Metal Design Systems, Inc.

Leadership in Energy and Environmental Design (LEED®) Guidelines

This guideline provides a summary of the USGBC's[i] new LEED 2009 green building rating program. It offers an overview of how metal products from Metal Design Systems, Inc. can count toward a LEED certified building project.

A wall panel system is only one component of an integrated building design program. LEED takes into account the building envelope and interior design technologies that affect the energy usage, environmental impact, and social quality of the design, construction and operation of a building.

What is LEED 2009?

The LEED 2009 Green Building Rating System for New Construction and Major Renovations is a set of performance standards for certifying the design and construction of commercial or institutional buildings and high-rise residential buildings of all sizes, both public and private. The intent is to promote healthful, durable, affordable, and environmentally sound practices in building design and construction.

Prerequisites and credits in the LEED 2009 for New Construction and Major Renovations address 7 topics:

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

LEED 2009 now contains rating programs for Green Building Design and Construction, Green Interior Design and Construction, and Green Building Operations and Maintenance. This guideline is based on the LEED 2009 Green Building Design and Construction Version.

To earn LEED certification, a building must meet certain requirements and benchmarks related to the building's performance. Points are awarded for credits in each of the seven key areas listed above. Visit www.usgbc.org for additional information.

How does Metal Design Systems, Inc. contribute to a LEED 2009 Certified New Building Project?

MATERIALS & RESOURCES

MR Credit 4: Recycled Content 1-2 Points

MR Credit 4.1: One point is awarded if the materials selected for the project have a recycle content of 10% based on total value. 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. For material assemblies, such as cladding systems, the recycled content value shall also be determined by weight.

MR Credit 4.2: One point is awarded if the materials selected for the project have a recycle content of 20%. The recycle content is determined using the same method as noted for Credit 4.1

Note: The total recycle content of the panels should be combined with the other components of the cladding system to determine the contribution of the wall cladding to the overall project point qualification[ii]

MATERIALS & RESOURCES

MR Credit 5: Regional Materials 1-2 Points

MR Credit 5.1: One point. Regional Materials 10%
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. If only a fraction of a product or material is extracted, harvested, or recovered and manufactured locally, then only that percentage (by weight) can contribute to the regional value.[iii]

MR Credit 5.2: One point. Regional Materials 20%
The same method as noted for Credit 5.1.

INDOOR ENVIRONMENTAL QUALITY

IEQ Credit 4.2: Low-Emitting Materials 1 point

IEQ Credit 4.2: One point. The intent of this credit is to reduce the quantity of indoor air contaminants that are odorous, irritating and/or harmful to the comfort and well-being of installers and occupants.

All coatings applied to the panels are factory applied using a coating line with an in line regenerative thermal oxidizer, which eliminates the release of the volatile organic compounds (VOC) content of the coating. By factory applying coatings the need for field painting and the accompanying VOCs are eliminated.[ii]

INNOVATION IN DESIGN

ID Credit 1.1 to 1.4: 4 points

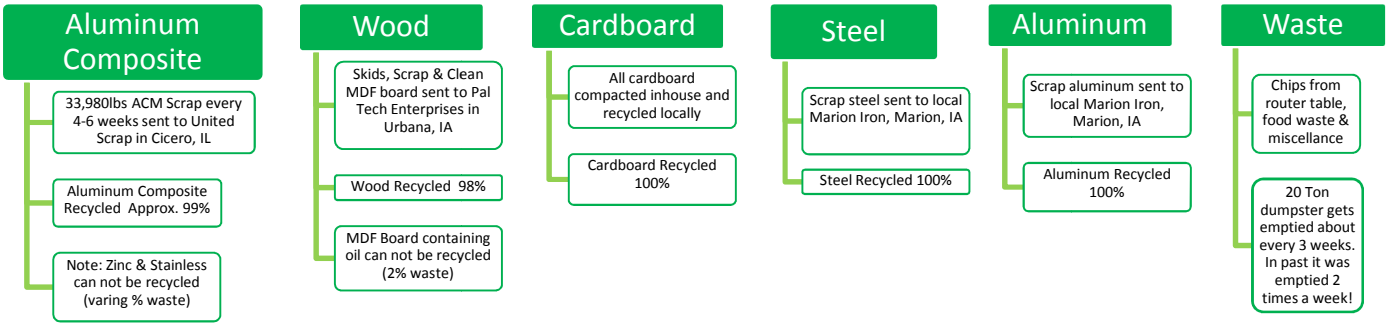
ID Credit 1.1 to 1.4: Four points are available by providing design teams and projects the opportunity to achieve exceptional performance above the requirements set by the LEED Green Building Rating System and/or innovative performance in Green Building categories not specifically addressed by the LEED Green Building Rating System.

The high recycle content of the aluminum panels can support the projects exceeding the recycle content required in MR Credit 4.2, thereby qualifying for an Innovation in Design credit. The aluminum panels also provide a highly durable and long lifetime cladding option.

CONCLUSION

The design team made up of architects, facility managers, construction managers, designers and owners need to integrate all products and processes in a whole building approach in their efforts to create a sustainable building. The LEED program is a tool to achieve this. Metal Design Systems, Inc. products can play a role in any building project achieving LEED certification.

In addition, Metal Design Systems, Inc. company waste reduction breakdown follows:



Contact us at **www.metaldesignsystems.com** or (319)362-7454 for more information.

For additional information on LEED certification process including LEED-Online, Credit Interpretation Requests and Rulings, Appeals, and Fees please see the LEED Reference Guide for Green Building Design and Construction, 2009 Edition and visit www.usgbc.org or www.gbci.org.

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[ii] http://www.alpolic-usa.com/pages/downloads.php
[iii] http://www.usgbc.org/ShowFile.aspx?DocumentID=5546