

## LEED® 2009 Credits Guide

The CavityComplete® Steel Stud Wall System brings system solutions to the next level. It's a simplified and streamlined solution from five of the most trusted names in the industry. This guide provides information on how the CavityComplete® Wall System for Steel Stud 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.

### 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.

### LEED® 2009 Credits Guide for CavityComplete® Framed Walls - Steel Stud

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

	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>												
<b>Owens Corning®</b> PROPINK® EcoTouch® Fiberglas™ Insulation Thermal Batts & Rolls with PureFiber® Technology, and EcoTouch® Flame Spread 25 Insulation with PureFiber® Technology	ALL	ALL	E	ABCD	ABCD	CE	ABD	B	ACDE	E	C	C
<b>Owens Corning®</b> Thermafiber® Insulation, FireSpan® and Safing™ Mineral Wool Insulation	ALL	ALL		ABCD	ABCD			B	ACDE	E	C	C
<b>Owens Corning®</b> FOAMULAR® XPS 250 Commercial Insulation	ALL	ALL	E	ABCD	ABCD	CE	ABD	B	ACDE	E	C	C
<b>Fasteners</b>												
<b>Heckmann</b> Pos-I-Tie® Masonry Veneer Anchoring System with ThermalClip® and Pintle Wire Tie	ALL	ALL		ABCD	ABCD			B	ACDE	E	C	C
<b>Rodenhouse</b> Thermal-Grip® ci prong washers w/ Grip-Deck® screws and Thermal-Grip® brick-tie washers (for use with Pos-I-Tie® veneer anchors) to attach FOAMULAR® XPS	ALL	ALL			ABCD			B	ACDE	E	C	C
<b>Air/Water Barrier, Drainage Plane</b>												
<b>Mortar Net Solutions®</b> MortarNet® with insect barrier mortar dropping collection device	ALL	ALL		ABCD	ABCD			B	ACDE	E	C	C
<b>Mortar Net Solutions®</b> TotalFlash® utilized flashing system	ALL	ALL			ABCD			B	ACDE	E	C	C
<b>Mortar Net Solutions®</b> CompleteFlash® for corners and end dams	ALL	ALL			ABCD			B	ACDE	E	C	C
<b>Mortar Net Solutions®</b> BTL-1 Sealant, flashing sealant	ALL	ALL	E		ABCD	CE	ABD	B	ACDE	E	C	C
<b>Mortar Net Solutions®</b> WeepVent, masonry weep opening	ALL	ALL		ABCD	ABCD			B	ACDE	E	C	C
<b>PROSOCO R-Guard®</b> Cat 5® Air/Water Barrier	ALL	ALL	E		ABCD	CE	ABD	B	ACDE	E	C	C
<b>PROSOCO R-Guard®</b> FastFlash® Liquid flashing membrane	ALL	ALL	E		ABCD	CE	ABD	B	ACDE	E	C	C
<b>PROSOCO R-Guard®</b> Joint & Seam Filler	ALL	ALL	E		ABCD	CE	ABD	B	ACDE	E	C	C
<b>PROSOCO R-Guard®</b> PorousPrep Water-based sealer for raw gypsum board edges	ALL	ALL	E		ABCD	CE	ABD	B	ACDE	E	C	C
<b>PROSOCO R-Guard®</b> 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

### EAp2 and EA c1 Minimum and Optimized Energy Performance

The CavityComplete<sup>®</sup> Steel Stud 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<sup>®</sup> Steel Stud 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<sup>®</sup> faced PROPINK<sup>®</sup> EcoTouch<sup>®</sup> Fiberglas<sup>™</sup> Insulation contains a minimum 55% recycled content, certified by Scientific Certification Systems (37% post consumer, 18% pre consumer content) and is GreenGuard GOLD Certified
- Owens Corning<sup>®</sup> unfaced PROPINK<sup>®</sup> EcoTouch<sup>®</sup> Fiberglas<sup>™</sup> Insulation contains a minimum 65% recycled content, certified by Scientific Certification Systems (47% post consumer, 18% pre consumer content) and is GreenGuard GOLD Certified
- Owens Corning<sup>®</sup> FOAMULAR<sup>®</sup> 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<sup>®</sup> 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 they meet requirements for SCS Indoor Advantage GOLD certified for low emissions.

## MR Recycled Content

### MRc4 addresses recycled content in the product

- Owens Corning<sup>®</sup> faced PROPINK<sup>®</sup> EcoTouch<sup>®</sup> Fiberglas<sup>™</sup> Insulation contains a minimum 55% recycled content, certified by Scientific Certification Systems (37% post consumer, 18% preconsumer content)
- Owens Corning<sup>®</sup> unfaced PROPINK<sup>®</sup> EcoTouch<sup>®</sup> Fiberglas<sup>™</sup> Insulation contains a minimum 65% recycled content, certified by Scientific Certification Systems (47% post consumer, 18% preconsumer content)
- Owens Corning<sup>®</sup> Thermafiber<sup>®</sup> Mineral Wool Insulation contains a minimum 70% recycled content, certified by ICC Evaluation Service (all pre-consumer)

- Owens Corning<sup>®</sup> FOAMULAR<sup>®</sup> XPS 250 Commercial Insulation contains a minimum 20% recycled content, certified by Scientific Certification Systems (all pre-consumer)
- Heckmann Pos-I-Tie<sup>®</sup> Masonry Veneer rAnchoring System with ThermalClip<sup>™</sup> and Pintle Wire Tie contains 65% recycled content (45% post consumer, 20% pre consumer)
- Mortar Net Solutions<sup>®</sup> MortarNet<sup>®</sup> with insect barrier mortar dropping collection device -- MortarNet<sup>®</sup> 2.0" is 20% post consumer recycled content; MortarNet<sup>®</sup> 1.0" is 40% pre consumer recycled content.
- Mortar Net Solutions<sup>®</sup> 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<sup>®</sup> for regional material source information

## 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<sup>®</sup> PROPINK<sup>®</sup> EcoTouch<sup>®</sup> Fiberglas<sup>™</sup> Insulation Thermal Batts & Rolls with PureFiber<sup>®</sup> Technology, and EcoTouch<sup>®</sup> Flame Spread 25 Insulation with PureFiber<sup>®</sup> Technology
  - Owens Corning<sup>®</sup> FOAMULAR<sup>®</sup> XPS 250 Commercial Insulation
- Mortar Net Solutions<sup>®</sup> 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<sup>®</sup> Joint-Seam Filler
  - PROSOCO R-Guard<sup>®</sup> FastFlash<sup>®</sup> Liquid flashing membrane
  - PROSOCO R-Guard<sup>®</sup> Cat 5<sup>®</sup> Air/Water Barrier
  - PROSOCO R-Guard<sup>®</sup> PorousPrep Water-based sealer for raw gypsum board edges
  - PROSOCO R-Guard<sup>®</sup> AirDam<sup>®</sup> Air and weather barrier sealant for windows and doors

## EQ Thermal Comfort EQc7 EQc7.1

The CavityComplete<sup>®</sup> Steel Stud 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<sup>®</sup> Steel Stud Wall System with its mass, insulation components and continuous air space is well suited to reduce sound transmission. These characteristics make the CavityComplete<sup>®</sup> Steel Stud 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<sup>®</sup> Steel Stud 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<sup>®</sup> Steel Stud 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.

The CavityComplete<sup>®</sup> Wall System excludes the masonry veneer, steel studs and interior and exterior gypsum board. A detailed list of the components is available at [www.CavityComplete.com](http://www.CavityComplete.com).