## LEED® for Homes Rating System

Credit Opportunities for Fiber Glass, Rock Wool and Slag Wool Insulation Products

Insulation is the most economical solution for building energy efficiency in any climate<sup>1</sup>







www.naima.org www.SimplyInsulate.com



## **LEED®** Prerequisites and Credits

CATEGORY	FIBER GLASS, ROCK WOOL & SLAG WOOL CONTRIBUTION	POINTS
Energy & Atmosphere		
Prerequisite EA 1.1: Optimize Energy Performance Meet the performance requirements of an ENERGY STAR labeled home.	Insulation is a key part of making a home energy efficient. Fiber glass, rock wool and slag wool insulation are some of the most	Required
EA Credit 1.2: Exceptional Energy Performance Exceed the performance of ENERGY STAR for Homes. Use equations relating the Home Energy Standards (HERS) index to the appropriate number of LEED points.	cost-efficient materials available. These insulation products come in a variety of forms and densities (batts, rolls, blown-in) making them ideal for ENERGY STAR design requirements.	Maximum 34 Points
Prerequisite EA 2.1: Basic Insulation Insulation must meet or exceed the R-value requirements of the 2004 IECC; Grade II installation specifications; and be verified by an energy rater or Green Rater.	Fiber glass, rock wool and slag wool insulation – when designed as thermal envelope systems and properly installed with an air barrier for joints, seams, and penetrations – will reduce air and moisture	Required
<b>EA Credit 2.2: Enhanced Insulation</b> Insulation that exceeds R-value requirements of the 2004 IECC by at least 5% and meets Grade I installation specifications.	infiltration and deliver optimal thermal protection to the home.	2 Points
Prerequisite EA 5.1A: Forced-Air Systems Reduced Distribution Losses Use at least R-6 insulation around ducts in unconditioned spaces. Use extra insulation around ducts in exterior walls.	Fibrous glass is used as thermal and acoustical insulation in forced air heating, ventilating, and air conditioning systems. Properly installed fibrous glass duct	Required
Prerequisite EA 5.1B: Nonducted HVAC Systems Reduced Distribution Losses Use at least R-3 insulation around distribution pipes in unconditioned spaces.	systems, duct liners, and duct wraps also help limit duct air leakage.	Required
<b>EA Credit 6.2: Very High Efficiency HVAC</b> Piping designed as part of a heat pump system must have R-4 insulation or greater.	Insulation prevents heat transfer which ensures high efficiency and low-operating costs for heat pump systems.	Maximum 4 Points
<b>EA Credit 7.1: Efficient Hot Water Distribution</b> Central manifold trunk must be insulated to at least R-4.	Insulation keeps cold-water pipes from sweating in warm weather and will reduce heat loss from hot-water pipes too. Insulated	2 Points
<b>EA Credit 7.2: Pipe Insulation</b> All domestic hot water piping shall have R-4 insulation.	hot-water pipes greatly reduce heat loss and saves money on utility bills.	1 Point

CATEGORY	FIBER GLASS, ROCK WOOL & SLAG WOOL CONTRIBUTION	POINTS		
Materials & Resources				
MR Credit 2.2: Environmentally Preferable Products Insulation in roofs, floors and walls a) Must comply with the State of California, DHS, "Practice for Testing of VOCs From Building Materials Using Small Chambers." b) Recycled content of 20% or more. c) Extracted, processed and manufactured within 500 miles of the home.	Fiber glass insulation contains upward of 40% recycled glass. Slag wool contains approximately 70% recycled content. ISO 14001 certified or equivalent fiber glass, rock wool and slag wool manufacturing facilities located throughout North America contribute to points. Many areas in the U.S. and Canada are within 500 miles of a fiber glass or rock wool and slag wool plant. Most fiber glass and rock wool and slag wool insulation plants are in close proximity to their raw and secondary material sources.	0.5 Points		
Indoor Environmental Quality				
EQ Credit 1: ENERGY STAR with Indoor Air Package Improve the overall quality of a home's indoor environment by specifying environmentally preferred products with low emissions and local production (0.5 points each, max. 8 points). See M.R. Credit 2.2: Environmentally Preferrable Products.	Fiber glass, rock wool and slag wool insulation contains no added formaldehyde or they are certified for low emissions by a third party program such as GREENGUARD Environmental Institute's Children and Schools Certification Program or the Scientific Certifications System's (SCS) Indoor Advantage Gold Certification. They may also qualify for local production credit.	Maximum 13 Points		
Innovation & Design Process				
ID Credit 1.3: Innovative or Regional Design Minimize the environmental impact of the home by incorporating additional green design and construction measures such as noise control that contributes to environmental quality and is beyond current LEED for Homes considerations.	Fiber glass, rock wool and slag wool insulation can be used in innovative designs that have both environmental and health benefits. One consideration is in the area of noise control. Congressional findings conclude that noise jeopardizes the health and welfare of the nation's population and impacts the environment. <sup>2</sup> These insulation products can improve indoor acoustic comfort by absorbing noises from exterior sources, interior sources, mechanical heating and cooling systems and from adjoining units. <sup>3</sup>	1 Point		

<sup>&</sup>lt;sup>1</sup> A Cost Curve for Greenhouse Gas Reductions, The McKinsey Quarterly, Number 1, 2007.

**DISCLAIMER:** NAIMA can not and does not guarantee compliance with LEED through the use of its products. For guidance on qualifying for LEED, work with a LEED AP consultant.

<sup>&</sup>lt;sup>2</sup> Noise Control Act, 42, U.S. C. § 4901, The Bureau of National Affairs, Inc., (1996).

