# **Glossary of Terms**

### **Air Pollution**

Airborne contaminants or pollutants that adversely affect the environment or human health.

### Biodegradable

A material or substance which, when left exposed to nature, will decompose without harmful effects to the environment.

## Brownfield

The U.S. Environmental Protection Agency's (EPA) designation for existing facilities or sites that have been abandoned or underused because of real or perceived environmental contaimination. The EPA sponsers an initiative to help mitigate these health risks and return the facility or land to renewed use.

## **Building Envelope**

The entire perimeter of a building enclosed by its roof, walls and foundation. Properly designed, the envelope can minimize temperature gain or loss and moisture infilitration.

## **Building Integrated Photovoltaics (BIPV)**

Solar panels that have been integrated into the design of the building structure.

## **Building-Related Illness (BRI)**

Serious and diagnosable health conditions, usually of the respiratory system, that can be attributed to specific air quality problems within a building.

## Cap and Trade

A system whereby the government or an exchange requires emissions cuts and issues permits allowing companies to emit greenhouse gases. Companies that do not use all their emissions credits can sell them. Conversely, companies whose emissions exceed the limit (cap) are fined and must buy creditsto compensate for their excess (see also Chicago Climate Exchange).

## **Captured Rainwater**

Through the use of appropriate roofing materials and gutter systems, rainwater can be harvested or collected then stored for future non-potable use such as showers and hand washing (see also Graywater).

## Carpet America Recovery Effort (CARE)

A voluntary initiative of the carpet industry and government to prevent carpet from burdening landfills. CARE focuses on developing carpet reclamation and recycling methods.

## **Certified Wood**

Under the guidance of the Forest Stewardship Council (FSC), wood-based materials used inbuilding construction that are supplied from sources that comply with sustainable forestry practices, protecting trees, wildlife habitat, streams and soil.

## **Chain of Custody**

A company needs to be Chain of Custody (CoC) certified in order to offer products that contain FSC-certified wood.

## Chlorofluorocarbons (CFC)

A group of volatile gases believed to deplete the ozone lay of the Earth's stratosphere. These gases have been discontinued from use as refrigerants and as blowing agents used to make foam.

## Clean Air Act 1972

Ground breaking legislation administered by the EPA that mandates specific measures to protect the air quality and respiratory health of U.S. inhabitants.

## **Construction Waste Management Plan**

A plan that diverts construction debris from landfills through conscientious plans to recycle, salvage and reuse. For best results, this type of plan should also eliminate packaging of materials when possible and be carefully monitored or audited by the contractor.

## Cradle to Cradle

A concept introduced by architect William McDonough that prescribes that at the end of a product's useful life, the product will decompose entirely with no negative environmental impact; otherwise it can be used as post-consumer material when recycled into a new product.

## **Cradle to Grave**

With no consideration for sustainability, these types of products are used for a period of time and then discarded, often long before their useful life is actually complete.

## Crypton<sup>®</sup> Green

A type of fabric that combines post-consumer recycled polyester fibers with an optimized chemistry for reduced environmental impact and human safety.

## Daylighting

Natural daylight introduced to interior spaces and controlled specifically to reduce levels of electric lighting, minimize glare and optimize lighting quality.

## **Eco-Intelligent Polyester**

A type of fabric that is produced and dyed with environmentally safe ingredients.

## **Embodied Energy**

All the energy used to grow, extract and manufacture a product including the amount of energy needed to transport it to the jobsite and complete the installation.

## Energy Efficient

Products and systems that use less energy to perform as well or better than standard products. While some have higher up-front costs, energy efficient products cost less to operate over their lifetime.

## Energy Star<sup>®</sup> Rating

The label given by the EPA and the U.S. Department of Energy (DOE) to appliances and products that exceed federal energy efficiency standards. This label helps consumers identify products that will save energy and money.

ENERGY STAR®-labeled appliances often exceed the efficiency levels of other new products

## Environmentally Friendly

A term that refers to the degree to which a product may harm the environment, including the biosphere, soil, water and air.

## **Environmentally Preferable Purchasing**

The federal government requires the purchase of products or services that have the least negative effect on the environment and human health in consideration of the acquisition of raw materials, manufacturing methods, packaging, distribution, recyclability, operation, maintenance and final disposal.

