



The Leadership in Energy and Environmental Design (LEED) certification program outlines a rating system for the design, construction, operation, and maintenance of green buildings, homes, and neighborhoods. The LEED program assists building owners and operators to incorporate environmentally responsible and sustainable features for all building types and all building phases including new construction, interior fit outs, operations and maintenance, and core and shell.

This document provides guidance regarding the contribution of SealTite Pro Spray Foam Insulation products manufactured by Carlisle Spray Foam Insulation to the overall LEED certification of a project.

ENERGY & ATMOSPHERE (EA)

EA Credit 1: Optimize energy performance (1-19 points)

Intent: To achieve increasing levels of energy performance beyond the prerequisite standard to reduce environmental and economic impacts associated with excessive energy use.

Requirements: Select 1 of the 3 compliance path options described below. Project teams documenting achievement using any of the 3 options are assumed to be in compliance with EA Prerequisite 2: Minimum Energy Performance.

Option 1. Whole building energy simulation (1-19 points)

Demonstrate a percentage improvement in the proposed building performance rating compared with the baseline building performance rating. Calculate the baseline building performance according to Appendix G of ANSI/ASHRAE/IESNA Standard 90.1-2007 (with errata but without addenda1) using a computer simulation model for the whole building project. Projects outside the U.S. may use a USGBC approved equivalent standard².

SealTite Pro Spray Foam Insulation functions as both insulation and air barrier creating a sealed building envelop with fewer air changes per hours and significantly less air infiltration. Engineers can specify more efficient HVAC systems to condition the interior air space increased occupant comfort.

The below chart shows how LEED credits are awarded. For Example: An increased efficiency of 12% above the baseline building performance will earn 1 point toward this credit for new construction, while a 48% increase over the baseline performance will earn 19 points. Specific LEED credits are determined by the individual project).

New Buildings	Existing Building Renovations	Points
12%	8%	1
14%	10%	2
16%	12%	3
18%	14%	4
20%	16%	5
22%	18%	6
24%	20%	7
26%	22%	8
28%	24%	9
30%	26%	10
32%	28%	11
34%	30%	12
36%	32%	13
38%	34%	14
40%	36%	15
42%	38%	16
44%	40%	17
46%	42%	18
48%	44%	19



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MATERIALS AND RESOURCES (MR)

MR Credit 4: Recycled Content (1-2 points)

Intent: To increase demand for building products that incorporate recycled content materials, thereby reducing impacts resulting from extraction and processing of virgin materials.

Requirements: Use materials with recycled content such that the sum of post-consumer recycled content plus 1/2 of the pre-consumer content constitutes at least 10% or 20%, based on cost, of the total value of the materials in the project. The minimum percentage materials recycled for each point threshold is as follows: 10% - 1 point, or 20% - 2 points.

MR Credit 6: Rapidly Renewable Materials (1 point)

Intent: To reduce the use and depletion of finite raw materials and long-cycle renewable materials by replacing them with rapidly renewable materials.

Requirements: Use rapidly renewable building materials and products for 2.5% of the total value of all building materials and products used in the project, based on cost. Rapidly renewable building materials and products are made from plants that are typically harvested within a 10 year or shorter cycle.

	Recycled Content		Rapidly Renewable Materials
	Pre-Consumer	Post-Consumer	
SealTite PRO Open Cell	-	-	1.5%
SealTite PRO High Yield	-	-	0.7%
SealTite PRO No Mix	-	-	1.5%
SealTite PRO No Trim 21	-	-	3.1%
SealTite PRO OCX	-	-	11.5%
SealTite PRO Closed Cell Regular	-	-	1.5%
SealTite PRO Closed Cell Winter	-	-	1.0%
SealTite PRO One Zero Regular	-	-	1.5%
SealTite PRO One Zero Winter	-	-	1.0%
SealTite One Regular	-	-	0.8%
SealTite One Winter	-	-	0.8%

MR Credit 5: Regional Materials (1-2 points)

Intent: To 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.

Requirements: Use building materials or products that have been extracted, harvested or recovered, as well as manufactured, within a specified distance of the project site for a minimum of 10% or 20%, based on cost, of the total materials value. If only a fraction of a product or material is extracted, harvested, or recovered and manufactured locally, then only that percentage (by weight) must contribute to the regional value.

SealTite Pro Spray Foam Insulation products are considered to be manufactured at the project site.



INDOOR ENVIRONMENTAL QUALITY (IEQ)

IEQ Credit 4.1: Low Emitting Materials – Adhesives and Sealants (1 point)

Intent: To reduce the quantity of indoor air contaminants that are odorous, irritating and/or harmful to the comfort and well-being of installers and occupants.

Requirements: All adhesives and sealants used on the interior of the building (i.e. inside the weatherproofing system and applied on-site) must comply with the following requirements as applicable to the project scope:

Adhesives, sealants, and sealant primer must comply with South Coast Air Quality Management District (SCAQMD) Rule #1168. Volatile organic compounds (VOC) limits listed below correspond to an effective date of July 1, 2005 and rule amendment date of January 7, 2005

Architectural Application	VOC Limit (g/L Less Water)
Plastic Foams	50

Carlisle Spray Foam insulation products have achieved Greenguard certification for low chemical emissions

	Greenguard Certification
SealTite Pro Open Cell	Certified
SealTite Pro High Yield	Certified
SealTite Pro No Mix	Certified
SealTite Pro No Trim 21	Certified
SealTite Pro OCX	Certified
SealTite Pro Closed Cell	Gold
SealTite Pro One Zero	Gold

IEQ Credit 7.1: Thermal Comfort Design (1 point)

Intent: To provide a comfortable thermal environment that promotes occupant productivity and well-being.

Requirements: Design heating, ventilating and air conditioning (HVAC) systems and the building envelope to meet the requirements of ASHRAE Standard 55-2004, Thermal Comfort Conditions for Human Occupancy (with errata but without addenda). Demonstrate design compliance in accordance with the Section 6.1.1 documentation.

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