

## SunProject & Potential LEED 2009 Rating System Points (USGBC)

### SCHOOLS: NEW CONSTRUCTION AND MAJOR RENOVATION

#### Sustainable Sites

- **Credit 8.0: Light Pollution Reduction** **0.5 points**

Minimizing interior and exterior lighting trespass from the building and site during nighttime to reduce light pollution can earn credit. Reduction of the interior lighting portion requires shielding of openings in the building envelope with a direct line of sight to non-emergency luminaires using automatically controlled devices (providing a resultant transmittance of <10% between 11pm and 5am). This may be fulfilled by SunProject's automated exterior solar shades.

#### Energy & Atmosphere

- **EA Prerequisite 2: Minimum Energy Performance** **required**

By reducing solar heat gain and associated cooling loads, SunProject's window treatments may contribute towards meeting minimum energy performance improvements of:

**OPTION 1:** 10% for new buildings or 5% for major renovations relative to the baseline building performance (ANSI/ASHRAE/IESNA Standard 90.1-2007), or

**OPTION 2:** ASHRAE Advanced Energy Design Guide for K-12 School Buildings, or

**OPTION 3:** Advanced Buildings Core Performance Guide developed by the New Buildings Institute.

- **Credit 1.0: Optimize Energy Performance** **1.6 points**

SunProject's window treatments would contribute towards optimizing energy performance, and would earn credit based on the percentage reduction in energy costs of the proposed building performance compared to the baseline building (ANSI/ASHRAE/IESNA Standard 90.1-2007). Assuming SunProject can contribute a maximum overall energy savings of 3.1% for a typical school building in the U.S., a potential contribution of 1.6 points can directly be earned, so long as the minimum energy performance requirements for EAp2 were met through other means.

#### Indoor Environmental Quality

- **Credit 7.1: Thermal Comfort - Design** **<1 point**

By preventing unwanted solar heat gain during the cooling season, SunProject's window treatments can significantly improve thermal comfort conditions for human occupancy. This assists with a building meeting indoor thermal comfort conditions specified by ASHRAE 55-2004 required for credit.

- **Credit 8.1: Daylight & Views - Daylight** **<1 point**

One form of glare control for each window is required as part of this credit. SunProject's window treatments can fulfill this requirement which, along with appropriate window and building orientation design, can provide sufficient daylight illuminance levels (between 25-500 footcandles on Sept. 21st, 9am-3pm) in ≥75% of all regularly occupied spaces inside the building.

**Total: 2.1-3.1 points of 23 available points**

#### ADDITIONAL ENVIRONMENTAL ATTRIBUTES

SunProject's window treatments can be operated both automatically and manually to influence lighting and thermal comfort within the building. This would contribute towards providing the high level of individual lighting system and thermal comfort control for building occupants, though shading systems are not a recognized method to earn credit in the LEED credit IEQc6 – Controllability of Systems: Lighting and Thermal Comfort Control.

The aluminum extrusions used in SunProject's window treatments are comprised of 60% post-industrial and 20% post consumer recycled content.