



ACFoam®-II Polyiso Roof Insulation can contribute in many ways to earn LEED™ rating points.

The US Green Building Council announced the first standard for Green Buildings. LEED, Leadership in Energy and Environmental Design Green Building Rating System, represents the construction industry's definition for what constitutes a "green" building. LEED requires building owners to accumulate credits for any number of design strategies. Credits or points are earned for successful accomplishment of the measures, and a minimum of 38% of the available points is required to achieve the minimum LEED Certified rating. Higher rating levels can also be achieved.

- Energy & Atmosphere, Prerequisite 2, **Minimum Energy Performance:** Thermally-efficient ACFoam-II facilitates compliance with ASHRAE/IESNA 90.1-1999 and local energy codes.
- Energy & Atmosphere, Credit 1, **Optimize Energy Performance:** ACFoam-II provides high thermal resistance (R-value) per inch of material, is economical, and would assist in reaching the specified reduction of design energy costs.
- Materials & Resources, Credit 1, **Building Reuse:** ACFoam-II can be and often is reused when building renovations include recover roof applications or partial tear offs in which only the membrane is removed.
- Materials & Resources, Credit 4, **Recycled Content:** ACFoam-II can be used toward the recycled material credit.
- Materials & Resources, Credit 5, **Local/Regional Materials:** Atlas has seven plants in North America, including one in Canada, so for most projects, a credit will be given for manufacturing the product within 500 miles of the job site.
- Innovation & Design Process, Credit 1, **Innovation in Design:** ACFoam-II with zero ozone depletion potential and zero global warming potential has been available since 1998 in an HCFC-free formulation in early compliance with the Montreal Protocol. Since ozone-depleting insulations are also available, credit for using materials with this HCFC-free technology may be granted.

LEED Project Checklist

Energy & Atmosphere		17 Possible Points		
<input checked="" type="checkbox"/>	Prereq 1	Fundamental Building Systems Commissioning	Required	
<input checked="" type="checkbox"/>	Prereq 2	Minimum Energy Performance	Required	
<input checked="" type="checkbox"/>	Prereq 3	CFC Reduction in HVAC&R Equipment	Required	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Credit 1.1 Optimize Energy Performance, 20% New / 10% Existing	2
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Credit 1.2 Optimize Energy Performance, 30% New / 20% Existing	2
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Credit 1.3 Optimize Energy Performance, 40% New / 30% Existing	2
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Credit 1.4 Optimize Energy Performance, 50% New / 40% Existing	2
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Credit 1.5 Optimize Energy Performance, 60% New / 50% Existing	2
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Credit 2.1 Renewable Energy, 5%	1
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Credit 2.2 Renewable Energy, 10%	1
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Credit 2.3 Renewable Energy, 20%	1
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Credit 3 Additional Commissioning	1
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Credit 4 Ozone Depletion	1
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Credit 5 Measurement & Verification	1
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Credit 6 Green Power	1
Materials & Resources		13 Possible Points		
<input checked="" type="checkbox"/>	Prereq 1	Storage & Collection of Recyclables	Required	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Credit 1.1 Building Reuse, Maintain 75% of Existing Shell	1
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Credit 1.2 Building Reuse, Maintain 100% of Shell	1
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Credit 1.3 Building Reuse, Maintain 100% Shell & 50% Non-Shell	1
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Credit 2.1 Construction Waste Management, Divert 50%	1
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Credit 2.2 Construction Waste Management, Divert 75%	1
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Credit 3.1 Resource Reuse, Specify 5%	1
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Credit 3.2 Resource Reuse, Specify 10%	1
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Credit 4.1 Recycled Content, Specify 25%	1
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Credit 4.2 Recycled Content, Specify 50%	1
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Credit 5.1 Local/Regional Materials, 20% Manufactured Locally	1
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Credit 5.2 Local/Regional Materials, of 20% Above, 50% Harvested Locally	1
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Credit 6 Rapidly Renewable Materials	1
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Credit 7 Certified Wood	1
Innovation & Design Process		5 Possible Points		
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Credit 1.1 Innovation in Design: Specific Title	1
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Credit 1.2 Innovation in Design: Specific Title	1
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Credit 1.3 Innovation in Design: Specific Title	1
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Credit 1.4 Innovation in Design: Specific Title	1
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Credit 2 LEED™ Accredited Professional	1

Please also keep in mind that **reduce** is considered one-third of the three R's of sustainable building: **reduce, recycle, reuse**. Since ACFoam-II is polyiso roof insulation, it can achieve the design thermal value in a thinner board than any other insulation material, thereby **reducing** the potential quantity of material required in the roof insulation.

ACFoam®-II Polyiso Roof Insulation Sustainable Building & LEED™ Credits

A Product Solution for Green Architecture and Sustainable Building Design

Construction of a building shouldn't be synonymous with the destruction of a planet. In the past, building material products sometimes violated this common sense imperative. Not by desire, of course, but by lack of knowledge and technology. That has begun to change. In recent years, manufacturers have been challenged to make the manufacturing process more environmentally-friendly, specifically regarding products such as insulation and roofing materials, and to address making products more "green" and longer-lasting.

Creating a "green" building, in effect, means matching the products and materials to the specific design and site to minimize the overall environmental impact. Building green has been associated with higher "first costs" versus savings on the "life cycle" maintenance costs. But today **building green is a good long-term investment that doesn't have to cost more than building with traditional materials.** And nowhere is that more evident than in Atlas's Polyiso Insulations.

ACFoam-II polyiso roof insulation has long been the preferred choice of the building industry. The reasons for this are many.

- Highest per inch Long-Term Thermal Resistance (LTTR) values
- Excellent dimensional stability and facer adhesion
- Ease of installation (labor savings)
- Superior fire test performance



Here are just a few of the reasons Architects, Consultants, Owners and Contractors are specifying ACFoam-II Polyiso Roof Insulation for their sustainable building projects.

Zero Ozone Depletion Potential (ODP)

More than 5 years ago, Atlas began to convert production from HCFC-containing products that deplete the ozone to HCFC-free products that do not. Every product manufactured in our converted plants is CFC and HCFC-free. It is important to understand that some ozone depleting polyiso and extruded polystyrene insulations remain available. In the case of extruded polystyrene, availability may continue until 2010. The Owner, Consultant, Architect, and Contractor have a choice between stratospheric ozone depletion and its protection.

Zero Global Warming Potential (GWP)

The global warming potential of ACFoam-II is negligible and considered zero by the U.S. EPA.

Recycled Content

ACFoam-II roof insulation contains between 17% and 68% recycled materials by weight, depending on thickness. Since the facers are made 100% of recycled materials (55% post-consumer, 45% post-industrial), the thinner the product, the higher the recycled content.

– A double layer application of insulation with staggered joints is well known for its improved thermal efficiency (prevention of heat loss or gain) over a single layer. In addition, a double layer can increase the level of recycled material in the roof insulation. For example, a two layer system of 2 in. thick ACFoam-II contains 34% recycled material by weight but a single layer of 4 in. ACFoam-II contains only 17%.

Waste Reduction

Waste produced during the manufacturing process of ACFoam-II can be diverted from the waste stream by using it in packaging and in the manufacture of other Atlas insulation products.