<sup>&</sup>lt;sup>3</sup> Final Report for the *Aircraft Noise Insulation, Noise Insulation Project For San Francisco International Airport*, Phase One Pilot Project, FAA, FAA funded and prepared for the City of South San Francisco, Earth Metrics Inc., Burlingame, Calif., July 1986; C.M. Hogan and Ballard George, *Pilot Noise Residential Insulation Program*, San Jose International Airport, (1983).

NAIMA Member	<b>Insulation Products</b>	<b>NAIMA Member</b>	<b>Insulation Products</b>
Aislantes Minerales, S.A. de C.V. Descartes #104, Neuva Anzures 11590 D.F., México Tel: 52-55-1036-0640 Fax: (52 + 55) 5203-4739 www.rolan.com	<ul> <li>Mineral wool pipe insulation</li> <li>Loose mineral wool insulation</li> <li>Mineral wool insulation boards</li> <li>OEM insulation fabrication</li> </ul>	Johns Manville 717 17th Street P.O. Box 5108 Denver, CO 80217 800-654-3103 www.jm.com	<ul> <li>Fiber glass building insulations</li> <li>Fiber glass pipe and board insulations</li> <li>Fiber glass duct insulations</li> <li>Fiber glass metal building insulations</li> <li>Fiber glass aerospace insulations</li> </ul>
Amerrock Products LP # 1 Jackrabbit Road P.O. Box C Nolanville, Texas 76559 800-762-9665 www.amerrock.com	<ul> <li>Mineral wool blowing wool insulation</li> <li>Mineral wool foundation insulation</li> <li>Horticultural wool</li> </ul>	Knauf Insulation One Knauf Drive Shelbyville, IN 46176 800-825-4434 www.knaufinsulation.us	<ul> <li>Fiber glass building insulations</li> <li>Fiber glass pipe and board insulations</li> <li>Fiber glass duct insulations</li> <li>Fiber glass metal building insulations</li> </ul>
CertainTeed Corp. 750 E. Swedesford Road Valley Forge, PA 19482 800-233-8990 www.certainteed.com	<ul> <li>Fiber glass building insulations</li> <li>Fiber glass board insulations</li> <li>Fiber glass duct insulations</li> <li>Fiber glass metal building insulations</li> </ul>	Owens Corning One Owens Corning Parkway Toledo, OH 43659 800-GET-PINK www.owenscorning.com	<ul> <li>Fiber glass building insulations</li> <li>Fiber glass pipe and board insulations</li> <li>Fiber glass duct insulations</li> <li>Fiber glass metal building insulations</li> </ul>
FiberTEK Insulation 925 South 4400 West Salt Lake City, UT 84104 801-973-9423 www.fibertekinsulation.com	<ul> <li>Fiber glass batt insulations</li> <li>Fiber glass blow-in and heavy-density loose-fill insulation</li> </ul>	Rock Wool Manufacturing Co. 203 7th Street, N.E. Leeds, AL 35094 205-699-6121 www.deltainsulation.com	<ul> <li>Slag wool building insulations</li> <li>Slag wool pipe and board insulations</li> <li>Slag wool commercial insulations</li> </ul>
Fibrex Insulations, Inc. 561 Scott Road Sarnia, Ontario Canada N7T 7L4 800-265-7514 www.fibrex.org	<ul> <li>Rock wool board, pipe and blanket insulations</li> <li>Rock wool roof insulations</li> <li>Rock wool marine insulations</li> </ul>	Roxul, Inc. 420 Bronte St., South, Unit 105 Milton, Ontario Canada L9T 0H9 800-265-6878	<ul> <li>Rock wool building insulations</li> <li>Rock wool pipe, board and blanket insulations</li> <li>Rock wool roof insulations</li> </ul>
Guardian Building Products, Inc. P.O. Box 207 Greenville, SC 29602 800-569-4262 www.guardianbp.com	<ul> <li>Fiber glass insulation products for residential, commercial and light industrial application</li> <li>Faced and unfaced batts and rolls</li> </ul>	Sloss Industries Corp. 3500 35th Avenue North Birmingham, AL 35207 205-808-7803 www.sloss.com	<ul> <li>Slag wool insulations (bulk)</li> <li>Slag wool ceiling tiles</li> <li>Slag blowing wool insulation</li> </ul>
Industrial Insulation Group, LLC 2100 Line Street Brunswick, GA 31520 912-264-6372 www.iig-Ilc.com	<ul> <li>Mineral wool board, pipe and blanket insulations</li> <li>Mineral wool marine insulations</li> <li>Mineral wool commercial insulations</li> <li>Mineral wool blowing insulation</li> </ul>	Thermafiber, Inc. 3711 Mill Street Wabash, IN 46992 888-834-2371 www.thermafiber.com	<ul> <li>Slag wool fire-acoustical-thermal spray systems</li> <li>Commercial building insulation</li> <li>Slag wool industrial and OEM fibers and insulations</li> <li>Slag wool residential insulation</li> </ul>
Isolatek International 41 Furnace Street Stanhope, NJ 07874 973-347-1200 www.isolatek.com	<ul> <li>Slag wool insulations (bulk)</li> <li>Slag wool fire protection (sprayed)</li> <li>Slag wool building insulations (sprayed)</li> </ul>	USG Interiors, Inc. 125 S. Franklin Street Chicago, IL 60606 312-606-4000 www.usg.com	<ul> <li>Slag wool ceiling tiles</li> <li>Mineral fiber board</li> </ul>



## **About NAIMA**

NAIMA is the association for North American manufacturers of fiber glass, rock wool, and slag wool insulation products. Its role is to promote energy efficiency and environmental preservation through the use of fiber glass, rock wool, and slag wool insulation, and to encourage the safe production and use of these materials.



Celebrating 75 Years

of Energy Efficiency

For more information, contact:



BUILD/NG COUNCIL

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