



Clearly the best.®

11/5/2009

Milgard Products can help earn LEED v 3.1 credits in the categories below.

ENERGY & ATMOSPHERE

EA Prerequisite 2 MINIMUM ENERGY PERFORMANCE

All Milgard Vinyl and Fiberglass Products can meet the ASHRAE/IESNA Standard 90.1-2004. All Milgard products have Milgard's SunCoat® low-E glass, and additional energy upgrades are available to meet or exceed the minimum standard. Milgard windows and door performance values are NFRC certified.

EA Credit 1 OPTIMIZE ENERGY PERFORMANCE

Milgard offers many products that meet ENERGY STAR® qualifications standard. In addition, Milgard offers 3D™ and 3D MAX™ energy package upgrades that meet or exceed ENERGY STAR® qualifications with dual-glazed windows. More recently, Milgard has begun to offer triple glazed vinyl and fiberglass products which can achieve u-factors that exceed ENERGY STAR qualifications by up to 50%. For specific u-factor and SHGC performance values of all Milgard products, visit the product details section on Milgard.com.

EA Credit 2 ON-SITE RENEWABLE ENERGY

As referenced above, Milgard window and door performance values are NFRC certified and can be used in building envelope modeling to achieve desired goals of this section.

11/5/2009

MATERIALS AND RESOURCES

MR Credit 4.1 and 4.2 RECYCLED CONTENT *(1 or 2 pts if project materials are 10% or 20% of post-consumer + ½ pre-consumer recycled content)*

For all Milgard windows and doors, glass is 42% -72% of the weight of the average window or door. The majority of glass used in fenestration contains cullet, or in-process recycled glass, which does not contribute toward the recycled content calculations (as it is considered Industrial recycled content and would not normally enter the waste stream).

Milgard Vinyl Windows contain 8%-10% pre-consumer recycled content of vinyl. Vinyl is approximately 35% of the weight of the average window and 31% of the weight of the average door. Therefore, as a weighted percentage, Milgard vinyl windows contain 2.8-3.5% in pre-consumer recycled content in windows and 2.4%-3.1% pre-consumer recycled content in doors.

Milgard Fiberglass windows and patio doors contain filament made up of a minimum of 90% postconsumer recycled content. The fiberglass filament comprises 25% of the weight of the window and 31% of the weight of the door. Therefore, as a weighted percentage, Milgard fiberglass windows contain 22.5% post-consumer recycled content and doors contain 27.9%.

Milgard Aluminum Windows and Doors contain a minimum of 25% pre-consumer recycled content in the aluminum extrusions. Aluminum is approximately 27% of the weight of the windows and 23% of the weight of the doors. Therefore, as a weighted percentage, Milgard aluminum windows contain 6.8% of recycled content and Milgard aluminum doors contain 5.9% recycled content.

MR Credit 5.1 and 5.2 REGIONAL MATERIALS *(1 or 2 pts if 10% or 20% of materials are extracted, processed and manufactured within 500 miles of project)*

Milgard currently manufactures windows and doors in 3 facilities in the Pacific Northwest (Tacoma, WA and Portland, OR), 4 facilities in California (Sacramento, Hollister, Simi Valley and Temecula CA), 1 facility in Phoenix, AZ, 1 facility in Aurora (Chicago Metro Area), IL, and 1 facility in Aurora (Denver Metro Area), CO. This geographical footprint covers approximately better than 25% of the nation in terms of sourcing of Regional Materials for LEED projects.

Glass makes up 42%-72% of the weight of the window, and the majority of glass is sourced locally to our window manufacturing facilities. Please see your local Milgard rep for estimations of locally extracted products based on your project location.

11/5/2009

INDOOR ENVIRONMENTAL QUALITY

EQ Prerequisite 1

In order to meet the Indoor Environmental Quality prerequisite of meeting the ASHRAE standard 62.1-2004, and 62.2-2004 in low-rise commercial projects seeking LEED 2.2 Certification, windows play an integral role.

EQ Credit 2 INCREASED VENTILATION *(1 pt. possible)*

In order to receive credit for the section EQ Credit 2, operable windows can play an integral role.

EQ Credit 3.1 CONSTRUCTION IAQ MANAGEMENT *(1 pt possible)*

The intent of this credit is to maintain acceptable indoor air quality during construction and demolition activities. Milgard fiberglass windows are factory-painted with water-based paints with low to no-VOC's. The adhesives and resins in the fiberglass pultrusion and veneer applications emits low to no odor or off-gassing. Milgard vinyl products no not off-gas.

EQ Credit 4.1, 4.2 and 4.4 LOW-EMITTING MATERIALS *(1 pt for all adhesives, sealants, and sealant primers complying with SCAQMD Rule #1168 and 1 additional pt for all applied architectural paints, coatings and sealants, 1 pt for No added Urea-Formaldehyde in Composite Wood products)*

Milgard fiberglass WoodClad™ products are delivered unsealed. Adhesives used in the manufacture of these products meets the SCAQMD Rule (reference page 339 for VOC limits), and contain no added urea-formaldehyde. Milgard fiberglass Ultra™ products are delivered with factory applied water based paint with low VOCs, meeting Green Seal Standard GS-11.

EQ Credit 6.2 CONTROLLABILITY OF SYSTEMS/THERMAL COMFORT *(1 pt possible)*

Milgard operable windows can play an important role in contributing to earning this credit.

EQ Credit 8.1, 8.2 DAYLIGHT AND VIEWS *(1 pt for 75% and 1 additional pt for 90% of spaces)*

Milgard windows and doors play an integral role in achieving this credit and maximizing interior daylighting.