

LEED credits in construction don't always mean less energy consumption

J&S Construction was recently invited by the U.S. Army Corps of Engineers to give a seminar on Leadership in Energy and Environmental Design (LEED) Construction to the purchasing officers in the Louisville district. One of the main concerns of the Corps was the fact that their buildings, which were receiving LEED credits and certifications, were somehow using more energy than similar buildings with no LEED accreditation.

We recently completed a \$13 million LEED facility for the Corps of Engineers at Fort Campbell, Ky., which is forecasted to be 30 percent more energy efficient than similar buildings on this base. The two Tactical Equipment and Maintenance Facilities will be LEED-Gold Certified with energy-efficient design including Variable Refrigerant Flow mechanical systems, polyurethane spray foam insulation at all perimeter walls, low flow water closets and urinals, motion/occupancy sensors on all light fixtures, and high efficiency light fixtures. The energy savings for these new facilities is expected to be in excess of \$19,000 annually. These buildings will also be the first LEED-Gold certified buildings at Ft. Campbell.

Having made note of J&S' recent accomplishments, the Corps invited us to Louisville to discuss our recent experiences with LEED Construction, as well as the pros and cons of different LEED techniques.

The Corps had several of the same questions which many of our current



GOING GREEN
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commercial clients are asking: Does LEED Construction guarantee them energy savings on their projects?



One would assume the answer to this question to be yes. But, surprisingly, the answer is no. LEED Construction is not guaranteed to give way to an energy-efficient building. Only 32% percent of the possible points received on a LEED project deal with Energy Efficiency. The LEED program recently commissioned a study to see how Energy-Efficient buildings that attain some level of LEED accreditation compare to other non LEED existing

buildings. The study, entitled "Energy Performance of LEED for new construction buildings," was released in 2008 and showed 25% of LEED buildings used more energy than the average for comparable existing buildings.

With commercial buildings using 18% of the total energy consumption

LEED accreditation while following the guidelines outlined by the Energy Star program. Information on the Energy Star program can be found at www.energystar.gov. Energy Star states that energy consumption represents about 30% of a typical office building's operating cost. Therefore, a 30% reduction in energy consumption could translate to 5% increase in Return on Investment. In 2005, the Environmental Protection Agency estimated 2,500 buildings which attained the Energy Star label are saving \$350 million on their energy bills.

If your company, or even residence, is looking to cut energy consumption, I would encourage you to visit www.energystar.gov, and see what things you can do right now to begin lowering your energy footprint. If you are considering a new "Green" construction project, you should go for the LEED plaque, but please ensure you are getting the energy efficiency return on investment. ■

Joe Bontrager is a LEED Certified Project Manager for J&S Construction Company Inc. in Cookeville, TN. J&S is a locally owned, full-service construction company with more than 52 years' experience building projects, relationships and trust. It has completed more than 90,000 square feet of LEED certified buildings and over 5,000 unique projects with more than a 75 percent repeat customer rate. J&S employs 100 of the finest craftsmen and trade professionals, including a number of nationally recognized and award winning architects and engineers.