

## **New "Green" Building Highlights**



**Brownfield Redevelopment:** Brownfields are the redevelopment, or reuse of property which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant. Cleaning up, reinvesting in and redeveloping these properties shifts development pressures away from undeveloped land, improving and protecting the environment. Moreover, brownfields redevelopment returns non-productive real estate assets to productive use, promoting the economic development of many of the nation's most economically distressed areas and regions.



**Helix Concrete:** Polytorx Helix steel fiber concrete requires 20% less pour. Polytorx Helix concrete is a Michigan developed and manufactured product. Helix is high performance, optimized steel for use in the reinforcement of concrete. Helix is short, twisted and polygonal shaped wires that are added to concrete during mixing resulting in less concrete needed.



**Pervious Concrete:** By capturing storm water and allowing it to seep into the ground, pervious concrete is instrumental in recharging groundwater, reducing stormwater runoff, and meeting U.S. Environmental Protection Agency (EPA) stormwater regulations. This pavement technology creates more efficient land use by eliminating the need for retention ponds, swales, and other stormwater management devices. In doing so, pervious concrete has the ability to lower overall project costs on a first-cost basis.



**Recycled Carpet:** Shaw is the world's first flooring manufacturer to use a cradle to cradle design philosophy. The backing of ShawMark carpet tile is 100% recyclable, EcoWorx is a PVC-free, fiberglass-reinforced modular tile backing system with recycled content. This earth friendly backing outperforms traditional PVC backing and offers cost and installation benefits.



**Bamboo Flooring:** Technically a grass, bamboo flooring is very earth-friendly because of how fast it grows. Five years of bamboo growth equals 40 years of hardwood growth, preserving hardwood forests. Bamboo is a renewable forestry product.





**Low VOC:** Materials adhered with high-performance adhesive with ultra-low emissions and almost no discernible odor.



**Cork Walls:** Cork oak trees are grown to be approximately twenty-five years of age before they can begin to be harvested. The bark is gently stripped from the tree and sent to factories where the cork is processed and used in the production of wine-stoppers. The excess waste product that is produced in this process is then gathered and processed into sheets of cork, used in flooring or wall tiling.

The corking industry is highly regulated to ensure the survival of the cork oak trees. Once a tree has been stripped, it may not be used again for seven to nine years, allowing the bark to regenerate.



**Sherwin Williams Green Paints:** Greenguard Indoor Air Quality Certified® Sherwin Williams products carry the GreenSure designation offering maximum performance, long-term durability. Designed and manufactured taking steps to reduce environmental impact and to meet or exceed the most stringent regulatory requirements.



**Recycled Bamboo Pulp Walls:** Architectural Bamboo Wall Flats are made from 100% bamboo pulp, one of the world's most renewable resources. No trees were harmed in the making of this product. It is a sustainable wall covering that is free of chemicals and will not be a burden to the environment at the end of its lifecycle, since the tiles are 100% bio-degradable.



**ENERGY STAR Appliances:** Energy Star rated appliances incorporate advanced technologies and use 10 to 50 percent less energy than standard appliances. Energy Star appliances save energy, save money and help reduce emissions of greenhouse gases and air pollutants at the source.





Low Intensity Infrared Heating System: Radiant heat minimizes roof heat losses by directing heat downwards to the area that requires heating. Radiant heating heats in the same manner that the sun warms the earth. The sun's infrared rays strike the earth, objects and people. The radiant energy is absorbed and each object becomes a heat reservoir, which then heats the ambient air.



**Geothermal Heating and Cooling:** Geothermal energy originates from the heat retained within the Earth's core. Geothermal is a central heating and/or cooling system that pumps heat to or from the ground. It uses the earth as a heat source (in the winter) or a heat sink (in the summer). This design takes advantage of the moderate temperatures in the ground to boost efficiency and reduce the operational costs of heating and cooling systems.



**Energy Efficient Lighting:** Energy-efficient lamps and fixtures save money on monthly electric bills. Using less energy reduces emissions of carbon dioxide, air-borne mercury, and other harmful pollutants from power plants that burn fewer fossil fuels to meet the lower energy demand. Lamps with longer life will require fewer replacements, reducing the demand for raw materials and lowering recycling costs.



**Daylight Harvesting:** Daylight harvesting is the term used in the building controls industry for a control system (motion controls and occupancy sensors) that reduces artificial (electric) light in building interiors when natural "day" light is available, in order to reduce energy consumption.



**Solar and Wind Energy:** EverLast® PVW is a solar and wind powered area light system, topped by a wind turbine, two solar panels, and a battery to store energy. Energy-efficient, sensor controlled EverLast® induction lamps make this green technology possible. EverLast® PVW is compact in size, free-standing and completely off the grid, allowing municipalities to reduce spending by reducing energy and maintenance costs associated with lighting systems.





**KraftMaid Environmental Cabinets:** Through every stage of the cabinetry process, from sourcing and manufacturing to finishing and shipping, KraftMaid is focused on The Three R's – reduce, reuse and recycle. Using energy efficient technology and Environmentally Preferable Product (EPP) particle board that includes a percentage of recycled material.



**Steelcase:** Steelcase ergonomic workstations made with recycled content.



**Rainwater Collection:** Rainwater Collection refers to the collection and storage of rain collected from the roof. Stored water will be used for non-potable purposes such landscape irrigation and flushing toilets.



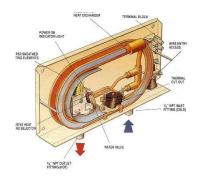
**Internal Recycling Program:** Recycling stations for paper, cardboard, metal, glass and plastic are setup throughout the building to help reduce landfill waste.

In addition, porcelain dishware and stainless steel silverware are utilized instead of wasting paper and plastic utensils.



**Recycled Bathroom Partitions:** Recycled bath partitions are made of 100% Post Consumer Recycled HDPE solid plastic.





**Tankless Water Heaters:** One of the biggest environmental benefits of tankless heaters is that when you turn on the tap, hot water comes out every time. When the tap is turned off, almost no energy is used. Heat only what you need versus conventional water heaters that constantly keep the 20 to 80 gallons of water they store hot all the time.



Find out how here

**Reverse Osmosis:** Reverse osmosis drinking systems reducing plastic bottle waste help the environment by eliminating plastic bottle waste.



**Solar Shades:** Solar Shades offer a minimal, modern look with practical, energy-efficient benefits. They absorb heat, protect interiors from harmful UV rays and reduce glare - while letting you maintain your view. Solar Shade materials are GreenGuard Certified as low-emitting products and materials.



**Window Glazing:** There are several technologies that control solar heat gain in windows. The SHGC through glazing can be altered by tinted glazing, reflective glazing or by applying a spectrally selective low-emittance (low-E) coating. Low-E coatings have become popular because this technology helps decrease solar gain, allows a higher transmittance of visible light and helps reduce radiant heat loss in colder months. The solar heat gain through low-E windows is rated as high, moderate or low depending on the coating and the SHGC.



**Solar Tracking Skylights:** Solar Tracking Skylights consist of highly reflective mirror panels within a clear plastic enclosure, which move continuously to follow the sun's position in the sky. By aligning to the exact position of the sun, the mirrors reflect light down into the space that would be otherwise lost due to the low incident angle of the sun through much of the day.