

Contribution of Glasswool to LEED Rating

LEED Credit Category	LEED Credits Available	Glasswool Contribution
Energy and Atmosphere - Optimize Energy Performance	1-10 points depending on percent reduction in energy used.	Helps to reduce building energy consumption by 20 to 30%.
Material and Resource - Recycled Content	1-2 points depending on post consumer, post industrial recycled content.	Glasswool can be recycled. In house scrap wool is being recycled.
Material and Resource - Regional / Local Manufacturing	1-2 points depending on whether 20% of total building material is locally manufactured (within 800 KM radius).	Two manufacturing units in North (U.P) and West (MH) can help to provide these points.
Innovation and Design Process	1-4 points depending on the innovation applied.	Acoustic benefit in buildings, fiberglass wool as concrete reinforcement.

NOTE: No individual product can accrue LEED points. For detailed evaluation please consult a LEED Accredited professional.

Complying with LEED India NC and ECBC, 2007

LEED India NC version 1.0 requires compliance with the Energy Conservation Building Code (ECBC) for a Green Building Project.

The illustrations below show how Glasswool can be applied with other green building materials to achieve the required transmittance value (U-value) so as to comply with ECBC 2007.

24 Hour Use Building and Daytime Use Building		
Climate Zone	Specified U Value (W/sq.m.k)	Recommended Insulation with 150mm Thick AAC Block
Composite Hot & Dry Warm & Humid	0.44	System Thickness 200mm GW 24kg/m ³ X 50mm: R-1.51 AAC X 150mm: R-0.94 U-0.41

Note: Lower U values / Higher R values means better thermal insulation.

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Glasswool - A Green Building Material

The use of Glasswool for the thermal insulation of external walls and ceilings has been shown to reduce energy consumption by 20% to 30%. Glasswool is manufactured from widely available and renewable raw materials and provides environmental benefits in terms of resource saving and energy saving in every stage from pre-manufacturing to end use. A comprehensive review is provided below:

Product Life Cycle	Analysis / Review
Pre-manufacturing	<ul style="list-style-type: none"> • Primary raw material: Sand, which is abundant and renewable in nature. • No raw material comes from any derivative of fossil fuel. • Secondary raw material is recycled glass.
Manufacturing	<ul style="list-style-type: none"> • Energy saving vs. energy used: The life cycle analysis of Glasswool products shows that the energy saved during the use of products may be around 700 times higher than the energy used in their production. • In house glass wool scrap is recycled.
Distribution and Packaging	<ul style="list-style-type: none"> • Compressed vacuum packaging in roll form requires less transportation volume without affecting the specified thickness required at the time of application. • Less packaging means less scrap. • Less requirement of transportation energy.
Product Characteristic	<ul style="list-style-type: none"> • High thermal resistance. • Non combustible and fire safe material. • Non corrosive. • No impurities, no shot content, no sulphur, no chloride. • No settling. • Totally inert. • Resistant to mold / fungal growth.
Use, Re-use and Maintenance	<ul style="list-style-type: none"> • No maintenance required. • Can be reused. • High life expectancy.
Waste Management	<ul style="list-style-type: none"> • Can be reclaimed and recycled into new product.