

Owens Corning[™] Fiberglas[™] Rigid & Semi-Rigid Insulation

HELPING YOU ACHIEVE LEED® CERTIFICATION







Owens Corning™ Insulation Products help improve thermal performance and control moisture in commercial, institutional and high-rise residential buildings. This document applies to the LEED New Construction and Major Renovations, LEED Commercial Interiors, LEED Core & Shell, LEED for Schools and LEED for Existing Buildings, Operations & Maintenance products. As you pursue LEED Certification, rely on the products and expertise of Owens Corning™.

LEED Certification and the awarding of credits, is based on the overall project design, properly designed building systems and construction assemblies, and the performance of the project as a whole. Fiberglas[™] Insulation can be a component of many of these systems and assemblies, with all components within those systems and assemblies being considered in assessing compliance with the LEED Rating System within a given category and credit. Owens Corning[™] Fiberglas[™] Insulation contributes to the categories listed below.

Owens Corning[™] Fiberglas[™] Rigid & Semi-Rigid Insulation Products:

- Curtainwall (CW-225) Insulation
- Fiberglas[™] 700 Series
- Fiberglas™ Insul-Quick® (IQ) Board
- Fiberglas™ TIW Type I & Type II
- Fiberglas[™] SCR Board

Table | (Chart continued on next page)

Contribution to LEED Requirement

		Owens Corning [™]
LEED Credit Category	LEED Requirement	Product Contribution
Energy and Atmosphere (EA)— Prerequisite 2: Minimum Energy Performance	10% performance improvement for new buildings or 5% better performance for renovated existing buildings, with baseline building performance rating calculated per method in Appendix G of ANSI/ASHRAE/IESNA Standard 90.1-2007 for whole building simulation.	Fiberglas [™] Insulation helps reduce building energy demand and improve thermal comfort. The project team is responsible for conducting the energy analysis to determine the overall building energy efficiency.
Credit 1: Optimize Energy Performance (1-19 points)	Improve building performance rating compared with the baseline building performance rating, calculated per Appendix G of ANSI/ASHRAE/IESNA Standard 90.1-2007 a whole project simulation model, with points awarded per energy cost savings in LEED table.	Fiberglas™ Insulation helps reduce building energy demand and improve thermal comfort. The overall contribution depends on the insulation R-value, the U-value of the construction assembly, and the assembly design. The project team is responsible for conducting the energy analysis to determine the overall building energy efficiency.
Materials & Resources (MR)— Credit 4: Recycled Content (I-2 points)	Materials with recycled content such that the sum of post-consumer recycled content plus $\frac{1}{2}$ of the pre-consumer content constitutes at least 10% (1 point) or 20% (2 points), based on cost, of the total value of the materials in the project.	Fiberglas™ Insulation products contain 55% pre- consumer recycled content. Recycled content certification by Scientific Certifications Systems: www.scscertified.com.
Credit 5: Regional Material (I-2 points)	Materials/products extracted and manufactured (or fraction thereof) within 500 miles of project site for a minimum of 10% (I point) or 20% (2 points), based on cost, of the total materials value (fractional quantities contribute as percentage by weight).	Fiberglas™ Insulation, I U.S. manufacturing plant provides regionally available material manufactured and sourced within a 500 mile radius of project locations in many areas of the country. Fiberglas™ Insulation plant locations are shown in Fig. I with approximate 500-mile radii for each plant. Contact I-800-GET PINK™ for additional information.

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Contribution to LEED Requirement

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Indoor Environmental Quality (IEQ)— Prerequisite 3: Minimum Acoustic Performance	Classrooms and core learning spaces with background noise from HVAC systems at 45 dBA or less, and have reverberation times per the ANSI Standard S12.60-2002, Acoustical Performance Criteria, Design Requirements and Guidelines for Schools.	Fiberglas [™] Insulation is effective at reducing noise transfer through building assemblies and improving room sound quality. See individual product data sheets for details.	
Credit 7 & 7.1: Thermal Comfort (I point each)	Design HVAC systems and building envelope to meet the requirements of ASHRAE Standard 55-2004, Thermal Comfort Conditions for Human Occupancy. Demonstrate design compliance in accordance with the Section 6.1.1 documentation.	Fiberglas™ Insulations contribute to a comfortable thermal environment. See individual product data sheets for details, and check with local sales representative for product applications.	
Credit 9: Enhanced Acoustical Performance (I point)	Apply ANSI Standard S12.60-2002, Acoustical Performance Criteria, Design Requirements and Guidelines for Schools for STC rating of building shell, classroom and core learning space partitions; HVAC background noise at 40 dBA; windows at least STC 35.	Fiberglas" Insulation reduces noise transfer through building assemblies and improves room sound quality and is a significant contributor to improved acoustic performance in schools and healthcare facilities. See individual product data sheets for details.	
Credit 10: Mold Prevention (1 point)	Added to IEQ Credits 3.1, 7.1, and 7.2, HVAC systems/controls limit RH to 60% and IAQ program based on U.S. EPA document, Building Air Quality: A Guide for Building Owners and Facility Managers, EPA reference number 402-F-91-102, December 1991.	Fiberglas™ does not attract or absorb moisture and does not contribute to mold growth. See individual product data sheets for details.	
Innovation in Design (ID)– (I-4 points)	Credit can be achieved through any combination of the Innovation in Design and Exemplary Performance.	Refer to individual product data sheets or check with the local sales representative for product applications.	

Note: No individual material enables a credit point to be taken within LEED because each category is dependent on the aggregate of all materials and their proportionate relationship to the total dollar cost of all materials.

Figure IOwens Corning™ Fiberglas™ Rigid & Semi-Rigid Insulation Plant Locations



To view other Owens Corning^{™™} products that help contribute to LEED certification please visit http://sustainability.owenscorning.com/ and download Pub Number 10011611.

