

# Sustainable Facility

Your Environmental Source for Facility + Power Management

# Facility

**Improving  
buildings and  
operations  
with LEED**

## A Penny Earned

### LESSONS LEARNED FROM BUILDING A LEED GOLD OFFICE.

>>> As CEO of J&S Construction, I have had the opportunity to work on several LEED projects; but my team and I have learned the most from constructing our own facility.

We are not in the business of selling green... we are in the business of helping our clients build efficiently. As we developed our own building, we discovered that some LEED requirements were not necessarily the most efficient choice or the right fit for our project. When making decisions, I encourage business owners to look for a financial return on their investment for building green. I truly believe that if business owners will invest in efficient and sustainable building methods that make sense, they will make their money back — and then some.

Located in Cookeville, Tenn., our building, the Freedom Plaza, is the first LEED Gold Class A office building in the Upper Cumberland area of Tennessee. At J&S Construction, we moved into our progressively efficient building in November 2008. The facility features a number of energy efficient products and construction methods.

One particularly innovative concept is a water source heat pump that utilizes the fire suppression system rather than a separate additional pipe configuration. Water source heat pumps help distribute heat generated in sunny parts of a building to those areas in need of some heat, and the cooling system works similarly. These are highly efficient heat pump systems. Yet, we were going to have the add

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ed expense of a second pipe system right next to the fire suppression pipe system throughout the building. I asked some questions and we did some checking with codes and building standards across the country. It turns out we were able to use the same pipes to accomplish both functions, saving us thousands of dollars.

Our 28,000 square foot employee office building only cost \$95 per month to heat this past winter. Efficient heating and cooling methods, along with other energy conservation efforts, helped deliver this \$95 monthly heating bill, which we often show to potential customers to demonstrate that construction methods focused on energy efficiency do work and do pay off.

Public perception is that investing in sustainable, green or energy efficient construction is significantly more costly. Strict adherence to earn only LEED certification points may add considerable expenses. However, our facility's



■ Courtesy of J&S Construction.

#### FREEDOM PLAZA PROJECTED ENERGY SAVINGS VS. CONVENTIONAL CONSTRUCTION METHODS:

- >> 40 PERCENT from wall insulation
- >> 60 PERCENT from water source heat pump
- >> 20 PERCENT from cool roof
- >> 35 PERCENT from natural light, LED and fluorescent light fixtures
- >> 20 PERCENT from motion sensor lights
- >> 35 PERCENT water savings from low flow water fixtures

construction costs rose only about 3 percent higher than conventional plans because we specifically chose products and technologies that made the most sense and had the greatest return on investment. I recommend talking to a professional contractor that has constructed multiple LEED projects and has used products available to help businesses determine the best choices for their project. **SA**



>> **JOHN D. STITES II**, CEO, J&S Construction, leads a 115 employee business. J&S is embracing the future of building by obtaining the first LEED Silver and Gold certifications in the Upper Cumberland area of Tennessee, by earning the Tennessee Quality Achievement Award for its business practices four times and by receiving the American Business Ethics Award. Stites has more than 38 years of experience in the construction industry running a family business that has been around for over 50 years.