

## Eclipse Products Add Points To LEED Projects

The U.S. Green Building Council does not provide LEED certification for specific products, only for overall projects. However, the use of SOLARA™ Retractable Awnings, AIRA® Retractable Screens and SOLA™ Motorized Screens can add significantly to the LEED points of a project under the U.S. Green Building Council LEED guidelines:

### Interior Environments Are Enhanced By Installing SOLARA™, AIRA® and SOLA™

There are a number of factors analyzed during the LEED certification of a project that contribute to the quality of the interior environment. Several can be improved through the use of Eclipse's Products:

- **INCREASED VENTILATION:** The proper use of SOLARA Retractable Awnings, AIRA Retractable Screens and SOLA Motorized Screens can reduce or eliminate the need for air conditioning during warm days, allowing for the specification of opening windows in the building's design to increase natural air ventilation.
- **INDOOR AIR QUALITY:** All of Eclipse Technologies aluminum extrusions are powder-coated. There are no solvents, fumes or volatile organic compounds (VOC's) involved in this process. The powder is non-toxic and 99% of overspray and unused powder can be collected and recycled. Additionally, SOLA Motorized Screens' Sheerweave 2100 options are Greenguard Certified, ensuring that the highest industry standards for low chemical emissions are being met to maintain good indoor air quality for the health of building occupants.
- **CONTROLLABILITY OF SYSTEMS – LIGHTING:** SOLARA Retractable Awnings and SOLA Motorized Screens can be sensor controlled and automatically extended during high sun periods to reduce direct and ambient light, and automatically retracted during less sunny periods to provide controllable, natural light.
- **CONTROLLABILITY OF SYSTEMS – THERMAL COMFORT:** SOLARA Retractable Awnings and SOLA Motorized Screens can be sensor controlled and automatically extended during high sun periods to significantly reduce solar heat gain, and retracted during less cooler periods to provide controllable, natural heating.
- **DAYLIGHT AND VIEWS:** Eclipse's complete product line by design can be extended to block unwanted sunlight and solar gain through windows, glass walls and openings without blocking views and allowing a higher ratio of glass to opaque building materials in projects without creating inherent light and cooling management problems.
- **INNOVATIONS IN DESIGN:** Exceptional performance where the LEED credit requirements have been exceeded substantially can earn ID Credits. Using Eclipse's unique product lines in conjunction with other energy saving products can contribute to meeting these exceptional requirements.

### Retractable Awnings & Exterior Solar Shades Reduce Thermal Heat Gain & Increase Energy Performance

Optimizing the energy performance of a building is the highest single area for earning LEED points on a project. Eclipse's products *can reduce solar gain up to 90%* - by stopping the sun's rays from ever touching the glass. This is far superior to simply using thermal-pane glass and/or window tints and coatings.

### SOLARA Retractable Awnings Reduce The Heat Island Effect In Uncovered Areas

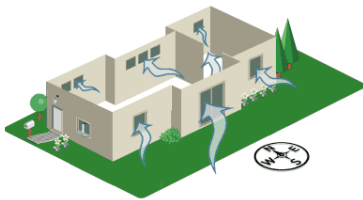
USGBC guidelines call for 50% of a site hardscape (including roads, patios, sidewalks, courtyards and parking areas) to have shade, paving materials with a Solar Reflective Index of at least 29, or open grid pavement systems. By installing a SOLARA awning over a patio, courtyard or parking area, the reflected heat is reduced significantly in that area.

### Creating Natural Ventilation and Reducing Heat Flow Through Windows

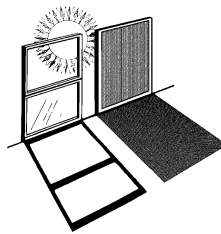
Windows are the weak link, thermally speaking, in most building envelopes. Windows today are much better than old single-pane windows and store-fronts, but they still represent a compromise—we accept their mediocre thermal performance because we want the daylight, views, and ventilation they offer. Windows and glazing systems allow unwanted heat flow in several ways. They tend to have cracks and gaps around their edges that allow air to leak in or out. They allow heat transfer via conduction across the glass and frames. And they allow heat to radiate through, both as visible light and as invisible, infrared radiation. *This solar gain is the biggest source of cooling loads in buildings with large areas of glass.*

Originally, designers began using tinted glass to reduce solar gain, but that approach reduces visible light transmittance, affects the aesthetic appearance of the glass, and impairs views.

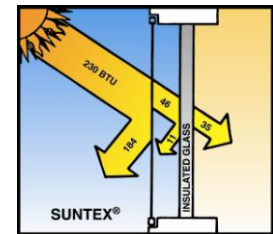
SOLARA Awnings, AIRA Retractable Screens and SOLA Motorized Screens can stop the sun from hitting the glass - the very best solution to stop unwanted solar gain through windows and retract away, virtually disappearing when they are not in use.



Cross-ventilation occurs when you open a door or window on each side of the house and the air pressure pulls the fresh air in and the stale air out. To optimize cross-ventilation, the locations of the openings need to be on the same side as the high and low pressure wind patterns.



The combination of solar heat and UV rays can cause drapery, upholstery and flooring to fade. Because exterior shading blocks a significant amount of solar energy and ultraviolet, you can slow down this process dramatically.



Exterior Sun Control Screens and Awnings absorb and dissipate a large percentage of solar heat and glare before it reaches windows and doors; this keeps the glass and interior cool and reduces dependency on air conditioning to maintain indoor temperatures.

For more information about LEED Certification, or any of our complete line of screening and shading solutions, please contact us at: **877.532.5477**, or [info@eclipse technologies.com](mailto:info@eclipse technologies.com).