



What is Green?

WHAT IS GREEN/ SUSTAINABLE BUILDING?

Green or sustainable building is the practice of creating healthier and more resource-efficient models of construction, renovation, operation, maintenance, and demolition. When buildings are designed and operated with their lifecycle impacts in mind, they can provide great environmental, economic, and social benefits.

WHAT IS LEED™?

The LEED™ (Leadership in Energy and Environmental Design) Green Building Rating System® is a voluntary, consensus-based national standard for developing high-performance, sustainable buildings. Members of the U.S. Green Building Council representing all segments of the building industry developed LEED™ and continue to contribute to its evolution. LEED™ was created to:

- > Define “green building” by establishing a common standard of measurement
- > Promote integrated, whole-building design practices
- > Recognize environmental leadership in the building industry
- > Stimulate green competition
- > Raise consumer awareness of green building benefits
- > Transform the building market

LEED™ REQUIREMENTS

In order for a building to be LEED™ certified, it must meet certain requirements and credits on the LEED™ project checklist. Those categories include state of the art strategies for the following:

Areas where Solutia® can contribute.

- > Sustainable Site Development
- > Water Efficiency
- > **Energy & Atmosphere**
- > **Materials & Resources**
- > **Indoor Environmental Quality**
- > Innovation & Design Process

LEED™ encourages & accelerates global adoption of sustainable green building & development practices through the creation & implementation of universally understood & accepted standards, tools & performance criteria.

LAMINATED GLASS

Solutia® Inc. has had a long standing commitment to safe, compliant operations with a focus on continuously improving the health, safety and environmental aspects of its business.

RECYCLED CONTENT & LOCAL/REGIONAL MATERIALS



LEED™-New Construction Contributions: Solutia is the world's largest producer of polyvinyl butyral (PVB) interlayers used in the manufacturing of laminated architectural glass. The use of laminated glass can significantly contribute to a building's overall LEED™ certification in several of the key project list categories.

Energy & Atmosphere: Solutia's interlayers can contribute to the Energy and Atmosphere category—Optimize Energy Performance. Over time, sunlight streaming in glass windows and doors can cause considerable damage to furnishings, carpets, artwork and other valuables. These items need protection from the damaging effects of the sun's ultraviolet (UV) rays. The plastic interlayer(s) found in laminated glass windows, doors, skylights, etc. screens out more than 99 percent of harmful UV rays up to 380 nanometer, making it essentially opaque to UV radiation. This prevents the degradation of dyes, pigments and polymers which causes color fading and the deterioration of natural and synthetic materials without compromising light transmission and visibility. The plastic interlayer is also compatible with low e-coatings and offers thermal performance qualities that help control heat and energy loads in buildings.

Materials & Resources: Solutia's architectural brand of glazing interlayers contribute to the standards under the Materials and Resources categories.

- > **Recycled Content:** The U.S. production facilities operate using 30 percent post industrial recycled content. Solutia does not use post consumer product in its facilities, however, the finished product as supplied to the consumer may be recycled into secondary materials for various markets. This applies to the Saflex® and Vanceva® products currently offered in Solutia's product.
- > **Local/Regional Materials:** Solutia supplies its PVB interlayers to major glass fabricators through the United States. For specific laminator information, please visit www.vanceva.com/design. These fabricators are widely dispersed throughout the United States, with more than 50 locations. This geographic diversity enables architects and building owners to easily source laminated glass within 500 miles of the job site, meeting important criteria on the LEEDS checklist.

Indoor Environmental Quality: Laminated glass can also contribute to the standards outlined under Indoor Environmental Quality 'Daylight and Views' category. Daylighting, using natural sunlight for interior lighting purposes, produces less heat than many artificial lights. If a building's daylighting replaces or supplements its artificial lighting, the building's cooling requirements may be reduced. A daylit building can also improve the productivity and health of its occupants. Because the glazed window surfaces are easy on the eyes and give building occupants a clear view of the outdoors, daylighting creates a more pleasant and productive working and living environment. When laminated glass is specified for specialty applications, such as hurricane, acoustic or bomb blast protection, it enables architects to use glass instead of other structural solutions.