

Green Building in the 21st Century

By Chris Cheatham
and Steve McBrady,
Crowell & Moring LLP

Despite the economic downturn's continuing impact on the construction industry, green building remains poised to realize significant market growth in 2010.

I. More green building means more regulation, and vice versa

According to ENR, in 2008, the top 100 green contractors in the United States generated roughly \$38.69 billion in revenue from projects registered or certified as green buildings. This marked a startling 70 percent increase from \$22.76 billion in revenue generated by the same group in 2007. While overall construction revenue—including revenue from green building projects—likely declined in 2009, green building projects as a percentage of overall construction projects grew.

The growth in the green building industry has been fueled in part by the American Recovery and Reinvestment Act of 2009 (ARRA), which allocated approximately \$25 billion for green building-related projects, and in part by federal, state and local government green building regulations (both incentives and mandates), which have expanded to encompass both public procurements and private sector commercial construction projects. According to the United States Green Building Council (USGBC), as of December 2009, green building legislation, executive orders, resolutions, ordinances, policies, and other initiatives can now be found within 14 federal agencies and 45 states—including 33 state governments (and the Commonwealth of Puerto Rico), 138 cities, 36 counties, and 28 towns, 17 public school jurisdictions, and 41 institutions of higher education.

The most prevalent green building rating systems is the USGBC's Leadership in Energy and Environmental Design (LEED®) rating system. LEED has served as a model for governments on the federal, state and local levels looking to craft green building regulations. Under the LEED system, there are five components to a green building: 1) Site planning, where the project is located; 2) Water management, the amount of water used by the building; 3) Energy, the amount of energy used by the building; 4) Material use, the incorporation sustainable materials into the building; and 5) Indoor environmental quality, the environment inside the building for occupant use.

The LEED system allows for developers and owners to track and score the number of green building components incorporated into a green building. For each green building component, points are given by the rating system, resulting in certification at a specific level (Certified, Silver, Gold and Platinum) depending on the number of LEED points accumulated. A certification serves as a both a recognition of the results achieved, and as a marketing device to inform prospective tenants, customers and the public that the building is "green."



The rapid growth of green building, coupled with ever-evolving regulations, has created new legal risks and liabilities for unsuspecting parties. This article will examine one example.

II. LEED-based regulations in practice

A. The DC Green Building Act

On March 8, 2007, the city of Washington, DC passed the Green Building Act ("Green Building Act"), which phased in green building requirements for various types of buildings over five years. The Green Building Act contains both LEED and non-LEED requirements for projects depending on the size, classification and schedule of the project, as well as incentives for entities participating in green construction in the form of grants and expedited review of construction documents.

The Green Building Act differentiates between two types of buildings—publicly- and privately-owned—in determining deadlines for compliance with new green building requirements. Beginning March 8, 2007, new construction (or "substantial" improvements) of publicly-owned, nonresidential buildings must fulfill or exceed LEED Silver standards; new construction of publicly-owned residential buildings greater than 10,000 square feet must satisfy a separate standard (the Green Communities 2006 standard); and tenant renovations to at least 30,000 square feet of a publicly-owned building used for commercial purposes must be LEED Certified.

Requirements for privately-owned buildings under the Green Building Act are phased in over the next several years, beginning on January 1, 2009, after which time all parties submitting building construction permit applications for privately-owned buildings are required to submit a USGBC green building checklist. The USGBC's green building checklist is used to calculate a building's estimated LEED score as the project progresses.

As of January 1, 2010, nonresidential, privately-owned projects submitting construction permits for new construction of 50,000 square feet or greater real property acquired from the Government of D.C. must comply with the LEED certified standard; and after January 1, 2012, **all new construction** of projects 50,000 square feet or greater must be LEED Certified.

One of the most controversial provisions of the Green Building Act is the performance bond requirement. Like the LEED requirements, implementation of the performance bond requirement depends on the date when key events occur. Prior to January 1, 2012, "commercial applicants" who apply for incentives under the Green Building Act must provide a performance bond, which is due and payable upon approval of the first building construction permit application.

After January 1, 2012, an applicant for construction of a privately-owned building must provide a performance bond which is due and payable prior to receipt of a certificate of occupancy. Thus, after January 1, 2012, if a construction project must meet green requirements in the Green Buildings Act, the "applicant for construction" must also provide a performance bond guaranteeing satisfaction of the green requirements.

The Green Building Act sets substantial amounts for the required performance bonds. If the performance bond is required prior to January 1, 2012, the bond must equal 1 percent of the incentives received. If the bond is required after January 1, 2012, the bond amount increases based on the project size from two to four percent of total cost of the building, but is not to exceed \$3 million.

Most importantly, if the building fails to meet the "verification requirements" in the Green Building Act, "the performance bond shall be forfeited to the District." For example, a 72,500 square foot privately-owned building with a total cost of \$28,000,000 being constructed after January 1, 2010 that fails to meet the appropriate LEED certification level would forfeit a performance bond in the amount of \$560,000 to the D.C. government.

In an August 13, 2007 letter, the Surety and Fidelity Association of America (SFAA) and the National Association of Surety Bond Producers (NASBP) responded to the Green Building Act's performance bond requirement, stating that the Act "includes bond requirements that, if not clarified significantly, may make sureties reticent to issue such bonds." The SFAA and NASBP outlined several problems with the Green Building Act's performance bond requirement, including:

- The Act incorrectly uses the term "performance bond" as the bond described in the Act "seems to function

more in the manner of a license or compliance bond, which typically guarantees compliance with a law or code." A performance bond typically assures one party that another party will perform the contract in accordance with its terms and conditions.

- The Act does not designate which party is to furnish the performance bond. The letter argues that "the building owner or developer, as the originator of the building project that retains the design professional and contractor, hold the ultimate responsibility for whether the building achieves compliance with the Act's requirements."

The SFAA and NASBP's primary concern with the Act is that contractors and performance bonds are improperly suited for guaranteeing compliance. As more owners and governments demand green construction, the mechanism for ensuring "green" compliance must be carefully articulated. The only party with control over a project from start to finish is the owner and/or developer.

While designers may dictate the a majority of the green features incorporated in a project, they cannot ensure these features are constructed properly; likewise, contractors can guarantee that a building will be built according to the "green" plans and specifications, but contractors should be reluctant to accept responsibility for design errors and omissions. Notably, the D.C. City Council proposed a revision to the "performance bond" requirement in December 2009 to strike the word "performance."

III. Conclusion

As federal, state and local governments place increasing focus on green building and sustainable development, contractors, developers and owners will be required to closely examine the fine print of new "regulations" and incentives. The growth of green building within the construction industry will give interested parties increasing clout in the formulation of smart policies; the key is for contractors and owners to recognize emerging opportunities as well as risks. ●

Steve McBrady and Chris Cheatham are residents in Crowell & Moring LLP's Washington, DC office.