



starlog

A SERIES OF FLOORCOVERING BULLETINS

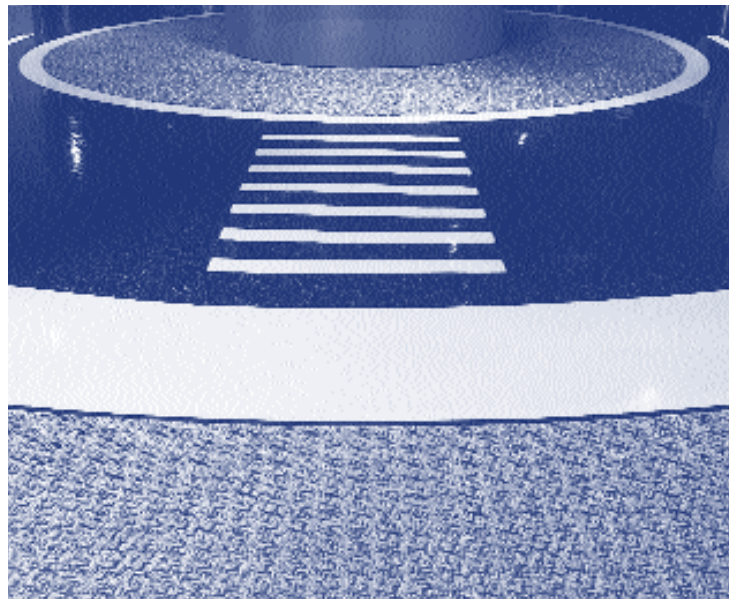
WHAT YOU SHOULD KNOW ABOUT “GREEN” FLOORCOVERING

CONFUSED ABOUT “GREEN?” YOU’RE NOT ALONE!

One of the hottest topics, if not THE topic of the new millennium for the design and build industry is “green.” Specifiers, facility managers, building owners and building occupants are demanding green buildings, green products, green construction methods, and green renovation and demolition. A heightened sense of environmental awareness for future generations is driving this desire to reduce the impact of man-made buildings on the natural environment.

For a movement that is creating a high percentage of new product introductions, construction practices, services, educational seminars and tradeshows, you might be surprised to learn that green, like beauty, is largely in the eye of the beholder. Unlike other aspects of building construction, which have strictly regulated or specific government, ASTM and/or industry guidelines, green has no universally accepted standards or definition. So, if you’re confused about what floorcovering is green and what isn’t, or what you need to do to be compliant with municipal guidelines and mandates on environmentally-friendly floorcovering, you’re not alone.

How can you be more environmentally responsible if you’re not sure how products contribute to a safe and healthy environment? How do you separate promotional “greenwashing” from actual data? As a member of StarNet, we and our preferred vendors would like to help you separate fact from fiction, and give you an overview of this increasingly important subject. We’re committed to providing you with ongoing progress reports on green floorcovering to help you make environmentally responsible decisions and reduce the environmental footprint of your building project.



“Green” floorcoverings are in demand, thanks to a heightened sense of environmental awareness and stricter municipal guidelines.

DEFINING GREEN FLOORCOVERING

Despite the lack of an official definition, there are commonly accepted general descriptions of green products. Two credible sources define green as follows:

The International Interior Design Association (IIDA)—Green is any material or construction method which does not utilize non-renewable and/or recycled material or energy sources. Non-renewable materials are those which come from sources which, once depleted, are gone forever, such as petroleum, some minerals, and old-growth hardwoods. Green also refers to systems which embody less energy in their manufacturing process or use less energy when in use.

Environmental Building News (the largest publisher of environmental product information as well as the GreenSpec specifier binder) –

Green products are a loosely defined collection of construction products that reduce environmental impact, including reduced energy consumption, protection of the ecosystem, and occupant health.

How does this apply to floorcovering? On a scale of greenness, floorcovering rates increasingly higher if it meets one or more of these criteria:

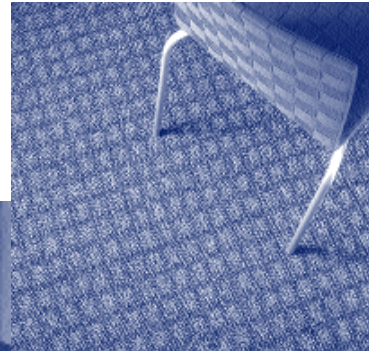
- Is made from ingredients that reduce overall material or energy use.
- Is made from salvaged products.
- Has post-consumer recycled content.
- Has post-industrial recycled content from the product's manufacturing process, or from another product's waste or by products.
- If "natural," is made from abundant and renewable natural materials.
- If "hardwood," is made from certified wood products that were harvested responsibly.
- If "synthetic," has attributes that contribute to overall environmental responsibility including low energy use for manufacture or disposal, long lifecycle, recyclability, reclamation programs, etc.
- Is recyclable and/or can be reclaimed and become part of a closed-loop recycling system or recycled into additional useful products.
- Reduces the need for renovation or replacement.



