## **PUBLICATION**

## It's All Green to Me

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Green, green. Every time you turn around in the construction industry, it seems that word pops up these days. Just what is green construction anyway? If you ask my father, he would probably tell you it is any building with a coat of paint splashed on it in a hue that falls somewhere between yellow and blue on the color spectrum. And he'd be right in one sense, but that's not what we're talking about when we say green construction in this day and age. Although there are many ways to define the term, in general it usually refers to a building that achieves one of the certification levels under the United States Green Building Council's Leadership in Energy and Environmental Design (LEED) rating system.

LEED is a voluntary standards and certification program that provides a framework for measuring a building's sustainability and its impact on the environment. Four progressive levels of certification may be achieved based on the number of points earned throughout a building's design and construction: Certified, Silver, Gold and Platinum.

According to a recent McGraw Hill Construction report, the past three years have seen a five-fold increase in the value of green building construction projects in the United States. On top of that already significant increase, it is estimated that today's value of green construction will again triple by 2013. What is driving this surge in green construction activity, and perhaps more importantly, will it continue?

Two primary forces are behind the rise in green construction: increasing demand from consumers, and the increasing role of governmental bodies. As energy prices rise and the idea of energy independence gains traction in the United States, more consumers are demanding buildings with lower operating costs and less harmful effects to the environment. Just as someone today would not consider buying a car without consulting the MPG sticker on the window, more and more building owners and occupants want to know how much their monthly operating costs will be. Owners also increasingly want the advantage of marketing their buildings as environmentally friendly.

The other hand driving the market belongs to governmental bodies. Municipal governments have been quick to influence green construction through the use of a variety of regulatory schemes, ranging from incentives to mandatory requirements. According to the U.S. Green Building Council (USGBC), there are more than 100 cities and 34 states with green building policies for governmental buildings; ten states with green building standards applying to non governmental buildings; and 69 cities that have enacted green building measures for various types of non governmental construction.

For example, Washington, D.C., requires privately owned buildings to meet LEED standards and will soon require all buildings (city owned and private) to benchmark and publish their energy performance data. Austin, Texas, will require all single family homes being sold to have an energy performance audit with the results disclosed to prospective buyers, and will eventually subject commercial and multi family buildings to this requirement as well. In San Jose, California, municipal buildings that are more than 10,000 square feet have been required to meet LEED Silver status since March 2007. This past October, the city expanded its green building policy to include private buildings and set requirements based on square footage and the type of construction. The state of California has picked up where its cities have left off, and recently became the first state to adopt green building standards into its building codes. The standards are voluntary for now, but will

become mandatory in 2011. In conjunction with ASHRAE, the USGBC is developing Standard 189.1 P, which will be a model green building code for adoption by states and municipalities across the country.

The combination of these two forces – consumers and government – is driving the growth of the green construction industry. If the tipping point has not already been reached, it will be here before you know it, especially once more of the mandatory green building codes go into effect. When this happens, green building products that once seemed experimental will become commonplace. The increased usage of green products will spur increased production and increased competition that will cause prices to fall. Design professionals will be better equipped to adopt sustainable designs with a proven track record. In short, what is considered green construction today will be considered standard construction in the near future.

The market shift to green construction will provide profitable opportunities for those design professionals and contractors who establish themselves early as experienced and competent in the field. But, as always, this profit potential obviously will not come without risk. Green construction will pose several new risks to design professionals and contractors, including the following:

- Who will be responsible for both documenting and achieving LEED certification? And who is responsible if the building fails to meet a local green building code?
- If tax incentives related to green construction are available, who bears the burden for achieving
- What happens if there is a delay due to waiting on certification from a third party, such as the USGBC?
- What if there are performance problems with green products that have not been widely used or tested?
- What if there is unexpected delay in the acquisition of green products that are in high demand with few current manufacturers?
- Are designers and contractors who hold themselves out as "green architects" or "green builders" subjecting themselves to a higher standard of care?

A vital question for green designers will be whether they would be covered under traditional professional liability policies. Already, a recent survey of the construction insurance industry by Marsh has revealed the following claims:

- Claim by developer against architect because building did not achieve LEED Gold certification.
- Claim against architect and structural engineer due to water infiltration from green roof.
- Claim against design team because the cork flooring they specified resulted in water retention and mold
- Claim against architect because lack of green product availability caused project delays.
- Claim against architect because health problems of tenants' employees increased despite warranties that the indoor air quality would improve.

The same Marsh report warns that "the general consensus is that a key difference between traditional design and green design involves enhanced performance expectations (i.e., energy savings, employee productivity, etc.) and an evolving standard of care which may not be covered by traditional architects and engineers professional liability insurance policies." Whether specialized "green insurance" for design professionals will be developed will depend on the amount of claim activity the insurers experience, but it appears inevitable given the increase in green construction.

In the same builders risk market report by Marsh, only one specialized product is reported to have been developed: a "Delay of Occupancy or Use - Green Amendment" endorsement. No surety markets surveyed had developed any products tailored to green construction risks, although one surety is considering an energy savings guarantee policy for HVAC firms. One thing is clear from the Marsh survey: green construction is just as new to insurers as it is to designers and contractors.

That being said, the risks involved in green construction aren't exactly foreign to the construction industry; they're just in new clothing. Delivering a completed building to a satisfied owner has always been a process with shared responsibilities among the owner, designer, contractor and subcontractors, and fraught with uncertainties. With a little extra care and thoughtfulness, the risks of venturing into green construction can be successfully managed. This can best be achieved through a contract that clearly spells out each party's roles and responsibilities. Doing this in a clear manner is even more important in the green construction context because there are fewer developed industry standards to help fill in gaps or interpret the contract.

Like it or not, all signs indicate green construction is growing and here to stay. The question then becomes whether you want to be ahead or behind the curve. While there are dangers lurking for those who want to be early leaders in the field, those risks – like all construction risks – can be successfully managed by drafting a well crafted contract that keeps these new risks posed by green construction in mind.