



LEED® with Custom Stud

INTRODUCTION

The US Green Building Council (USGBC) LEED® program is the nationally accepted benchmark for the improvement of sustainable design, environmental performance, and economic impact for commercial buildings.

Steel framing is recognized for its important environmental attributes: Particularly its consistent recycled content and reclamation rate. Custom Stud Inc. supports the increasing demand for sustainable green buildings through the use of innovative practices, standards, materials, and technologies.

LEED® CREDIT MR 2.1 and MR 2.2 – Construction Waste Management

Intent

“Divert construction and demolition debris from disposal in landfills and incinerators. Redirect recyclable recovered resources back to the manufacturing process. Redirect reusable materials to the appropriate sites.”

Credit Requirements – (1 point)

Recycle or salvage at least 50% of non-hazardous construction and demolition materials.
75% for Credit 2.2.

Opportunity - *Determined by the Contractor*

Custom Stud Inc. sections are manufactured from cold-formed steel framing. 100% of cold-formed steel framing members can be recycled. The specific contribution to LEED® Credits MR 2.1 and MR 2.2 will vary by project and must be determined by the Contractor.

Calculations

Calculations are by weight or volume for total recycled and diverted waste over the total construction waste from a project. These calculations are generally performed and submitted by the Contractor.



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LEED® CREDIT MR 4.1 and MR 4.2 – Recycled Content Credit

Intent

“Increase demand for building products that incorporate recycled content materials, thereby reducing impacts resulting from extraction and processing of virgin materials.”

Credit Requirements – (1 point)

“Use materials with recycled content such that the sum of post-consumer recycled content plus one-half the pre-consumer content constitutes at least 10% of the total value of materials on the project.” 20% for the Credit 2.2. (1 point in addition to 4.1) An additional point (totaling 3 points) is available under **the Innovation in Design (ID)** credit if the project has a total recycled content value greater than 30%.

Steel Recycled Content Value = (Value of Steel Product)(Post-Consumer % + ½ Pre-Consumer %)

Opportunity - 28.9% Minimum Recycled Content

Custom Stud sections are manufactured from cold-formed steel framing that has a high percentage of recycled content. Larger recycled content numbers from the SSMA certified sections contribute to the goal for the project, since cost of materials is multiplied by recycled content.

Recycled content is reported based on data from The Steel Recycling Institute (SRI).

SRI has simplified the process by providing recycled content data for the sheet steel products industry. The USGBC vetted the SRI data and the Basic Oxygen Furnace data can be conservatively applied to all Custom Stud products. These numbers easily result in a positive net contribution to the 10% and 20% goals of MR 4.1 and MR 4.2. (Steel Recycling Institute, March 2009 “Steel Takes LEED with Recycled Content) www.recycle-steel.org.

Post-consumer Recycled content = 25.5%

Pre-consumer Recycled content = 6.8%

Formula: Steel Recycled Content Value = (Value of Steel Product)(**25.5** % + ½ **6.8** %) =

28.9% recycled content.

“The use of steel building products enables builders and designers to earn points under Credit 4.1 and 4.2 (as required by LEED Version 2.1). The recycled content value of the steel produced in facilities that use basic oxygen furnace (BOF) technology exceeds the 5% and 10% goals in LEED. The same is true for steel produced in facilities that use electronic arc furnace (EAF) technology.” (Steel Framing Alliance, Vol. 1 Issue 4)

www.steel framing.org/PDF/Issue Papers/green.pdf



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LEED® CREDIT MR 5.1 and MR 5.2 – Regional Materials

Intent

“Increase demand for building materials and products that are extracted and manufactured within the region, thereby supporting the use of indigenous resources and reducing the environmental impacts resulting from transportation.”

Credit Requirements - (1 point)

“10% of materials (based on cost) extracted, harvested or recovered, as well as manufactured, within 500 miles of the project site.” 20% for Credit MR 5.2 (1 Point in addition to 5.1).

Opportunity - Project Site Dependent - contact Custom Stud Sales

Custom Stud is located in the upper Midwest, placing us in near proximity to major Raw Material extraction. That being said, much of our steel is then Manufactured within 500 miles of our manufacturing facility in Lakeville MN. Where is Your project site – 500 miles or less? There is a good chance the steel will qualify for the 500 mile requirement for MR 5.1 and MR 5.2. Contact Custom Stud with project specific information.



Where is Your Project Site?

All the statements contained in this document are based on Custom Stud’s understanding of:

[SSMA Technical Notes: LEED® 2.2 Credits for Cold-Formed Steel Framing Manufacturers](#)
[The Steel Recycling Institute “Steel Takes LEED® with Recycled Content” letter, 03/2009](#)
[Steel Framing Alliance Issue Paper “Steel Is Green: Recycled & Recyclable” Vol 1 Issue 4](#)

Industry Links

www.sma.com - Steel Stud Manufacturers Association

www.recycle-steel.org - Steel Recycling Institute

www.steel framing.org - Steel Framing Alliance