPA: The U.S. Environmental Protection Agency, which publishes purchasing guidelines for minimum recycled product content. Many state and local governments and businesses have voluntarily adopted these guidelines. EPA handles most of the responsibility for environmental guidance, direction, monitoring and enforcement in the United States. See <u>www.epa.gov</u>.

Formaldehyde: A cross-linking agent that can have detrimental effects on health. Many environmental

organizations and governments are in the process of eliminating formaldehyde from the home and workplace.

FSC: The Forest Stewardship Council—an independent, international, environmentally and socially oriented forest certification organization. It trains, accredits and monitors third-party certifiers around the world and works to establish international forest management standards.

See <u>www.fsc.org</u> and <u>www.rainforest-alliance.org</u>.

Greenguard Certification Standards for Low-Emitting Products: Performance-based standards set by the GREENGUARD Environmental Institute (GEI) to define goods with low chemical and particle emissions for use indoors. These goods primarily include building materials, interior furnishings, furniture, cleaning and maintenance products, electronic equipment and personal care products. The standard establishes certification procedures including test methods, allowable emissions levels, product sample collection and handling, testing type and frequency, and program application processes and acceptance.

LEED: The Leadership in Energy and Environmental Design Green Building Rating System. Developed by the U.S. Green Building Council (USGBC), it is a nationally accepted benchmark for the design, construction, and operation of high-performance green buildings. LEED recognizes performance in sustainable site development, water savings, energy efficiency, materials selection and indoor environmental quality.

No Added Formaldehyde: Products made without formaldehyde. As formaldehyde exists in detectable quantities in almost all of nature, few goods are formaldehyde free. Instead, wood, paper and other natural products are described as being made without the use of formaldehyde.

Recycled: Made at least in part from recovered fibers. There is no universally acceptable definition so requirements vary by specific circumstances. For example, EPA requires that recycled papers purchased by federal agencies contain post-consumer content. However, the Federal Trade Commission (FTC) does not require postconsumer content in papers labeled recycled. Most U.S. governments and companies uphold the EPA standards, but there is no requirement.