Sometimes a combination of attributes contributes to an overall green rating. Floorcovering products can also be green due to what is not in them. This applies to not only the floorcovering, but to the products used to install them, such as adhesives, and the products used to maintain them, such as cleaning solutions. A non-green aspect often mentioned about floorcovering and related installation/maintenance products is volatile organic compounds (VOC's). These vapors can cause respiratory as well as psychological and sensitivity problems when they "off gas" into the building environment. Ask us about no- and low- VOC products for installing and maintaining floorcoverings. These products are available from a variety of StarNet preferred vendors.

GIVING THE GREEN LIGHT TO GREEN FLOORCOVERING

Floorcovering manufacturers have been quick to identify attributes about their products that contribute to the perception of the products' greenness. Some of the claims are fact-based and valid, while other promotional claims fit into the category of "greenwashing" for marketing purposes. The bottom line is, specifiers and facility managers must use their own judgement and rely on their vendors' knowledge when sorting through the myriad of environmental claims and information.



Environmentally friendly flooring includes "natural" materials such as linoleum, made from abundant renewable resources, and "synthetic" materials such as carpet, which is manufactured by closed-loop recycling.

Here are examples of floorcovering products, and why manufacturers claim these are green and/or environmentally responsible:

- **Bamboo**—More dimensionally stable and more durable than many types of hardwood floorcovering. When properly maintained, bamboo floorcovering has a long life cycle, far outlasting the time needed for new bamboo to be grown and harvested to produce additional floorcovering.
- **Carpet**—Manufacturers are increasingly using biodegradable dyes and solutions, as well as recycled post-industrial content and recycled wastewater in the manufacturing of their carpet and carpet backings. The practice of closed-loop recycling, which essentially takes carpet manufacturing waste and by-products to create new carpets, is growing. Major carpet mills and fiber suppliers have carpet reclamation programs that extend the life of the original raw materials. These programs have kept tens of millions of pounds of used commercial carpet out of landfills. With proper maintenance, most carpet has a long life cycle.
- **Ceramic**—Made from primarily natural and renewable ingredients. Many manufacturers use recycled content and manufacturing waste in their products. An environmentally attractive product with exceptional durability and a long life cycle.
- **Cork**—Made from natural, renewable raw ingredients. Biodegradable.
- **Linoleum**—The floorcovering and jute backing are made from primarily natural, renewable, and/or abundant raw ingredients including cork or wood flour, linseed oil, limestone and organic pigments. The floorcovering is biodegradable.
- **Slate, stone, marble**—Natural products with low raw materials extraction environmental impact, and exceptionally long life cycles.
- **Resilient**—A new type of resilient floorcovering is chlorine free, exceptionally durable, low cost, easy to maintain, VOC and plasticizer-free, and recyclable. One vinyl floorcovering manufacturer is incorporating vinyl liners from recycled automotive safety glass windshields, as well as recycled plastic bottles, into its manufacturing process. Many vinyl floorcovering manufacturers use post-industrial PVC scrap and recycled PVC by-products in their floorcovering products. Resilient floors have exceptional durability and a long life cycle.
- **Rubber**—Some rubber floors are made from recycled automobile tires, and are efficient users of post-consumer as well as post-industrial waste. Many synthetic rubber floorcoverings have a longer life cycle, and less negative impact on the environment over time, than natural rubber products.
- **Vinyl composition tile**—VCT is made primarily of limestone, an abundant, renewable natural resource. It is also rated higher in overall environmental performance than linoleum and recycled-content ceramic tile by the Building for Environmental and Economic Sustainability (BEES) methodology, a life cycle assessment analysis developed by the National Institute of Standards and Technology (NIST).

- **Wood/Hardwood**—Certified wood products are environmentally responsible and require low energy for producing the finished product. Third party forest certification is based on standards developed by the Forest Stewardship Council (FSC). This means the wood comes from well-managed forests and has undergone an extensive certification process. These products carry the FSC stamp, and a percentage claim. Most wood floorcovering companies are reducing or eliminating their purchases of wood harvested from old-growth forests. Traditional hardwood is biodegradable.

