

LEED® v4 for Building Design and Construction (BD+C) Credits Guide

The CavityComplete™ 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® v4 certification.

Finalized in 2013, the LEED® v4 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, construction and operation of the built environment.

This credits guide includes information for New Construction, Core & Shell, Schools, Retail, Data Centers, Warehouse and Distribution Centers, Hospitality and Healthcare.

CavityComplete™ products and credit contributions by construction type are featured below. The key details the qualifying construction type(s) for each credit.

KEY

ALL	Qualifies for ALL construction categories	E	Data Centers
A	New Construction & Major Renovations	F	Warehouses and Distribution Centers
B	Core and Shell Development	G	Hospitality
C	Schools	H	Healthcare
D	Retail		

Prerequisites and Credits in the LEED® v4 Building Design and Construction

The LEED® v4 Rating System addresses the following Categories:

- Integrative Project Planning and Design or Integrative Process
- Location and Transportation (LT)
- Sustainable Sites (SS)
- Water Efficiency (WE)
- Energy and Atmosphere (EA)
- Materials & Resources (MR)
- Indoor Environmental Quality (EQ)
- Innovation (IN)
- Regional Priority (RP)

Prerequisites and Credits for each of the categories 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	Building Product disclosure and Optimization — Environmental Product declarations	Building Product disclosure and Optimization — Sourcing of Raw Materials	Minimum Acoustical Performance	Low-Emitting Materials	Thermal Comfort	Acoustic Environment
Prerequisite	EAp2				EQp3			
Credit Number		EAc2	MRc2	MRc3		EQc2	EQc5	EQc9
Insulation Products								
Owens Corning™ FOAMULAR® 250 Extruded Polystyrene (XPS) Rigid Foam Insulation	ALL	ALL	ALL	ALL	C	ALL	ALL	ACEFGH
Owens Corning™ EcoTouch® PINK® FIBERGLAS™ Insulation (unfaced), and EcoTouch® Flame Spread 25 Insulation (faced)	ALL	ALL	ALL	ALL	C	ALL	ALL	ACEFGH
Owens Corning™ Thermafiber® Safing Mineral Wool Insulation	ALL	ALL	ALL	ALL	C		ALL	ACEFGH
Fasteners/Anchors								
Heckmann Building Products Pos-I-Tie® Masonry Veneer Anchoring System with ThermalClip® and Pintle Wire Tie	ALL	ALL		ALL	C		ALL	ACEFGH
Rodenhouse 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® 250 XPS	ALL	ALL			C		ALL	ACEFGH
Air/Water Barrier, Drainage Plane								
Tremco® ExoAir® 230 Vapor-Permeable Air/Water Barrier	ALL	ALL			C	ALL	ALL	ACEFGH
Tremco® Dymonic® 100 Sealant	ALL	ALL			C	ALL	ALL	ACEFGH
Mortar Net Solutions™ TotalFlash® unitized flashing system with Tremco® ExoAir® TWF flashing membrane	ALL	ALL			C		ALL	ACEFGH
Mortar Net Solutions™ MortarNet® with Insect Barrier™ mortar dropping collection device	ALL	ALL		ALL	C		ALL	ACEFGH

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. This guide considers the contribution to credit achievement of the products working together as a system, except for the MR and EQ low emitting credits, where specific product components are noted as contributors to the credit. Call 1-844-CAV-COMP to learn more about achieving LEED® certification.

EA Energy and Atmosphere Credits

EA_{p2} and EA_{c2} Minimum and Optimized Energy Performance

The CavityComplete™ Wall System provides a completely tested wall insulation, water management and air barrier system. It complies 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

MR_{c2} and MR_{c3} Product Disclosure and Optimization

Individual components of the CavityComplete™ Wall System can contribute to meeting MR credits where noted on the product credits table.

- Owens Corning™ insulation products listed have Environmental Product Declarations (EPDs)

As listed below, several components have recycled content levels:

- Owens Corning™ FOAMULAR® 250 XPS Insulation contains a minimum 20% recycled content, certified by Scientific Certification Systems (all pre-consumer)
- Owens Corning™ EcoTouch® Flame Spread 25 (faced) Insulation contains a minimum 58% recycled content, certified by Scientific Certification Systems (36% post-consumer, 22% pre-consumer content)
- Owens Corning™ EcoTouch® PINK® FIBERGLAS™ Insulation (unfaced) contains a minimum 65% recycled content, certified by Scientific Certification Systems (41% post-consumer, 24% pre-consumer content)
- Owens Corning™ Thermafiber® Mineral Wool Insulation contains a minimum 70% recycled content, certified by ICC-ES (all pre-consumer)
- Heckmann Building Products Pos-I-Tie® Masonry Veneer Anchoring System with ThermalClip® and Pintle Wire Tie contains 65% recycled content (45% post-consumer, 20% 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

EQ Indoor Environmental Quality Credits

EQ_{p3} Minimum Acoustic performance for Schools, EQ_{c9} Design classrooms or workspaces with effective acoustic controls

The CavityComplete™ Wall System with its mass, insulation components and continuous air space is well suited to reduce sound transmission. These characteristics make the CavityComplete™ 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™ Wall System for Steel Stud with Masonry Veneer is estimated to achieve STC and OITC ratings in the range of >45 to >60 depending on wall system design details.

EQ_{c2} Low Emitting Materials

The following components carry the GREENGUARD Gold Certification for low emitting materials:

- Owens Corning™ FOAMULAR® XPS 250 Rigid Foam Insulation
- Owens Corning™ EcoTouch® Insulation and EcoTouch® Flame Spread 25 Insulation
- Tremco® ExoAir® 230 Vapor-Permeable Air/Water Barrier
- Tremco® Dymonic® 100 Sealant

EQ_{c5} Design to meet the requirements of ASHRAE Standard 55–2010, Thermal Comfort Conditions for Human Occupancy

The CavityComplete™ Wall System provides a completely tested wall insulation, water management and air barrier system that complies 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 55-2010, Thermal Comfort Conditions for Human Occupancy.

The CavityComplete™ 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.