

# LEED

## New Construction and Major Renovations

LEED is a national third-party certification system that recognizes leadership in green building. The LEED Green Building Rating Systems are voluntary, consensus-based, and market-driven. Based on existing and proven technology, they evaluate environmental performance from a whole building perspective over a building's life cycle, providing a definitive standard for what constitutes a green building in design, construction, and operation.

LEED for New Construction and Major Renovation is a rating system for buildings that was designed to guide and distinguish high performance buildings that have less of an impact on the environment, are healthier for those who work and/or live in the building, and are more profitable than their conventional counterparts. The LEED for New Construction Rating System can be applied to commercial, institutional and high-rise residential projects, with a focus on office buildings. LEED for New Construction is a performance-oriented rating system where building projects earn points for satisfying criterion within five environmental categories: Sustainable Sites (SS), Water Efficiency (WE), Energy and Atmosphere (EA), Materials and Resources (MR) and Indoor Environmental Quality (IEQ). An additional category, Innovation in Design (ID), addresses sustainable building expertise as well as design measures not covered under the five environmental categories. Regional bonus points (RP) are an additional feature of LEED and acknowledge the importance of local conditions in determining best environmental design and construction practices.



**ICYNENE**<sup>®</sup>

The Evolution of Insulation

# LEED: New Construction and Major Renovations

LEED for New Construction (2009) Credit	Total Available Points	Relevant Benefit of Icynene Insulation and Air Barrier Material	Maximum Icynene Direct Point Contribution		
			Icynene Classic	Icynene MD-C-200	Icynene ProSeal Icynene ProSeal Eco
<b>A2:</b> Minimum Energy Performance	Prerequisite	<p>Icynene insulation products can contribute towards meeting minimum energy performance improvements of:</p> <p><b>OPTION 1:</b> 10% for new buildings or 5% for major renovations relative to the baseline building performance (ASHRAE Standard 90.1-2007)</p> <p><b>OPTION 2:</b> ASHRAE Advanced Energy Design Guide (AEDG) for small office buildings/retail buildings/warehouses and self storage</p> <p><b>OPTION 3:</b> Advanced Buildings Core Performance Guide developed by the New Buildings Institute.</p>	Prerequisite	Prerequisite	Prerequisite
<b>EA1:</b> Optimize Energy Performance	19	<p>Up to 11 % in overall building energy savings can be achieved with Icynene insulation products versus traditional energy options. This can earn up to 5.5 points, (\$) assuming the minimum energy performance requirements for EA2 were met through other means.</p> <p>*Icynene insulation products can reduce heating and cooling costs by up to 50%. Note: Energy use study shows that over 40% (+) (commercial or residential) and over 50% (+) (schools) of building energy consumption is attributed to space heating and cooling. (+) US Energy Information Administration 2003 Commercial (2005 Residential) Building Energy Consumption Survey, 2008 – Commercial, Schools; 2009 - Residential).</p>	5.5*	5.5*	5.5*
<b>MR4:</b> Recycled Content	2	The 3.4% by weight of recycled content (normalized by adjusting for pre-consumer versus post-consumer) of Icynene ProSeal and Icynene ProSeal Eco product can contribute towards the 10-20% of building material, based on cost, required to be made of recycled material, required to earn 1-2 points, respectively.	-	< 1	< 1
<b>IEQ1:</b> Minimum Indoor Air Quality Performance	Prerequisite	The reduction in air leakage and accompanying moisture movement provided by Icynene insulation products may contribute towards meeting the minimum requirements of Section 4 through 7 of ASHRAE 62.1-2007, Ventilation for Acceptable Indoor Air Quality.	Prerequisite	Prerequisite	Prerequisite
<b>IEQc5:</b> Indoor Chemical and Pollutant Source Control	1	The low air permeance of ProSeal Eco can contribute towards the air sealing and compartmentalization of spaces where hazardous gasses or chemicals may be present.	-	-	< 1

\* Independent performance assessment by Mindscape Innovations Group.

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