

# 2005 GREEN BUILDING UPDATE

by ICC Senior Staff Architect Allan Bilka, RA

The National Association of Home Builders (NAHB) held its annual Green Building Conference March 13–15 in Atlanta, Georgia. The ICC Industry Advisory Committee met in tandem with NAHB's conference to discuss green building programs and their relationships to the *International Codes*<sup>®</sup>.

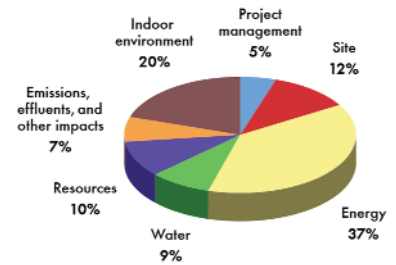
In general, green building can be characterized as building with a conscious effort to minimize negative impacts and encourage positive impacts on both the indoor and outdoor environments. The number of green buildings being constructed in the U.S. has increased exponentially over the past several years. As a result, more and more green building programs are appearing in jurisdictions around the nation. The majority of these are voluntary, but an increasing number of jurisdictions are adopting mandatory green building programs. Although most of the latter only apply to government buildings, some mandate compliance for residential and commercial structures.

Many jurisdictions and designers look to the U.S. Green Building Council (USGBC) Leadership in Energy and Environmental Design (LEED) program to assess and certify green commercial structures. The USGBC rates buildings using a system that awards points for each environmentally friendly concept utilized. Although the LEED for New Construction and Major Renovation (LEED-NC) program is the most widely utilized green building rating system in the U.S. for commercial buildings and has proven effective, LEED evaluation can also be time-consuming and costly for some projects.

One alternative is Green Globes: a green building rating system which can be self-administered by a commercial designer or builder. Green Globes has been utilized primarily in Canada; however, the Green Building Initiative recently acquired the rights to Green Globes and is actively promoting the program in the U.S. with the support of NAHB. It is important to note that Green Globes is not intended to be utilized with mandatory green building programs. Other prominent green building programs include the U.K.'s Building Research Establishment Environmental Assessment Method and the International Initiative for a Sustainable Built Environment's Green Building Challenge.

On the residential front, as green building has gained more and more attention from the general public it has become a valuable marketing tool for home builders. One result is the recent publication of NAHB's *Green Home Building Guidelines*, which ICC contributed to as an invited

Distribution of points in Green Globes.



member of the development program's stakeholder group. Seminars regarding the use and implementation of these guidelines were presented at the Green Building Conference. Like the LEED-NC program for commercial buildings, a point system is utilized to evaluate performance. Unlike USGBC, NAHB does not intend to have a system or staff in place to assess compliance with its residential guidelines. Instead, the program is to be self-administered or administered through local home builders associations (NAHB is not encouraging adoption or enforcement by local jurisdictions).

Meanwhile, some local jurisdictions have developed their own residential green building programs and the USGBC is at work on its own green building rating system for residential construction. According to LEED for Homes Program Manager James Hackler, the system will be much more user-friendly and streamlined as compared to LEED-NC, and the USGBC does not intend to check or certify plans for LEED for Homes compliance.

From a codes perspective, it is interesting to note that the minimum standards set by most green building programs and rating systems are tied to the I-Codes<sup>®</sup>. For example, green buildings are typically required to fully comply with the energy code adopted by a jurisdiction—which can itself be a major step forward environmentally.

The ICC Industry Advisory Committee is currently studying the subject of green building on behalf of ICC members and stakeholders, and will present its recommendations to the ICC Board of Directors. ♦



The 80,000 square-foot Integrated Learning Centre at Queen's University in Kingston, Ontario, received a four-leaf rating through the Green Leaf program, which is now accessible online as Green Globes. Designed by B+H Architects of Toronto, the project was completed in 2004. The Ottawa-based firm Green & Gold, Inc., implemented the Green Leaf program and helped integrate the building analysis tool into the design process. The lighting, ventilation and water distribution systems, in particular, contributed to the building's high rating.