

## LEED® 2009 Credits Guide

The CavityComplete® Concrete Masonry Unit (CMU) Wall System brings system solutions to the next level. It's a simplified and streamlined solution from four of the most trusted names in the industry. This guide provides information on how the CavityComplete® Wall System for CMU with Masonry Veneer contributes to helping achieve LEED® 2009 certification.

The LEED® 2009 Green Building Rating System is a set of performance standards for certifying the design and construction of commercial, institutional and high-rise multifamily residential buildings, both public and private. The intent is to promote durable, affordable and sustainable materials and processes during the design and construction of the built environment. This guide covers the rating system for New Construction & Major Renovations, Core & Shell Development, Schools, Retail and Healthcare.

### LEED® 2009 Credits Guide for CavityComplete™ CMU Wall

Product lists and credit contribution by construction type is featured below. The key details the qualifying construction type(s) for each credit.

#### KEY

- ALL Qualifies for ALL construction categories
- A New Construction & Major Renovations
- B Core and Shell Development
- C Schools
- D Retail
- E Healthcare

### Prerequisites and Credits in the LEED® 2009 Green Building Rating System address Seven Topics in addition to Pilot Credits:

- Sustainable Sites (SS)
- Water Efficiency (WE)
- Energy & Atmosphere (EA)
- Materials & Resources (MR)
- Indoor Environmental Quality (EQ)
- Innovation & Design Process (ID)
- Regional Priority (RP)

Prerequisites and Credits for each of the Seven Topics covered in the LEED® Rating System for each building type are project rather than product focused. Therefore, it is the cumulative effect of products integrated within building systems and assemblies and evaluated within the parameters of each of the topics that contribute to the "points" a project accrues during the certification process.

	EA		MR				EQ					
	Minimum Energy Performance	Optimize Energy Performance	Sustainably sourced materials and products	Recycled Content <sup>1</sup>	Regional Materials	Low-Emitting Materials	Low-Emitting Materials — Adhesives and Sealants	Thermal Comfort	Thermal Comfort	Acoustic Environment	Enhanced Acoustical Performance	Mold Prevention
Prerequisite	EAp2											
Credit		EAc1	MRc3	MRc4	MRc5	EQc4	EQc4.1	EQc7	EQc7.1	EQc2	EQc9	EQc10
<b>Insulation Products</b>												
Owens Corning® FOAMULAR® XPS 250 Commercial Insulation	ALL	ALL	E	ABCD	ABCD	CE	ABD	B	ACDE	E	C	C
Owens Corning® Thermafiber® Insulation, Safing™ Mineral Wool Insulation	ALL	ALL		ABCD	ABCD			B	ACDE	E	C	C
<b>Fasteners</b>												
Heckmann Standard joint reinforcing masonry anchors with hook & eye pintle	ALL	ALL		ABCD	ABCD			B	ACDE	E	C	C
<b>Air/Water Barrier, Drainage Plane</b>												
Mortar Net Solutions® MortarNet® with insect barrier mortar dropping collection device	ALL	ALL		ABCD	ABCD			B	ACDE	E	C	C
Mortar Net Solutions® TotalFlash® unitized flashing system	ALL	ALL			ABCD			B	ACDE	E	C	C
Mortar Net Solutions® CompleteFlash® for corners and end dams	ALL	ALL			ABCD			B	ACDE	E	C	C
Mortar Net Solutions® BTL-1 Sealant, flashing sealant	ALL	ALL	E		ABCD	CE	ABD	B	ACDE	E	C	C
Mortar Net Solutions® WeepVent, masonry weep opening	ALL	ALL		ABCD	ABCD			B	ACDE	E	C	C
PROSOCO R-Guard® Cat 5® Air/Water Barrier	ALL	ALL	E		ABCD	CE	ABD	B	ACDE	E	C	C
PROSOCO R-Guard® FastFlash® Liquid flashing membrane	ALL	ALL	E		ABCD	CE	ABD	B	ACDE	E	C	C
PROSOCO R-Guard® AirDam® Air and weather barrier sealant for windows and doors	ALL	ALL	E		ABCD	CE	ABD	B	ACDE	E	C	C

The products listed contribute to meeting requirements of the LEED® Rating system in the categories identified, however, the use of these products does not guarantee attainment of points or prerequisite compliance, nor are any products certified under the LEED® brand. Call 1-800-GET-PINK® to learn more about achieving LEED® certification.

