

SUNFLEX
LEED™ NC v3.0
Statement

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The U.S. Green Building Council's Leadership in Energy and Environmental Design (LEED™) New Construction 3.0 program certification is required by many states for various building types. Schools, retail outlets, Offices, multi-family residential, mixed use facilities and the hospitality industry can all benefit from the optimization of energy performance and day lighting features offered by SUNFLEX® products. One of the easiest ways to gather LEED™ points is to incorporate natural light, energy efficiency and natural ventilation into the design of a building. This guide will give specifics on how SUNFLEX can contribute to your project's LEED™ certification.

DISCLAIMER: Please be aware that this document is a guide developed independent of the U.S. Green Building Council LEED™ Certification program and is not a guarantee of points being awarded to the project. Specific design and variables are the responsibility of the project design and construction team.

Beyond LEED™: What Makes SUNFLEX Products Friendly To The Environment?

SUNFLEX products conserve energy and contribute to a more comfortable interior environment for building occupants. Windows/Doors and skylights account for about 30% of building heating and cooling inefficiencies. Under performing Windows/Doors emit solar heat and glare into the building, causing thermal and visual discomfort to the occupants. Building designers attempt to mitigate the sun's negative affect by oversizing the HVAC system. In contrast, SUNFLEX products reduce energy consumption of buildings by retaining quality daylightand reducing solar heat gain, thus reducing the need for grid-tied energy for comfort.

SUNFLEX Products: The Best of Both Worlds

SUNFLEX products are manufactured to offer user daylighting in interior rooms and provide light without energy consumption or heat loss, which also aids in occupant productivity.

Environmental Manufacturing and Life Cycle Assessment

- **Recycled Content:** SUNFLEX glass products contain 19% pre-consumer and post-consumer recycled content (together). SUNFLEX aluminum products contain 23% pre-consumer and 21% post-consumer recycled content.
- **Post production:** SUNFLEX recycles 100 % of the aluminum down fall. In addition, 100% of wood downfall is either incorporated back into the product or reclaimed for use as animal bedding and pelletized fuel. All other waste materials get sorted by type of material in cooperation with a waste management company to recycle all possible contents.
- **Post product life:** SUNFLEX products are designed and manufactured with 100% recyclable materials.

LEED NC v3.0 Credit and Intent

EA Credit 1 Optimize Energy Performance

Demonstrate a 12-48% in improvement in whole building energy performance for new construction, 8%-44% in existing buildings, over baseline ASHRAE standard 90.1-2007.

MR Credit 4.1, 4.2

Regional Materials

Post-consumer, plus ½ pre-consumer recycled content in all applicable building materials must be at least 10% of the total material cost/value of the project.

MR Credit 5

Regional Materials

Building materials manufactured and extracted/ harvested/ recycled within 500 miles of the project site must account for at least 10% of the total material cost/value of the project.

IEQ Credit 2

Increased Ventilation

Design naturally ventilated systems for occupied spaces and use diagrams/calculations, per CIBSE manual for 90% of spaces.

IEQ Credit 4.2, 4.3

Low Emitting Materials

Reduce odorous air contaminants for well-being of installers and occupants

IEQ Credit 7.1

Thermal Comfort

Provide mechanical or natural ventilation, which support productivity of occupants that is compliant with ASHRAE 55-2004.

LEED NC v3.0 Credit and Intent

SUNFLEX Folding Sliding Door/Window products are energy-saving daylighting and ventilation solutions, allowing natural light and air to help lessen both, artificial light, energy needs and HVAC loads. U-factor and solar heat gain coefficient (SHGC) can exceed ENERGY STAR® standards. (See ENERGY STAR® table) The system SF 55 with triple glazing can achieve a U-factor of 0.29 and a SHGC of 0.17. The wood clad system SF 55c can achieve a U-factor of 0.24 and a SHGC of 0.17. The SF 55c double glazed can achieve a U-factor of 0.32 and a SHGC of 0.19.

SUNFLEX laminated and tempered glass products contain 19% by weight and aluminum extrusions contain 40% recycled material.

SUNFLEX products are manufactured/assembled in Florida USA. Raw materials are sourced in Germany and Florida. Projects located within 500 miles may comply.

SUNFLEX products are an excellent choice to allow natural ventilation for up to 90% of the occupied space. Natural ventilation is preferred by occupants over mechanical (HVAC).

SUNFLEX products are pre-assembled and arrive at the jobsite without further indoor air quality contamination. Emissions-free, all of the materials used in manufacturing processes are non-hazardous. All paint and finishing is water-based for safer disposal and reduces VOCs released into the environment.

Passive ventilation strategies using SUNFLEX products can contribute to overall thermal comfort of occupants and reduce reliance on mechanical ventilation systems.

IEQ Credit 8.1**Daylighting**

Provide the building occupants with a connection between indoor spaces and the outdoors through the introduction of daylight into at least 75% of regularly occupied areas of the building.

SUNFLEX products offer a view through the entire wall and flood the interior with daylight.

IEQ Credit 8.2**Views**

Provide the building occupants with a connection between indoor spaces and the outdoors through direct exterior views for at least 90% of regularly occupied areas of the building.

SUNFLEX operable glass walls provide a direct view to the exterior and if opened a direct interaction with the exterior environment.

IEQ Credit 9**Enhanced Acoustical Performance (Schools Only)**

Provide classrooms that facilitate better teacher-to-student and student-to-student communications through effective acoustical design.

SUNFLEX products are tested for STC rating under certain circumstances. Please check back with **SUNFLEX** for availability.