

1.0 : the USGBC and the LEED system

1.1 : who is the USGBC?

The United States Green Building Council, composed of more than 8,500 groups from all areas of the construction industry, is a non-profit collective who are together for a purpose: to revolutionize the construction market to focus on sustainability. The USGBC has a goal to modify the way in which structures and communities are developed and operated, facilitating an environmentally and socially capable, active, and flourishing environment that enhances the quality of life. These members have developed and continue to refine the rating system known as LEED, or Leadership in Energy and Environmental Design.

1.2 : how the LEED system works

The LEED rating system is a voluntary means to develop and construct environmentally responsible buildings and homes. The LEED system focuses on different areas that range from new construction of buildings and homes, interior and exterior remodeling, and entire school and healthcare campuses. It utilizes proven scientific standards and strategies to develop improved water systems, energy systems, materials, site development, and living conditions. The rating system gives developers the ideas and tools needed to create structures that have measurable improvements over standard methods.

The process begins with the registration of the project with the USGBC, who then determine if the project is a candidate by achieving established prerequisites. The project must then meet certain standards and will be tested on performance in various categories ranging from initial site development to indoor environmental quality to overall design. The project is then awarded a certification based on how well it performed in the varying categories. This process has proven to reduce environmental impact, reduce operation cost, and improve the quality of life.

1.3 : new construction

New construction projects have a rating system that is unique from the others. This system has categories that focus on developing sustainable building sites, enhancing water efficiency, improving energy performance, selecting proper materials, improving the quality of the indoor environment, and overall design innovation. Each category contains several points that these projects attempt to achieve and in turn gain certification.

1.4 : the difference

The difference in these structures is vast compared to similar structures built according to standard methods. It has been shown that LEED certified buildings have no more initial cost than a non-LEED building, but the energy and water savings are greatly improved, as is the quality of the indoor environment. LEED buildings have been shown to improve the productivity and overall morale of the people living and working inside.