### EA Energy and Atmosphere Credits

#### EA2 and EA1 Minimum and Optimized Energy Performance

The CavityComplete® CMU Wall System, which includes all of the components and details, provides a fully tested wall insulation and air barrier system that demonstrates compliance with national energy codes for all climates and provides multiple insulation levels for cavity and continuous insulation design options to meet higher performance energy efficiency targets and can contribute to meeting energy performance criteria in this category.

### MR Materials and Resources Credits

Individual components of the CavityComplete® CMU Wall System can contribute to meeting MR credits where noted on the above matrix.

### MR Sustainably sourced materials and products

#### MRc3 addresses recycled content or regionally sourced materials AND low emitting materials for wall systems

- Owens Corning® FOAMULAR® XPS 250 Commercial Insulation contains a minimum 20% recycled content, certified by Scientific Certification Systems (all pre-consumer) and is GreenGuard GOLD Certified
- Mortar Net Solutions® BTL-1 Sealant, flashing sealant may be regionally sourced depending on project location and is low emitting
- PROSOCO Products may be regionally sourced depending on project location and they meet requirements for SCS Indoor Advantage GOLD certified for low emissions.

### MR Recycled Content

#### MRc4 addresses recycled content in the product

- Owens Corning® Thermafiber® Mineral Wool Insulation contains a minimum 70% recycled content, certified by ICC Evaluation Service (all pre-consumer)
- Owens Corning® FOAMULAR® XPS 250 Commercial Insulation contains a minimum 20% recycled content, certified by Scientific Certification Systems (all pre-consumer)
- Heckmann standard joint reinforcing masonry anchors with hook and eye pintle contains 98% recycled content (85% post-consumer, 13% pre-consumer)
- Mortar Net Solutions® MortarNet® with insect barrier mortar dropping collection device -- MortarNet® 2.0" is 20% post consumer recycled content; MortarNet® 1.0" is 40% pre consumer recycled content.
- Mortar Net Solutions® WeepVent contains a minimum 50% recycled content (17% post consumer, 33% pre consumer)

### MR Regional Materials

#### MRc3 addresses regionally sourced materials within 500 miles of the project

Call 1-800-GET-PINK® for regional material source information

The CavityComplete® Concrete Masonry Unit (CMU) Wall System excludes the masonry veneer and concrete masonry units. A detailed list of the components is available at [www.CavityComplete.com](http://www.CavityComplete.com).

### EQ Indoor Environmental Quality

#### EQ Low Emitting Materials EQc4 and EQc4.1

- The following components carry the GREENGUARD Gold Certification for low emitting materials:
  - Owens Corning® FOAMULAR® XPS 250 Commercial Insulation
- Mortar Net Solutions® BTL-1 Sealant, flashing sealant meets requirements for low emitting with 67g/l VOC

The following components carry the SCS Indoor Advantage GOLD certification for low emitting materials:

- PROSOCO R-Guard® FastFlash® Liquid flashing membrane
- PROSOCO R-Guard® Cat 5® Air/Water Barrier
- PROSOCO R-Guard® AirDam® Air and weather barrier sealant for windows and doors

#### EQ Thermal Comfort EQc7 EQc7.1

The CavityComplete® CMU Wall System, which includes all of the components and details, provides a fully tested wall insulation and air barrier system that demonstrates compliance with national energy codes for all climates, and provides multiple insulation levels for cavity and continuous insulation design options to meet higher performance energy efficiency targets. It can contribute to meeting the building envelope design criteria necessary to meet ASHRAE Standard 55-2004, Thermal Comfort Conditions for Human Occupancy.

### EQ Design for Acoustics control, Healthcare and Schools

#### EQc2 Design the building envelope composite STC rating based on the 2010 FGI Guidelines for the Categorization of Health Care Facility Sites by Exterior Ambient Sound

#### EQc9 Enhanced acoustic control in schools through design to meet the Sound Transmission Class (STC) requirements of ANSI Standard S12.60-2002, Acoustical Performance Criteria, Design Requirements and Guidelines for Schools

The CavityComplete® CMU Wall System with its mass, insulation components and continuous air space is well suited to reduce sound transmission. These characteristics make the CavityComplete® CMU Wall System effective at resisting the passage of noise commonly in the range of speech, typically measured by the Sound Transmission Class (STC), and lower frequency outdoor noise sources typically measured by the Outdoor-Indoor Transmission Class (OITC). The CavityComplete® CMU Wall System is estimated to achieve STC and OITC ratings in the range of >60.

#### EQc10 Reduce the potential presence of mold in schools through preventive design and construction measures

The CavityComplete® CMU Wall System can contribute to this credit as it is tested and shown to be both an air and weather resistive barrier as a first line of defense from moisture intrusion which can lead to mold growth.