



| v3 - LEED 2008

Material-efficient framing

MRC1 | Possible 5 points

Glossary

Intent

Optimize the use of framing materials.

Requirements

Prerequisites

1.1 Framing order waste factor limit. Limit the overall estimated waste factor to 10% or less. If the waste factor on any portion of the framing order exceeds 10%, calculate the overall waste factor as shown in **Table 1**.

Waste factor is defined as the percentage of framing material ordered in excess of the estimated material needed for construction.

Table 1. Sample Framing Order Waste Factor Calculation

Framing component	Total cost	Waste factor	Waste cost
Random lengths	\$1,000	15%	\$150
Studs	\$2,000	5%	\$100
Beams and headers	\$500	20%	\$100
Roof deck	\$2,000	0%	\$0
Wall sheathing	\$0	0%	\$0
Rafters	\$2,000	0%	\$0
Ceiling joists	\$1,500	10%	\$150
Cornice work	\$3,000	10%	\$300
TOTAL	\$12,000		\$1,000
Overall waste factor (waste \$ / cost \$)			8.3%

Credits

1.2 Detailed framing documents (1 point). Prior to construction, create detailed framing plans or scopes of work and accompanying architectural details for use on the job site. Indicate the specific locations, spacing, and sizes of all framing members in the floors, walls, roof, and ceiling (if different from the roof).

1.3 Detailed cut list and lumber order (1 point). The requirements in MR 1.2 must be met to earn this credit. Prior to construction, create a detailed cut list and lumber order that corresponds directly to the framing plans and/or scopes of work.

AND/OR

1.4 Framing efficiencies (maximum 3 points). Implement measures from **Table 2**.

OR

1.5 Off-site fabrication (4 points). Use either of the following alternatives to on-site framing:

1. Panelized construction. Wall, roof, and floor components are delivered to the job site preframed.
2. Modular, prefabricated construction. All principal building sections are delivered to the job site as prefabricated modules.

Table 2. Efficient Framing Measures

Measure	Points
Precut framing packages	1.0
Open-web floor trusses	1.0
Structural insulated panel (SIP) walls	1.0
SIP roof	1.0
SIP floors	1.0
Stud spacing greater than 16" o.c.	1.0
Ceiling joist spacing greater than 16" o.c.	0.5
Floor joist spacing greater than 16" o.c.	0.5
Roof rafter spacing greater than 16" o.c.	0.5
Implement any 2 of the following: <ul style="list-style-type: none"> ° Size headers for actual loads ° Use ladder blocking or drywall clips 	0.5

Note: Alternative measures not listed in Table 2 may be eligible to earn points if they save comparable amounts of framing material. A formal credit interpretation request with full justification of any alternative measure's potential savings must be submitted by the Provider to USGBC.