

## Owens Corning<sup>™</sup> Pipe & Equipment Insulation

HELPING YOU ACHIEVE LEED® CERTIFICATION







Owens Corning™ Pipe and Equipment Insulation Products help improve thermal performance and condensation control on mechanical systems in commercial 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 assemblies, and the performance of the project as a whole. Owens Corning™ Pipe and Equipment Insulation Products can be a component of many of these systems and assemblies, with all components within those systems and assemblies considered to assess compliance with the LEED Rating System used for certification within a given category. Owens Corning™ Pipe and Equipment Insulation Products contribute

to the categories listed below.

## Owens Corning<sup>™</sup> Pipe & Equipment Insulation Products:

- Fiberglas<sup>™</sup> SSLI<sup>®</sup> & SSLII<sup>®</sup> Pipe Insulation with ASJ
- Fiberglas™ Pipe Insulation with Evolution™ Paper-Free All Service Jacket (ASJ)
- VaporWick® Pipe Insulation
- Fiberglas™ "No Wrap" Pipe Insulation
- Fiberglas™ Pipe & Equipment Insulation
- Fiberglas™ FlexWrap® Pipe & Equipment Wrap

Table | (Chart continued on next page)

Contribution to LEED Requirement

Contribution to LEED Requirement			
		Owens Corning <sup>™</sup>	
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.	Pipe & Equipment Insulation helps reduce building energy demand while improving thermal comfort for the occupants. The project team is responsible for conducting the energy analysis to determine the overall building energy efficiency.	
Credit I: Optimize Energy Performance (I-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.	Pipe & Equipment Insulation helps maximize mechanical systems energy performance and efficiency to reduce building energy demand.  Overall contribution is dependent on R-value of product and the U-value of the design of the system used. The project team is responsible for conducting the energy analysis to determine the overall building energy efficiency.	
Credit I.3: Optimize Energy Performance (HVAC) (5-10 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.	Pipe & Equipment Insulation helps maximize mechanical systems energy performance and efficiency to reduce building energy demand.  Overall contribution is dependent on R-value of product and the U-value of the design of the system used. The project team is responsible for conducting the energy analysis to determine the overall building energy efficiency.	

## Table | (Continued)

Contribution to LEED Requirement

LEED Credit Category	LEED Requirement	Owens Corning <sup>™</sup> Product Contribution
Materials & Resources (MR)— Credit 4: Recycled Content (I-2 points)	Materials with recycled content such that the sum of post-consumer recycled content plus ½ 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.	Pipe & Equipment 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% (1 point) or 20% (2 points), based on cost, of the total materials value (fractional quantities contribute as percentage by weight).	Pipe & Equipment Insulation is made in 1 U.S. and 1 Mexico manufacturing plant to provide regionally available material manufactured and sourced within a 500 mile radius of project locations in some areas of the country. Check with local sales representative, and refer to Fig 1 to determine finish material place of origin.
Indoor Environmental Quality (IEQ)— Credit 4.6: Low Emitting Materials (I-4 points)	Meet California Department of Health Services Standard Practice for the Testing of Volatile Organic Emissions from Various Sources Using Small-Scale Environmental Chambers, including 2004 Addenda for all interior products, including insulation.	Fiberglas™ Insulation and Acoustic Products are Greenguard Certified for Low Emitting Products: IAQ and Children and Schools. Additional verification can be found at www.greenguard.org.
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.	Pipe & Equipment Insulation contributes to a comfortable thermal environment by helping to maximize the mechanical system energy performance. See individual product data sheets for details, and check with local sales representative for product applications.
Credit I0: Mold Prevention (I point)	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.	Pipe & Equipment Insulation Products do not promote mold growth when tested in accordance with ASTM C1338. 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 I

Owens Corning™ Pipe & Equipment 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.

