

LEED® - POTENTIAL CREDITS FOR THERMASTEEL PANEL USE:

It is important to note that the below scoring is meant for reference only. Actual project scoring will depend on the individual rater, contractor, and other factors.

RESIDENTIAL PROJECTS: LEED for HOMES

EA - ENERGY and ATMOSPHERE

PERFORMANCE PATH

EA 1: Optimize Energy Performance *Maximum 34 Points*

Using the Performance Pathway, the building is awarded points based on overall energy performance, measured by a HERS index. A home's HERS index is calculated by a certified energy rater and takes into account the insulation, results from a blower door test, HVAC, lighting, and other relevant information. LEED points are allocated on a scale ranging from 0 points for ENERGY STAR and 34 points for a net zero energy home. Homes must meet ENERGY STAR requirements as a prerequisite for this credit.

PRESCRIPTIVE PATH

EA 2.1: Insulation *Maximum 2 Points*

Contractors must install insulation that meets (or exceeds) the requirements of the 2004 International Energy Conservation Code (IECC), and are given points for exceeding this standard. Structurally Insulated Panels are listed as an exception to this requirement, and must alternately pass a visual inspection using the ENERGY STAR SIP Visual Inspection Form.

EA 3: Air Filtration *Maximum 3 Points*

Well-sealed, air-tight ThermaSteel homes have a proven track record of achieving extremely low levels of air filtration. Homes are awarded points based on their blower door test results, with a maximum of 3 points possible.

MR - MATERIALS and RESOURCES

MR 1.4: Framing Efficiencies *Maximum 3 Points*

The project is given one point for each SIP system used: walls, roofs, and floors. ThermaSteel panels are manufactured for all three locations.

MR 1.5: Off-Site Fabrication *Maximum 4 Points*

This credit can be awarded to homes with pre-cut SIPs in the walls, roof, and floor. If SIPs are cut on site, or only used in walls and/or roof, no point should be awarded for this credit; points may be awarded in MR 1.4 instead.

MR 2.2 Environmentally Preferable Materials *Maximum 2 Points*

SIPs should be treated as two different components - framing and insulation. If the requirements for either or both components are met, points should be awarded accordingly. (MR 03-04)

MR 3.2: Construction Waste Reduction *Maximum 3 Points*

Using prefabricated SIP panels decreases the amount of on-site construction waste, helping contractors qualify for waste reduction points. Waste reduction points are given on a scale ranging from 0 to 3 depending on the amount of waste generated per square foot of the home.

COMMERCIAL PROJECTS

ThermaSteel panels are used not only in residential projects, but also in commercial projects. Below is the potential credits for using ThermaSteel panels in your commercial projects when LEED 2009 for New Construction and Major Renovations rating system is used. However, it must be understood that the variables in commercial construction varies from one project to another vastly. Therefore, if you have a commercial project that seeks LEED certification, we can help you on a project-basis.

LEED 2009 (version 3.0) NEW CONSTRUCTION and MAJOR RENOVATIONS

It is important to note that the below scoring is meant for reference only. Actual project scoring will depend on the individual rater, contractor, and other factors.

EA - ENERGY and ATMOSPHERE

EA 1: Optimize Energy Performance *Maximum 19 Points*

ThermaSteel wall panels are ENERGY STAR™ compliant. The ThermaSteel panel provides not only structural integrity, but excellent insulation properties as well. The EPS component of the panel is solid (except where wire chases are incorporated) and does not provide voids or allow air movement through the walls. In a study conducted by Energy scientists at the Oak Ridge National Laboratory* the stated RValue of virtually every product on the market evaluated in the "real world" of thermal breaks such as, corners, windows, and doors and stud walls was drastically reduced... EXCEPT Structural Insulated Panels. For example: A 2" x 6" stud wall 24" on center with R-19 fiberglass batts tested out with an R-Value of 13.7. A Structural Insulated Panel wall tested at R-21.7. That means that the Structural Insulated Panels out performed a 2" x 6" stud wall by 58%. *ASHRAE Journal March 1996, Christian and Kosny

MR - MATERIALS and RESOURCES

MR 2: Construction Waste Management *Maximum 2 Points*

ThermaSteel panels produce little to no waste on the job site.

MR 4: Recycled Content *Maximum 2 Points*

ThermaSteel panels are assemblies that are made of steel studs and EPS infill. Steel is "Green" because it contains a minimum of 25% recycled steel and is 100% recyclable. The recycled content value of a material assembly is determined by weight. The recycled fraction of the assembly is then multiplied by the cost of assembly to determine the recycled content value.

MR 5: Regional Materials *Maximum 2 Points*

Use building materials or products that have been extracted, harvested or recovered, as well as manufactured, within 500 miles of the project site for a minimum of 10% or 20%, based on cost, of the total materials value.

RP - REGIONAL PRIORITY

RP 1: Regional Priority *Maximum 4 Points*

ID - INNOVATION IN DESIGN

ID 1: Innovation in Design *Maximum 1 Point*

REFERENCES:

http://www.thermocoremo.com/sip_visual_inspection_form.pdf (ENERGY STAR SIP Visual Inspection Form)

<http://www.usgbc.org/ShowFile.aspx?DocumentID=3638> (LEED for Homes "Search SIP")

<http://www.usgbc.org/ShowFile.aspx?DocumentID=8868> (LEED 2009 for New Construction and Major Renovations)

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