

Eco-Friendly Evolution

Tuesday, 23 March 2010 21:38 Shane Watts



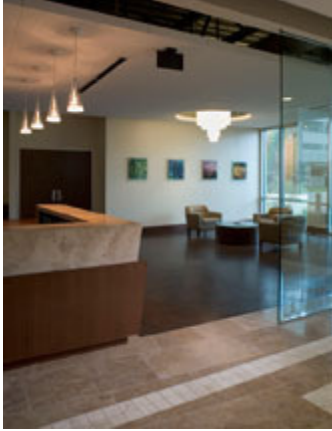
GROWING CULTURE

It is hard to believe a program started just more than 10 years ago could expand as rapidly as the U.S. Green Building Council's Leadership in Energy and Environmental Design (LEED) certification program has, but a growing desire to be environmentally responsible has driven the program's popularity to surprising heights. Since its inception in 1998, 21,000 projects representing 5 billion square feet of space have registered their intent to seek LEED certification.

This growing culture of environmental responsibility has put a premium on a developer's ability to provide clients with top-quality sustainable spaces, not just because it is the responsible thing to do, but also because it is what companies are demanding. In response, construction companies across the country are adapting and developing the expertise to support the demand for sustainable structures. While many of the basic principles of construction remain the same, the LEED program – and other types of sustainable construction – require additional diligence and often call for creative problem solving to meet specifications.

Although the LEED process focuses on a variety of facets, such as existing building operation and maintenance, LEED for New Construction is by far the most utilized program. Key elements of green construction include implementing and managing mechanical systems that support improved indoor air quality, locating suitable materials, applying finishes with nontoxic approaches, and recycling and disposing of materials in an eco-friendly way.

LEED is synonymous with sustainability, but there are a number of requirements that address occupant wellness, as well. Many of these occupant wellness requirements are related to indoor air quality, such as extensive ventilation and the use of high-efficiency particulate air filters. During construction, ventilation filters have to be changed regularly; and when construction is complete, requirements of LEED call for outside air to be pumped in for weeks prior to occupancy.



Material World

Sustainability does not simply cover energy consumption, but also the materials used in construction. Recycled materials used in carpet, environmentally friendly gypsum board vs. sheetrock and products made from rapidly renewable resources, like bamboo, are popular choices for eco-friendly material. Energy consumption does come into play, however, as the LEED process also prefers materials utilized to come from sources within a 250-mile radius of a project to eliminate excessive shipping.

General contractors are tasked with securing and ordering materials to complete the architectural vision. Finding enough of a specific material or finding a material that fulfills the vision of the design and meets sustainable objectives requires research and a solid understanding of what's available locally.

Traditional non-sustainable means of adhering carpets, wood floors and architectural details are not always environmentally friendly. General contractors and their teams often need to evaluate leading-edge approaches to applying finishes or even generate some new, creative approaches of their own to meet sustainable objectives.

The increase in demand for sustainable construction is evident, not just in the qualifications demanded by clients, but also in the materials that are offered for contractors to use in the construction process. Manufacturers are developing better green products that are nontoxic, but unfortunately, there is a limited record of reliability, as many of these products are very new to the marketplace. It's important for general contractors to understand how new products and adhesives are going to work on selected materials so that the quality of work is never compromised.

Green Incentives

During construction, materials pile up. For decades, common practice has been to take unused or old materials to a landfill. Now, with the surging demand for sustainable practices, ensuring materials are recycled is imperative. When LEED design was in its infancy, it was common for general contracting teams to sort materials for recycling into specific categories. With a requirement that 75 percent of demolished debris be recycled to adhere to the LEED process, sorting the material became quite a chore. As a result, Dumpster companies are leveraging the increasing demand for recycling by offering all-in-one services. Debris is collected, carried off-site and sorted into appropriate components. While more expensive than traditional disposal, it takes the hassle and mess away from the construction site.

Many communities also have responded to the demand for sustainable projects by offering incentives for obtaining LEED certification that could provide some sizable benefits. For instance, Cincinnati offers a 100 percent property tax exemption for all newly constructed or renovated spaces that earn a LEED certification. Organizations should research programs available in their own communities, as many across the country offer incentives including tax credits, tax breaks and density bonuses for LEED-certified spaces.

Companies of all types and sizes can and are making the choice to build green, and they now have more options than ever to do so. As many organizations are seeking to build these spaces, selecting a general contractor with experience in sustainable construction is critical, and in many cases, a major differentiator. In order to compete, it is essential that organizations in the construction industry adapt, if they have not already. New variables and a lack of time-tested solutions mean that construction teams need to bring a high skill set to the site to not only meet the requirements for LEED certification, but also provide their clients with a top-quality space that meets their expectations.



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