

LEED Green Building Rating System

The Leadership in Energy and Environmental Design (LEED) Green Building Rating System was developed by the U.S. Green Building Council (USGBC) in 1998 to provide a set of standards for environmentally sustainable building construction utilizing a consensus-based, market-driven rating system. This includes the use of environmentally responsible carpets.

LEED certification is recognized in the U.S. and a number of countries as the standard for measuring building sustainability. LEED certification, which demonstrates that a building is truly “green”, provides independent, third-party verification that a building project meets the highest level of green building and performance measurements.

Commercial buildings defined by the standard building codes under LEED include LEED for new construction, LEED for existing buildings, LEED for commercial buildings, LEED for retail, LEED for schools, and LEED for core and shell rating systems. LEED eligible buildings include, but are not limited to offices, retail and service establishments, institutional buildings such as libraries, schools, museums and religious institutions, hotels, and residential buildings of four or more habitable stories.

LEED certified buildings offer a wide range of cost savings and occupant benefits. Included here are lower operating costs and increased asset value, reduced waste sent to landfills, less water and energy consumption, reduced greenhouse gas emissions, healthier indoor air, eligibility for tax rebates, zoning allowances, and other incentives. In addition to this, in a society today that places considerable value on environmental stewardship, LEED participation demonstrates an owner’s commitment to environmental and social responsibility. Pursuing LEED certification for a project is an additional added cost since it can increase the cost of initial design and construction and require the need to use LEED accredited professionals to undertake a building project. These costs are offset by savings obtained over time by the lower than industry standard building costs typical of LEED certified buildings. LEED certified buildings also tend to command higher rental rates and greater occupancy than non-green buildings. Studies have also shown that workers in LEED certified buildings have increased labor productivity, job retention, and days worked.

The LEED rating system offers four levels of certification for new building constructions. These ratings include:

- Certified: 26-32 points
- Silver: 33-38 points
- Gold: 39-51 points
- Platinum: 52-69 points

These points correspond to the number of credits that can be obtained in the Green Building design categories:

- sustainable sites-14 points
- water efficiency-5 points
- energy and atmosphere-17 points
- materials and resources-13 points
- energy and atmosphere-17 points
- indoor environmental quality-15 points
- innovation and design-5 points

A building requires a minimum of 26 points to obtain LEED certification.

There are thousands of consultants, engineers, architects and other building professionals that have knowledge of the Green Building LEED rating system who can suggest ways for builders to earn LEED credits and assist them in meeting their LEED goals. These individuals have passed the accreditation exam given by the Green Building Certification Institute, and are recognized for their knowledge of the LEED rating system. As a result, these individuals are permitted to use the LEED Accredited Professional (AP) acronym after their name in recognition of their accomplishment.

The LEED Green Building rating System is based on a whole-building concept. Carpet is included in the Green Building design category of Materials and Resources. Carpets that have a post consumer content of 10% or more receive 1 LEED point. If a carpet has 20% or more post- industrial content it is eligible for 2 LEED points. If a carpet has obtained The Carpet and Rug Institute's Green Label (GL) or Green Label plus (GLP) Indoor Air Quality Certification, it is eligible for an additional 1 LEED point. If the carpet is installed using either GL certified pad or adhesives, and also relies on Seal of Approval carpet care products, it is eligible for an additional 1- 3 LEED points. If a carpet is installed at a building located within 500 miles of the carpet manufacturer's plant, it is eligible for an additional 1 LEED point. An additional 1 LEED point can be obtained for 50% diversion of recycled carpet materials back to the manufacturing process, and an additional 2 LEED points for 75% diversion of recycled carpet materials back to the manufacturing process.

Many factors contribute to the lifecycle costs of a carpet. Environmentally responsible carpet manufacturers reduce the impact in the manufacturing process by using recycled content in carpet's face fiber. Today, the majority of carpets made from recycled content are made from P.E.T. These carpets usually offer richer and brighter shades than those found in nylon carpets, and are often inherently more colorfast, fade and stain resistant.

Mark Johnston