

Constructech

Owners, Contractors Benefit From Green Construction

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You can't teach an old dog new tricks—at least that is what many commercial contractors are finding when they try to convince their clients that green building offers several long-term benefits for their buildings.

The upfront costs for innovative green designs to a building, as well as some of the material used for a green facility, can be rather expensive, if not planned correctly. However, the overall payback on the life-cycle of the building can be even higher. Unfortunately, many contractors are still dealing with owners who don't want to see, or can't see, the big picture.

"I think that the biggest obstacle is getting the owners educated enough to understand where the true costs are and how they affect their bottomline, what they do with energy efficiency and the savings over time, and to have all those together to make a decision is what is most important," explains , Ted van der Linden, preconstruction manager and the corporate green champion for DPR Construction, Redwood City, Calif.

Van der Linden adds, however, that having an educated construction team that gets involved during the preconstruction phase of the project can help promote green building. In the traditional bid/build process, architects that are designing a green building may at times not understand the true cost of a particular green system or product, comments van der Linden. This is why having an educated construction team is so important if creating a green building is the goal. Van der Linden says green buildings don't have to cost as much as some architects say they will.

"If that contractor was involved early enough in the process, they would in fact be able to help the team from a very conceptual stage and provide decisions based on actual cost data versus assumptions or innuendos," says van der Linden.

One such owner that was able to make a clear decision for a green building with the help of its construction team was Toyota Motor Sales USA, Torrance, Calif. The newly constructed headquarters for Toyota Motor Sales USA is the largest green building complex in the nation, and the largest ever to receive a LEED Gold rating from the U.S. Green Building Council (USGBC).

The facility, which has 624,000-sq.ft. of office space, achieved a 95% recycled content rate and has one of the largest commercial solar electric systems in North America, which reduces the facility's demand on the local utility grid load during peak hours. Additionally, Toyota installed a special pipeline to supply recycled water to the complex for cooling, landscaping, and rest-room flushing. The facility also has energy-efficient features such as direct-indirect lighting, high-efficiency insulation, and thermally insulated glass that helps the complex exceed State of California energy efficiency targets by more than 20%.

"Every decision along the way also had to make good business sense and fall within budget guidelines," says Robert Pitts, Toyota group vice president for administrative services. "We wanted to show that building an environmentally sensitive office complex does not have to be limited to small or unique projects—or ones with inflated budgets."

DPR is also practicing what it preaches when it comes to green building, by constructing a new headquarters in Sacramento, Calif., using green systems and designs. Van der Linden says the initial first costs for the green systems in the building will only be between \$70,000- \$75,000, and the long-term payback will be high. "I think that we are going to see returns of almost all of that in two and a half years through water and energy savings, and we anticipate an even greater return of our investment over the lifecycle of the building," he says.