

LEADERSHIP IN ENERGY AND ENVIRONMENTAL DESIGN (LEED)

by

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LEED is a certification system, developed by the U. S. Green Building Council (USGBC)¹, which provides a framework for implementing green building design, construction, operations, and maintenance solutions.

What LEED measures:

- A. Sustainable Sites: LEED can assist owners and designers, etc. in selecting and maintaining sustainable sites. This category discourages development on undeveloped land. It also minimizes building's impact on ecosystems and waterways, encourages regionally appropriate landscaping, rewards smart transportation choices, controls storm water runoff, and reduces erosion, etc.
- B. Water Efficiency: This category encourages smarter uses of water. Water reduction is typically achieved through more efficient appliances, fixtures and fittings inside, and landscaping that requires less water.
- C. Energy and Atmosphere: According to the U.S.DOE, buildings use 39% of the Energy and 74% of the electricity produced each year in the United States. The Energy and Atmosphere category encourages a wide variety of energy strategies, which include: Commissioning, energy use monitoring, efficient design, construction, appliances, systems, and lighting.
- D. Materials and resources: During both the construction and operations phases, buildings generate a lot of waste, and use a lot of materials and resources. This category encourages the selection of sustainably grown, harvested, produced and transported products and materials. At the same time it promotes the reduction of waste as well as reuse and recycling. It also takes into account the reduction of waste at a product's source.
- E. Indoor Environmental quality: The U.S. Environmental Protection Agency (EPA) estimates that Americans spend about 90% of their day indoors, where the air quality can be significantly worse than outside. The LEED indoor Environmental Quality Credit category promotes strategies that can improve indoor air, as well provide access to natural daylight, views and improve acoustics.
- F. Locations and linkages: The LEED for homes rating system recognizes that much of a home's impact on the environment comes from where it is located and how it fits into the community. The LEED Locations & Linkages credits encourage homes being built away from environmentally sensitive places and instead being built in infill, previously developed and other preferable sites. It rewards homes that are built near already existing infrastructure, community resources and transit. It also encourages access to open spaces for walking, physical activity, and time spent outdoors.

¹ <http://www.usgbc.org/>

- G. Awareness and education: The LEED for homes rating system acknowledges that a green home is a home in which the people who live in it use the green features to maximum effect. The Awareness & Education credits encourage home builders and real estate professionals to provide homeowners, tenants, and building managers with the education and tools they need to understand what makes their home green and how to make the most of those features.
- H. Innovation in Design: The Innovation in Design credit category provides bonus points for projects that use new and innovative technologies and strategies to improve a building's performance well beyond what is required by other LEED credits.

Definitions²

Green Building

A building that conforms to environmentally sound principles of construction practices, is insulated, and oriented properly for efficient energy use.

Green Neighborhood

A neighborhood that is typically moderately dense, includes a range of uses, is designed for people (pedestrians and bikers) first – including an integrated network of paths and streets, human-scaled buildings and pedestrian-oriented street design. It has “green” elements, including a network of green spaces and corridors, street trees, significant private landscaping (including possibly green roofs). Buildings are often “green” buildings with excellent environmental performance. Green infrastructure is commonplace, from low-impact storm water management to district energy systems.

Green Roof

Contained green space on, or integrated with, a building roof. Green roofs maintain living plants in a growing medium on top of a membrane and drainage system. They are also excellent natural insulators.

² <http://www.greenplaybook.org/resources/glossary.htm>