CARPET—GROWING GREENER FROM FIBER TO FINAL DISPOSAL

The carpet industry has a strong track record in recognizing green floorcovering issues. From indoor air quality to carpet reclamation, carpet manufacturers have been keen to identify and respond to the environmental sensitivities of their customers and specifiers. As landfill closures increase, and as municipalities shut the door on building materials that are not recyclable, the carpet industry has been proactive in creating solutions that limit the impact of carpeting on our natural environment. Great strides are being made by carpet fiber suppliers and carpet manufacturers to address life cycle issues, and to slow down and reverse the production of waste materials.

BASF, one of the largest carpet fiber suppliers to the major carpet mills, has been a leader in exploring environmentally sound options for carpet manufacture, use, and disposal. They have been recycling nylon waste at their own production facilities for more than 30 years. Through the inherent strengths of Nylon 6ix®, the fiber behind all Zeftron® nylon yarns, BASF has the ability to turn used carpet fiber into virgin quality nylon for new carpets. The 6ix Again recycling program, a technological breakthrough, is a key element of BASF's global commitment to environmental responsibility.

ADVICE FROM CARPET'S GREEN GURU

One of BASF Corporation's consultants on green floorcovering and carpeting is Paul Williams, a senior contract specialist. His advice for facility managers interested in extending the life cycle of their carpeting is to have a planned and proper maintenance program. This will not only increase the visual satisfaction and longevity of the carpet, it may actually reduce maintenance costs.

"In the last several years there has been a strong effort from detergent formulators and manufacturers to develop lower residue detergents and recommend lower detergent to water mixing ratios," Williams says. "Lower ratios help the environment because you use and dispose of less detergent, as well as help extend the life cycle of the carpet. If we can extend the life cycle of every carpet job by just one year we would be sending that much less carpet to landfills, and have much less impact on our environment," he adds.

Williams and other qualified, certified BASF consultants conduct seminars covering a variety of subjects pertaining to commercial carpet specifying, environmental subjects and communications. These seminars are registered with the Interior Design Continuing Education Council (IDCEC) and are approved for CEU credit.



The world of “green” floorcovering is evolving. As global industry guidelines and standards become more defined, count on StarNet to help you separate fact from fiction.

Here’s a sampling of courses:

- **Carpet: Specifying It Today, Recycling It Tomorrow**—Learn about lowering carpet life cycle cost; the biggest problem with respect to our nation’s landfills; what each of us can do to greatly reduce waste; how to rethink old habits and overhaul behaviors that cause environmental problems; the future of carpet recycling in North America; how we can effectively use chemicals to increase productivity and decrease environmental pollution
- **How Carpet Can Improve Indoor Air Quality**—Learn about advancements in equipment and cleaning solutions along with better training programs that are having a positive effect on better indoor air quality; and practical techniques to reduce waste
- **Reducing the Life Cycle Cost of Commercial Carpet**—Learn about reducing carpet life cycle cost by lowering maintenance cost; understanding how carpet can be cared for properly for optimum performance; an overview of carpet cleaning systems, equipment and maintenance for carpets that look good and last longer.

These programs are new, evolving and in demand. BASF is committed to giving back to the marketplace and is in the process of making these programs more available to qualified groups throughout the U.S. If you would like information, please contact Paul Williams at 800-441-3778.

IT’S EASY BEING GREEN— SPECIFY ENVIRONMENTALLY RESPONSIBLE FLOORCOVERING AND WORK WITH STARNET ON YOUR NEXT PROJECT

Even with a rudimentary understanding of green floorcovering, you can choose more environmentally responsible products. Ask the manufacturer directly, or work with StarNet to find out if the floorcovering you specify includes one or more of these attributes:

| “Green” Attribute | Environmental Benefit |
|---|---|
| Uses the least amount of energy from raw material extraction through manufacturing. | Conserves resources. |
| Is produced from waste or recycled materials. | Diverts volume from landfill disposal. |
| Is made from materials salvaged from other uses. | Extends the useful life of other products. |
| Has post-consumer or post-industrial recycled content. | Reduces landfill volume. Post consumer is very green because the material used to make the products is diverted from landfills. |
| Does not use limited natural resources, such as old-growth timber. | Prevents depletion or extinction of natural resources. |
| Has a long life cycle. | Eliminates or reduces the need for renovation or replacement. |
| Has a recommended maintenance routine, and maintenance training/instruction. | Improves aesthetics and life cycle performance. |
| Can be installed with low-or-no-solvent, and low-or-no-VOC adhesives. | Reduces or eliminates problems associated with offgasing. |
| Can be maintained with environmentally friendly materials, machinery and methods. | Reduces total environmental impact, from offgasing to energy efficiency. |
| Is associated with recycle or reclamation programs. | Contributes to sustainable design. |

We are committed to helping you learn more about green floorcovering, as well as green installation, maintenance products and procedures, and environmentally friendly disposal methods. We can provide you with valuable, decision-making information that will help you be compliant now and in the future. We can also help you plan a more environmentally friendly building project, and enhance relationships with tenants and municipalities that demand greener products and practices. As the world of green floorcovering evolves, as industry guidelines and regulatory bodies zone in on exactly what green means, and as criteria used to evaluate greenness becomes more defined, look to StarNet and future issues of StarLog to help you separate fact from fiction.

