

# FOAMULAR® XPS Commercial Insulation

Helping you achieve LEED® Certifications



**FOAMULAR®**  
Energy-Saving, Moisture-Resistant XPS Insulation



Owens Corning® offers a number of products to help improve thermal performance, moisture control, durability and sound quality in commercial buildings. This document applies to the LEED 2009 and LEED v4 for Building Design and Construction (BD+C), including New Construction, Core and Shell, Schools, Retail, Data Centers, Warehouses and Distribution Centers, Hospitality, and Healthcare. 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® products can be a component of many of these systems and assemblies. All components within those systems and assemblies should be considered to assess compliance with the LEED® Rating System within a given category.

Owens Corning® FOAMULAR® XPS Commercial Insulation Products contribute to the categories listed below.

## Owens Corning® FOAMULAR® XPS Commercial Products:

- FOAMULAR® 150 Insulation
- FOAMULAR® 250 Insulation
- FOAMULAR® 400 Insulation
- FOAMULAR® 600 Insulation
- FOAMULAR® 1000 Insulation
- FOAMULAR® Insulating Sheathing
- FOAMULAR® CC
- FOAMULAR® PROPINK® Sheathing
- FOAMULAR® CW 15, CW 25
- FOAMULAR® High-R CW Plus
- FOAMULAR® InsulPink®, InsulPink® Z Insulation
- FOAMULAR® LT30, LT40
- FOAMULAR® Insul-Drain® Board

**Table 1**

Credit Category	LEED® v4 Requirement	LEED® 2009 Requirement	Owens Corning® Product Contribution
<b>Energy and Atmosphere (EA)</b>			
Minimum Energy Performance-Prerequisite 2	Whole Building Energy Simulation Performance improvement or Prescriptive Compliance in accordance with ANSI/ASHRAE/IESNA Standard 90.1-2010, Appendix G	Whole Building Energy Simulation Performance improvement dependent on building type, baseline performance according to ANSI/ASHRAE/IESNA Standard 90.1-2007, Appendix G	Insulation helps reduce building energy demand. The overall contribution is dependent on the R-value of insulation used and the regionally appropriate design of the building enclosure. Project team is responsible for conducting energy analysis to determine the overall building energy efficiency.
Optimize Energy Performance	Whole Building Energy Simulation improvement beyond prerequisite or Prescriptive Compliance using ASHRAE 50% Advanced Energy Design.	Improved performance rating compared with baseline building performance rating per ANSI/ASHRAE/IESNA Standard 90.1-2007, Appendix G	
<b>Materials &amp; Resources (MR)</b>			
Building Product Disclosure & Optimization-Environmental Product Declaration	Use at least 20 different permanently installed products sourced from at least five different manufacturers that have third-party certified EPD.	NA	Owens Corning® FOAMULAR® XPS Building Insulations carry third-party certified EPDs. See UL.com/EPD for certifications.
Raw Material Source and Extraction Reporting	Sum of postconsumer recycled content plus ½ the preconsumer recycled content, constitutes 25%, by cost, of the total value of the project. Products sourced within 100 miles of project site valued at 200% of cost.	Sum of postconsumer recycled content plus ½ the preconsumer content by cost, of the total value of the project. Products sourced within 500 miles of project site by cost, of the total materials value.	Owens Corning® FOAMULAR® XPS Insulations are made in 3 U.S. plants and 1 Canadian plant (Figure 1) to provide regionally available material which contains a minimum 20% preconsumer recycled content.

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**Table 1** (continued)

Credit Category	LEED® v4 Requirement	LEED® 2009 Requirement	Owens Corning® Product Contribution
Building Product Disclosure and Optimization - Material Ingredients	Products with chemical inventory to at least 0.1% (1000 ppm); have Declare, Cradle to Cradle (at least Bronze), or Cradle to Cradle Material Health Certification (Bronze or higher) and 90% of materials assessed by weight.	N/A	Owens Corning® FOAMULAR® XPS Insulation products have Cradle to Cradle Material Health Certification (Silver level).
Construction and Demolition Waste Management	Recycle and/or salvage nonhazardous construction and demolition materials. Diversion of at least 50% of the total construction and demolition material; diverted materials include at least three material streams.	Use salvaged, refurbished or reused materials, which constitute at least 5% (1 point) or 10% (2 points), based on cost, of the total value of materials on the project.	FOAMULAR® XPS Insulation products can be removed and reused.
<b>Indoor Environmental Quality (EQ)</b>			
Low Emitting Materials (EQ)	Achieve 100% threshold level of compliance with emissions and content standards for ceilings, walls, thermal, and acoustic insulation per LEED Table 2.	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	Certified for Low Emitting Products: IAQ and GREENGUARD Gold Certified. Additional verification can be found at <a href="http://productguide.ulenvironment.com">http://productguide.ulenvironment.com</a>
Thermal Comfort (EQ)	Design heating, ventilating, and air-conditioning (HVAC) systems and the building envelope to meet the requirements of ASHRAE Standard 55-2010, Thermal Comfort Conditions for Human Occupancy with errata or a local equivalent.	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.	FOAMULAR® XPS Insulation products contribute to a comfortable thermal environment. See individual product data sheets for details, and check with local sales representative for product applications.
Mold Prevention (EQ)	Credit requirements moved to "Thermal Comfort" credit.	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.	FOAMULAR® XPS Insulation products do not support mold growth. While contributing to the overall thermal resistance of assemblies, FOAMULAR® XPS insulation layers can also help manage the dew point location, minimizing moisture condensation in an assembly.

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® FOAMULAR® XPS Insulation Plant Locations**



To view other Owens Corning® products that help contribute to LEED® certification please visit [sustainability.owenscorning.com](http://sustainability.owenscorning.com)



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