



Green Building Alliance®

GREEN BUILDING BLOCKS

Green building addresses multi-faceted aspects of building performance. These performance areas are a useful framework for green building design, construction and operation. Below is a brief description of the goals, strategies and benefits associated with each area.

SUSTAINABLE SITES alleviate the impact of the landscaping and building exterior on the ecosystem and the region. Helpful strategies include use of native plants, appropriate shading, reduction of impervious and nonreflective surfaces, use of infill sites and features to reduce reliance on cars. These measures simplify maintenance, reduce disturbance of habitats and water, and help to revitalize urban areas.

MATERIALS AND RESOURCES employed in construction, renovation and ongoing maintenance should be reused, recycled, recyclable, non-toxic, locally produced and renewable. Choose building reuse over new construction, include green criteria in materials specification and require smart management of waste, both during construction, and throughout operations and management. These practices reduce garbage and impact from the production and transportation of materials.

WATER EFFICIENCY means minimal use of potable water from the municipal system. This can be achieved through water conserving fixtures, on-site treatment of wastewater, and use of rain catchment or graywater for irrigation and toilets. Water efficiency provides a dual cost savings by reducing the volume of water used and sewage treated.

INDOOR ENVIRONMENTAL QUALITY involves the air, thermal comfort, light, views and acoustics in a building. These qualities are enhanced by increased ventilation, avoidance of pollutants in the building, monitoring, individual controls, use of daylight and access to outdoor views. The indoor environmental quality of a building has a significant impact on the health and productivity of its occupants and on related potential liabilities for its owner.

ENERGY AND ATMOSPHERE performance is optimized through integrated and modeled design, installation and monitoring of high-efficiency mechanical systems combined with natural systems, use of renewable energy sources and good energy management practices. In addition to lowering operating costs, these measures help avoid toxic emissions and mining impacts.

PROCESS is the key to better performance in all areas. At its essence, green building is a process – an approach based on teamwork. It begins with a plan that involves the work of design professionals, engineers and contractors, as well as the active participation of the owner. This team should be committed to a interdisciplinary, integrated approach to design, and they should understand that an up-front investment in rigorous planning will pay great dividends later. Green operations and maintenance require the building manager and staff to adopt a team approach in order to understand the design and implement systems and procedures that will provide optimum performance in all areas.

*The U.S. Green Building Council sets standards for green building by defining specific, verifiable criteria in each of these performance areas. The Council's **LEED™** standards can be used as a design tool, as criteria for appraisal and financing, and as assessment criteria for leasing choices. To learn more, see reverse side and www.usgbc.org.*

continued

LEED and USGBC BACKGROUND

See www.usgbc.org

Best practices for the building industry have shifted rapidly with the introduction in 2000 of the LEED (Leadership in Energy and Environmental Design) Green Building Rating System®, developed by the U.S. Green Building Council.

- Nationally, certified green space is valued at \$8 billion and the related green products market at \$5.8+ billion.
- The U.S. Green Building Council, developer of the LEED standards, has 6,000+ member organizations that employ tens of thousands of workers.
- Major corporations following green standards include Honda, Ford, PNC, Bank of America, IBM, Starbucks, and Monsanto.
- The U.S. General Services Administration, the nation's largest landlord which leases or owns over 8,000 buildings to provide workspace for over one million federal employees, requires that all new federal building projects apply LEED standards.

The LEED system is a voluntary, consensus-based national standard for developing high-performance, sustainable buildings. Members of the U.S. Green Building Council representing all segments of the building industry developed LEED and continue to contribute to its evolution. LEED standards are currently available or under development for:

- New commercial construction and major renovation projects (LEED-NC)
- Existing building operations (LEED-EB)
- Commercial interiors projects (LEED-CI)
- Core and shell projects (LEED-CS)
- Homes (LEED-H)
- Neighborhood Development (LEED-ND)

LEED certification distinguishes building projects that have demonstrated a commitment to sustainability by meeting the highest performance standards. Points are accumulated by meeting specific criteria in the performance areas described on the reverse side. A project earns LEED certification at one of four levels, determined by the number of points: Certified, Silver, Gold or, the highest level, Platinum.

Council committees are actively collaborating on new LEED standards. LEED was created to:

- define "green building" by establishing a common standard of measurement
- promote integrated, whole-building design practices
- recognize environmental leadership in the building industry
- stimulate green competition
- raise consumer awareness of green building benefits
- transform the building market

LEED provides a complete framework for assessing building performance and meeting sustainability goals. Based on well-founded scientific standards, LEED emphasizes state of the art strategies for sustainable site development, water savings, energy efficiency, materials selection and indoor environmental quality. LEED recognizes achievements and promotes expertise in green building through a comprehensive system offering project certification, professional accreditation, training and practical resources.