## Environmental Tobacco Smoke (ETS)

Tobacco smoking producing airborne, cancercausing particles that are exhaled by smokers and inhaled by all. ETS must be entirely eliminated from any built environment that considers itself green.

### Flush Out

To help ensure the indoor air quality, mechanical systems are operated for a minimum of two weeks using 100 percent outside air at the end of construction and prior to building occupancy.

## Forest Stewardship Council (FSC)

An international not-for-profit membership based organization that brings people together to find solutions to the problems created by bad forestry practices and to reward good forest management. Knoll has supported FSC since 1996.

## Formaldehyde

A gaseous chemical used to bind together and preserve building materials and household products. A potential carcinogen, its use should be avoided whenever possible.

## **Fossil Fuels**

Fuels such as coal, oil, and natural gas extracted from beneath the earth's surface, often with significant environmental and political cost. These fuels are a finite resource and are non-renewable.

## Graywater

Refers to wastewater from sinks, showers and laundry that can be collected and treated for some reuse, such as the flushing of toilets or watering of landscape (see also captured rainwater).

## GREENGUARD™

Established performance-based standards to define goods such as building materials, interior furnishings furniture, cleaning and maintenance products, electronic equipment and personal care products with low chemical and particle emissions for use indoors. The standards establish certification procedures including test methods, allowable emission levels, product sample collection and handling, test type and frequency, and program application processes and acceptance.

## Hazardous Waste

Byproducts of society with physical, chemical or infectious characteristics that pose hazards to the environment and human health when improperly handled.

## **High Performance Green Building**

These buildings include design features that conserve water and energy; use space, materials and resources efficiently; minimize construction waste; and create healthy indoor environments.

## Hydrochlorofluorocarbon (HCFC)

Though not what some negative environmental impacts, these substances are used to replace CFC's because they are less damaging to the ozone layer. HCFC's are slated to be banned along with CFC's by 2030.

## Indoor Air Quality (IAQ)

The supply and introduction of adequate air for ventilation and control of airborne contaminants acceptable temperatures and relative humidity.

## Institute for Market Transformation to Sustainability (MTS)

A non-profit that brings together a powerful coalition of manufacturers, environmental groups and government leaders with the goal of increasing the sale and market share of sustainable products. Also the developer of the SMaRT Standard.

## Integrated Design Team

A term referring to all individuals involved in a project from very early in the design process, including the design professionals (architect, engineers, landscape architect and interior designer); theowner's representatives, (investors, developers, building users, facility managers and maintenance personnel) and the general contractor and subcontractors.

## International Organization for Standardization (ISO)

The world's largest developer and publisher of international standards, including ISO 14001.

#### ISO 14001

An international standard created by ISO that addresses environmental management Complying organizations must work to 1) minimize harmful effects on the environment caused by its activities and 2) achieve continual improvement in its environmental performance.

#### **LEED**®

Developed by the U.S. Green Building Council, Leadership in Energy and Environment Design (LEED®) is a voluntary, consensus-based national rating system for developing high-performance, sustainable buildings.

## level™

The certification program for the Business and Institutional Furniture Manufacturer's Association (BIFMA), established as a common framework to evaluate environmental and social responsibility impacts across a variety of products.

#### Life Cycle Assessment (LCA)

A science-based measurement of a product's environmental impacts throughout its life cycle, from raw materials sourcing through manufacturing, shipping, use, and re-use or end-of-life.

#### Low Toxic

This refers to the degree to which a product is poisonous to people or other living organisms.

#### Material Safety Data Sheets (MSDS)

Informational fact sheets that identify hazardous chemicals and health and physical hazards, including exposure limits and precautions for workers who may come into contact with these chemicals. Green design professionals review product MSDS when specifying materials and require their submittal during the shop drawing phase.

#### Non-Renewable

A finite resource.

## Occupational Safety and Health Administration (OSHA)

A governmental agency that aims to ensure employee safety and health in the U.S. by working with employers and employees to create better working environments.

## **Ozone Layer**

Defined by the EPA as the protective layer of atmosphere, 15 miles above the ground, that absorbs some of the sun's ultraviolet rays, reducing the amount of potentially harmful radiation reaching the Earth's surface. Ozone depletion is caused by the breakdown of certain chlorine and/or brominecontaining compounds such as CFC's or halons.

