

## Material Difference

### Alternative building products put 'green' back into your pockets

By Joe Westfall

**T**he movement toward utilizing sustainable, energy-efficient building materials and planning practices is gaining traction as the domestic energy crisis continues to impact every aspect of our lives. Many companies are working to develop a host of alternative products and services, all aimed at offering a more meaningful product in the end. Some of these products have a small overall financial impact while others have profound financial implications.

To ensure a real impact on capital planning, it's imperative that you select a qualified team to assist in developing a well-crafted plan. This is essential, whether you are building a personal dwelling or a commercial property. When it comes to green building, upfront planning is critical and bringing qualified team members on-board is equally important. You must be willing to venture outside the ideals of conventional planning to select the best team members and solutions; then you must be courageous enough to withstand the nay-sayers who live life by an overly conventional mindset. The old adage that "conventional wisdom equals conventional results" comes to mind.

There have been significant advancements in the technologies available, specifically shell construction, mechanical, electrical and plumbing systems. When a building's design and the use of these technologies are incorporated together, they can deliver extremely strong results, measured by reduced operating expenses and an improved net present value of the property. Viewed from an investment-grade platform, your new building project must deliver every ounce of return that a product development program can offer. Some technologies only deliver fractional savings while costing many times their measurable impact. Other technologies, such as alternative shell materials and cutting-edge mechanical systems working together, offer affordable and dramatic energy savings with realistic break-even timeframes.

Conventional wall and roof assemblies, using time-proven materials and designs will work, but do not offer any energy savings. Dollar for dollar, a building built with conventional wood or metal studs and fiberglass batt-insulation will cost you significantly more in the long run. What appears on day

one to be your best and lowest priced option will prove to be a poor performing hedge against the property's ability to combat the rapidly escalating costs of operating the property and returning needed savings.

However, rigid-insulation wall and roof panel assemblies, offering a complete thermal break (structural insulated panels), have been documented to deliver exponential savings when compared to conventional materials performing in a like-type manner. When paired with a state-of-the-art, energy-efficient (16 SEER) mechanical system, the combined efficiency has been shown to dramatically reduce the energy required to heat and/or cool the property. Utility bills are dramatically reduced (often well in excess of 50% in comparative studies), offering a higher net-present value on the property, a more positive cash flow for the owner, and it often translates to reduced insurance premiums, and a higher market value as an exit strategy component.

*Tax-planning tools offer positive impact*

The federal government is currently offering \$1.80 per square foot maximum



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energy tax deduction for commercial projects taking occupancy in 2008; there is a strong likelihood this federal tax deduction may be extended as part of the energy tax bill currently before Congress. Assuming this tax deduction is extended, the one-time tax deduction can be applied for by engaging an approved Energy Audit tax consultancy firm federally approved to offer such services. Additionally, cost segregation tax studies should be budgeted into the project's overall proforma; there is a potential for huge tax savings for owners who implement these tax-planning strategies, delivering every available means of getting the highest return on their capital from the very onset of the project's planning.

*Dramatic energy savings month after month.*

Each commercial project has a beginning and a planned end. Each project's planning includes a projection for ownership as to the investment's

return on capital. Every dollar spent must be viewed as a means to an end; maximizing the leverage of an owner's capital should always be the top priority for the entire professional team hired to execute the work. Measuring your past projects' energy performance can provide a solid baseline for your upcoming project's target performance. Take the gross square footage of the property and divide it into the average monthly utility costs for operating the property to determine your cost per square foot, per average month. This is a meaningful metric and one that should be your target energy performance value. Any improvement to this benchmark for a similar type building will offer you a real hedge against the escalating utility costs required to operate your building.

Green-Source Products, a Cleveland-based manufacturer of green building products, has seen projects in which the difference between use of conventional

materials (\$.12 to \$.15/sq.ft. /month) was in excess of 50% savings (\$.04 to \$.07/sq.ft. /month), or more.

In today's economy, predicting the next 12 months of energy costs is impossible. Doesn't it make sense to use your capital to maximize your hedge against these highly unpredictable and rising costs? Alternative, energy efficient construction products and materials, when combined with a thorough MEP effort, will have an unusually positive impact on the long-term cost of ownership. **P**

*Joe Westfall is vice president of sales & marketing for Green-Source Products, LLC., Cleveland, OH 44110. Green-Source Products is a national manufacturer of High Performance Green Building System (HPGBS), a patent-pending, energy efficient wall and roof panel system consisting of light-gauge steel framing with expanded polystyrene as its embedded rigid insulation component. For more information, call Green-Source Products at 216.851.4641 or GreenSourceProducts.com.*

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