



Owens Corning® Metal Building Insulation

HELPING YOU ACHIEVE LEED® CERTIFICATION



Owens Corning® metal building insulation products help improve thermal performance, moisture control, and sound quality 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® Metal Building 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® Metal Building Insulation Products contribute to the categories listed below.

Owens Corning® Metal Building Insulation Products:

- Certified R® Metal Building Insulation
- Metal Building Utility Blanket
- MBI Plus Metal Building Insulation

Table 1 (Chart continued on next page)

Contribution to LEED Requirement

LEED Credit Category	LEED Requirement	Owens Corning® Product Contribution
Energy and Atmosphere (EA)– Prerequisite 2: Minimum Energy Performance Credit 1: Optimize Energy Performance (1-19 points)	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. 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.	Metal Building 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. Metal Building Insulation helps reduce building energy demand while improving thermal comfort for the occupants. The overall contribution is dependent on the R-value used as well as the U-value of the regionally appropriate design of the building system or construction assembly in which the Metal Building Insulation is used. The project team is responsible for conducting the energy analysis to determine the overall building energy efficiency.
Materials & Resources (MR)– Credit 4: Recycled Content (1-2 points) Credit 5: Regional Material (1-2 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. 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).	Metal Building Insulation products contain 30% pre-consumer and 20% post-consumer recycled content, for an industry leading 50% total recycled content. Recycled content certification by Scientific Certifications Systems: www.scs-certified.com . Metal Building Insulation, made in 5 U.S. manufacturing plants, provide regionally available material manufactured and sourced within a 500 mile radius of project locations in most areas of the country. Metal Building Insulation plant locations are shown in Fig. 1 with approximate 500-mile radii for each plant. Contact 1-800-GET PINK® for additional information.

Table 1 (Continued)

Contribution to LEED Requirement

LEED Credit Category	LEED Requirement	Owens Corning® Product Contribution
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.	Metal Building Insulation is effective in reducing noise transfer through building assemblies and improving room sound quality. Check with local sales representative for product applications.
Credit 4.6: Low Emitting Materials (1-4 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.	Metal Building Insulation is 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 (1 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.	Metal Building Insulation contributes to the excellent performance of the exterior envelope of the project, providing for a comfortable thermal environment. Check with local sales representative for product applications.
Credit 9: Enhanced Acoustical Performance (1 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.	Metal Building Insulation is effective in reducing noise transfer through building assemblies and improving room sound quality. Check with local sales representative for product applications.
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.	Metal Building Insulation products do not promote mold growth as demonstrated in tests done in accordance with ASTM C1338. See individual product data sheets for details.
Innovation in Design (ID)– (1-4 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 1

Owens Corning® Metal Building Insulation Plant Locations



To view other Owens Corning® products that help contribute to LEED certification please visit <http://sustainability.owenscorning.com/> and download Pub. No. 10011611.



OWENS CORNING INSULATING SYSTEMS, LLC
 ONE OWENS CORNING PARKWAY
 TOLEDO, OHIO 43659
 1-800-GET-PINK®
www.owenscorning.com

Pub. No. 10011702-A. Printed in U.S.A. January 2018. The color PINK is a registered trademark of Owens Corning. © 2018 Owens Corning. All Rights Reserved. The GREENGUARD INDOOR AIR QUALITY CERTIFIED mark is registered certification mark used under license through the GREENGUARD Environmental Institute. LEED® is a registered trademark of US Green Building Council. © 2018 Owens Corning. All Rights Reserved.