### Photovoltaic (PV)

The capacity of photocells to generate electricity from the sun's energy. PV panels, now more affordable than in the past, are incorporated into building design (see building related Photovoltaics).

## **Pollution Prevention**

Reducing the amount of energy, materials, packaging or water in the design,manufacturing or purchasing of products or materials in an effort to increase efficient use of resources, reduce toxicity and eliminate waste.

## **Polyvinyl Chloride (PVC)**

Commonly known as vinyl, PVC is one of the most common synthetic materials. Recently, however, the manufacture and disposal of PVC have been identified as potentially harmful to the environment and human health.

## Post-Consumer

A material or finished product that served its intended use as a consumer item. It may be recycled and incorporated into building materials and identified as containing post-consumer recycled content or recovered material.

## Post Industrial or Pre Consumer

This refers to waste produced during the manufacturing process of virgin material and rerouted from one step in the process to the next. This does not refer to recycled material.

#### **Rapidly Renewable**

Materials that are not depleted when used, but are typically harvested from fast growing sources and do not require unnecessary chemical support. Examples include bamboo, flax, wheat, wool, and certain types of wood.

## Recyclability

The ability of a product or material to be recovered or other wise diverted from the solid waste stream for the purpose of recycling (EO 13101).

### **Recycled/Recovered Materials**

Waste materials and by-products that have been recovered or diverted from solid waste but do not include those materials and by-products generated from and commonly reused with an original manufacturing process (EO 13101).

### Recycling

A series of activities including collection, separation and processing by which products or materialsare recovered from the solid waste stream for use in the form of raw materials in the manufacture of new products other than fuel for producing heat or power by combustion (EO 13101).

## **Resource Efficiency**

A practice in which the primary consideration of material use begins with the concept of "Reduce –Reuse–Recycle–Repair" stated in descending order of priority. This concept may be applied in everyday life to help promote a sustainable society. In design, begin by reducing the amount of material that is specified; find ways to reuse materials recycle products or product waste; specify products made from recycled materials; and repair or restore products instead of replacing them.

## **Renewable Energy**

Energy harvested from sources that are not depleted when used, typically causing very low environmental impact. Examples include solar energy, hydroelectric power and wind power.

## Remanufacturing

A recycling concept by which an existing product can have its useful life extended through a secondary manufacturing or refurbishing process such as remanufactured systems furniture.

### Sick Building Syndrome (SBS)

Health complaints such as nasal congestion, headache, irritated eyes, lethargy and tiredness, which are difficult to medically diagnose but are present in individuals when they are within a building and disappear or diminish once they leave the building. The cause of SBS is suspected to be poor air quality and conditions within the building.

#### SMaRT© Standard

A transparent, quantified and consensus-based sustainable product standard that measures environmental benefits throughout the global supply chain, from raw materials through endof-life. SMaRT was developed by the Institute for Market Transformation to Sustainability (MTS) and is approved by the U.S. Green Building Council's LEED® rating system for an innovation credit.

#### **Sustainable Yield Forestry**

Sustainable yield forestry is an ecologically sustainable practice that dictates that the same numbers of trees cut down are replanted.

#### **Thermal Comfort**

The appropriate combination of temperatures, warm or cool, combined with airflow and humidity, which allows one to be comfortable within the confines of a building. This comfort is not usually achieved by the fixed setting of thermostats but through careful design and planning.

#### **U.S. Green Building Council**

A non-profit organization committed to expanding sustainable building practices. Also the developer of LEED<sup>®</sup> (Leadership in Energy and Environmental Design).

#### Volatile Organic Compound (VOC)

These substances are indoor air pollutants or chemical compounds that exist as vapor or gases at normal temperatures and are carbon-based molecules typically used as solvents in products such as household cleaners, paints, inks and dyes. Sources of VOC's include formaldehyde (a suspected carcinogen), xylene, toluene, benzene (a known carcinogen) and acetone

#### Waste Reduction

This is a process to reduce or eliminate the amount of waste generated at its source or to reduce the amount of toxicity from waste or reuse of materials. The best way to reduce waste is not to create it in the first place.

#### Waste Stream

The total flow of solid waste from homes, businesses, institutions and manufacturing that is recycled, burned or disposed of in landfills.

#### Wastewater

Water that has been used and contaminated. Wastewater must be purified before being used again or before being returned to the environment.