MORE INFORMATION AND RESOURCES

If you'd like to know more about green building information and issues in general, we recommend the following resources:

AIA's Professional Interest Area (PIA) on environmental issues:

The website provides general environmental news on conferences and papers, and lists useful resources on environmental design. The website address is www.e-architect.com/pia. The AIA also publishes an Environmental Resource Guide.

U.S. GREEN BUILDING COUNCIL

The Council was founded in 1993 and offers an extensive guide to green building and design issues. This non-profit consensus coalition of the building industry promotes the understanding, development and accelerated implementation of green building policies, programs, technologies, standards and design practices. The Council developed a Leadership in Energy and Environmental Design Building (LEED) rating system for architectural construction. The Council is now developing a similar rating system for interiors, including floorcovering materials. Info@usgbc.org

ENVIRONMENTAL BUILDING NEWS:

The newsletter is distributed on a monthly basis, providing news on environmental design, construction and products. The website address is www.buildinggreen.com

GLOSSARY

Green products have a lingo all their own. Familiarize yourself with some of the more frequently used terms:

Biodegradable—The ability for waste material to decompose back into the ecosystem.

Closed-loop Recycling—Using products and/or manufacturing waste and by-products to produce or manufacture a similar product.

Environmental Footprint—The total environmental impact, from obtaining raw materials to installing the finished product, and extending the lifecycle with proper product selection through maintenance. The goal is to make as small a footprint as possible.

Environmentally Friendly—A general, catch-all phrase for products and procedures that have no negative impact on the environment.

Environmental Impact—The effects of our built environment on the natural environment, which can be beneficial or detrimental.

Green Design—Designing for optimum environmental responsibility, including materials selection, installation and disposal.

Indoor Air Quality—The ASHRAE defines acceptable indoor air quality as air that has no known contaminants at harmful concentrations as determined by cognizant authorities, and air that does not dissatisfy 80% or more of the people exposed to it.

Life Cycle Analysis—A product's full environmental impact analysis, from raw material extraction to final disposal, in terms of costs, and consumption of resources, energy and waste.

Reclamation—The process whereby products or materials are made from the waste of other products or materials for beneficial uses. The reclaimed materials or product or use may be completely different than the original material, product or use.

Recycled Products—Contain materials that would have become waste from other materials.

Renewable Resources—Materials that are or can be replenished at a rate equal to or greater than the rate of depletion caused by extraction for manufacturing.

Sustainability—The ability to ensure the health and well-being of the building environment, the social structure and the economy over time without compromising the present or the future.

Sustainable Design—Design that strives to reduce or eliminate any negative impacts, and improve the beneficial impact, of the built environment on the natural environment indefinitely.

Volatile Organic Compound (VOC)—An organic substance that has the ability to off gas and release vapors that can cause respiratory as well as psychological and sensitivity problems.

LATEST NEWS – STARNET MEMBERS LAUNCH STARPOINT

STARPOINT

The National Accounts Program that delivers quality around-the-corner local service across the United States.



Introducing StarPoint: Floor covering solutions for customers with multiple locations in a wide variety of commercial environments. An exclusive service of StarNet, the leading nationwide network of independent commercial flooring specialists, StarPoint delivers flexible and responsive service across the United States by combining the strengths of local floor covering professionals with "single-point" accountability. StarPoint from StarNet: The new standard for excellence... a better way to ensure company-wide consistency, competitive material-pricing, knowledgeable service and floor maintenance solutions anywhere in the United States.



As the nation's largest network of independent commercial flooring contractors, only StarNet members can provide customers with the best of both worlds. Independent ownership means you'll always receive unbiased recommendations and personalized service from a local name you trust. StarNet's nationwide network assures the best product selection at the industry's most competitive prices. What you do business with a StarNet member, you can be sure we'll do whatever it takes to satisfy you now, and for the long term.

IF YOU HAVE ANY COMMENTS OR QUESTIONS ABOUT THE STARLOG NEWSLETTER, WE'D ENJOY HEARING FROM YOU. WRITE US AT STARNET, 44 EAST RIDGE RD., RIDGEFIELD, CT 06877, OR CALL 1-800-787-6381. VISIT WWW.STARNETFLOORING.COM FOR BACK ISSUES OF THE STARLOG.

One in a series of Technical Bulletins from your Commercial Floorcovering Professionals at:



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