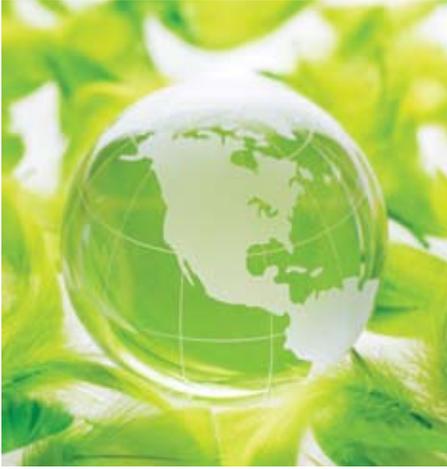




Taking the LEED



Green design has gotten a big boost in the last few years as a result of increasing energy costs and competition among developers for commercial tenants. From these dynamics, the non-profit U.S. Green Building Council (USGBC) developed core principles for commercial and residential buildings that are designed to:

- Lower operating costs and increase asset value
- Reduce waste sent to landfills
- Conserve energy and water
- Be healthier and safer for occupants
- Reduce harmful greenhouse gas emissions
- Qualify for tax rebates, zoning allowances and other incentives in hundreds of cities
- Demonstrate an owner's commitment to environmental stewardship and social responsibility



Heatcraft Refrigeration Products has a range of products and services to assist each of our customers in meeting the requirements for LEED (Leadership in Energy and Environmental Design) initiatives on new or existing facilities. As a division of Lennox International, Inc., Heatcraft Refrigeration can help maximize LEED credits through membership in the USGBC.

LEED is a rating system developed by the USGBC as a national benchmark to encourage the design, construction and operation of buildings that reduce their overall impact on the environment. It serves as a third-party certification program for use by developers, federal agencies and state and local governments nationwide. (Canada has a similar rating system administered by the Canada Green Building Council.) The metrics-driven program evaluates a building's total environmental performance over its anticipated lifecycle, awarding points in several areas. The number of points earned determines the certification level of the building.

Achieving certification is a team effort with points given based on features such as: Sustainable Sites; Water Efficiency; **Energy & Atmosphere; Materials & Resources; Indoor Environmental Quality; Innovation in Design; and Regional Priority.** More information about the LEED program is available at www.usgbc.org.

Making the Grade: LEED Rating Systems

LEED points are awarded according to the following scale: Platinum (80 pts. +), Gold (60–79 pts.), Silver (50–59 pts.) and Certified (40–49 pts.). There are 100 base points, with six possible points for Innovation in Design and four Regional Priority points. As an example of how the LEED process can be effectively addressed, the USGBC offers the following roadmap for certification of existing buildings:

- Review the LEED rating system to assess credit potential
- Set your target certification level: Platinum, Gold, Silver, Certified
- Assess what equipment will need upgrades
- Assign responsibility for credits and for writing green policies
- Make a budget
- Create a timeline to optimize work and process flow
- Register project to take advantage of USGBC resources



Earning LEED credits

Buildings—not products or builders—achieve LEED certification based on the number of credits they earn, and those factors that have the greatest positive effect on reducing CO₂ and increasing energy efficiency are weighted with higher points. There are 13 environmental impact categories to take into consideration, including climate change, indoor environmental quality, resource depletion and water intake, among many others.

There are multiple LEED rating systems, based on the building type or project under construction. The 2009 rating system includes:

- New Construction and Major Renovations (NC)
- Schools – New Construction and Major Renovations (S)
- Commercial Interiors (CI)
- Existing Buildings – Operations and Maintenance (EB)
- Core and Shell Development (CS)

You can begin analyzing various means to attain LEED certification for your building(s) by reviewing strategies found in resource materials available through the USGBC. One opportunity is the installation of commercial refrigeration equipment that offers efficiency and sustainability benefits, such as the following products from Heatcraft Refrigeration:

Credit #	Applicable Rating Systems	Credit Description	Condensing Units		Condensers		Evaporators		Package Systems		Controls
			HTS w/Hypercore™ Microchannel		Air-Cooled Condensers		Walk-In/Reach-In		PRO3™ Top/Side		Heatcraft Vantage™ Console
			Std.	VSEC	Std.	EC	Std.	EC	Std.	EC	
EAp2	NC;CS;S; EB; CI	Minimum Energy Performance		◆		◆		◆		◆	
EAp3	NC;CS;S; EB; CI	Fundamental Refrigerant Management	◆	◆	◆	◆	◆	◆	◆	◆	
EAc1	NC;CS;S; EB	Optimize Energy Performance		◆		◆		◆		◆	
EAc4	NC;CS;S; EB	Enhanced Refrigerant Management	◆	◆	◆	◆	◆	◆	◆	◆	
EAc5	NC;CS;S; EB	Measurement & Validation									◆
MRc4	NC;CS;S; EB; CI	Recycled Content	◆	◆	◆	◆	◆	◆	◆	◆	
IDc1	NC;CS;S; EB; CI	Innovation in Design	◆	◆							
RPc1-4	NC;CS;S; EB; CI	Regional Priority	As appropriate based upon regional priorities								

Again, credits are not awarded based on the use of particular products, but upon meeting performance standards set forth in the rating systems. LEED project teams must determine the products that are most appropriate for their specific initiatives in order to achieve certification.

Heatcraft Refrigeration Products provides a variety of product information and selection tools that allow users to estimate energy consumption and environmental impact of our commercial products. These tools will help a LEED project team understand the impact of their product selection in their LEED building project.

Learn more at www.heatcraftpd.com and www.usgbc.org.

Source: U.S. Green Building Council

Bold indicates those categories for which Heatcraft Refrigeration has products or services to assist customers in achieving LEED points.



LEED FAQs

Questions/Answers:



What are the benefits of LEED certification?

LEED certification is third-party validation of a building's performance. LEED-certified projects blend environmental, economic, and occupant-oriented performance. They cost less to operate and maintain; are energy- and water-efficient; have higher lease-up rates than conventional buildings in their markets; are healthier and safer for occupants; and are a physical demonstration of the values of the organizations that own and occupy them. For more information: www.usgbc.org.

Does it cost more to build green?

There are many LEED-certified projects that prove you can use effective green building principles without spending more than traditional building. And the payoff of LEED certification can be tremendous in terms of the building's cost over its lifecycle. There are numerous common-sense strategies in building design, for example, that don't add a cent to the bottom line. Depending on your green building strategy and the level of certification your project is targeting, there may be mid- and long-term ROI associated with additional green features that merits an investment in first costs.

Are there specific products that can help me achieve certification?

No products are certified for LEED usage; however, to meet the requirements, LEED practitioners will need to utilize products with characteristics that help them achieve certification. And there are certain elements of the LEED process that require specific product data in order to attain certification.

How do I get a project certified for LEED?

The Green Building Certification Institute (GBCI) administers the certification process through a network of professional, third-party certification bodies. To begin the registration process, visit www.gbci.org.

How much does LEED certification cost?

The U.S. Green Building Council (USGBC) charges a \$450 project registration fee for its members and \$600 for nonmembers. Fees for certification vary depending on a number of factors, but the average cost of certification is \$2000. There may also be additional costs for resource materials and education programming for credentialing; however those costs are not project-specific and can be amortized over multiple projects.

What is the LEED professional credentialing program?

GBCI manages a comprehensive LEED professional credentialing program. This program guarantees that LEED professionals are equipped with the most current knowledge and understanding of green building practices, encouraging professionals to maintain and advance their knowledge and expertise. The GBCI has identified three tiers of excellence for a professional to pursue: LEED Green Associate; LEED AP with Specialty; and LEED AP Fellow. To learn more about the tiers and the professional credentialing program, visit www.gbci.org.