

Taking on Fire Safety and Sustainability

A New Green Building Code Debuts

By Dave Nichols and Kraig Stevenson

We have all seen the headlines and have had discussions about what it means to “go green.” The public is clamoring for more energy-efficient and renewable technologies in schools, hospitals and worksites of all types. Due to the upswing in sustainable construction, it is important to understand how these technologies are applied within the framework of a sustainable building code, as well as how green building design and construction relates to fire safety. There is a need to ensure integration between regulations that promote sustainable construction and those that promote the safety of building occupants and firefighters.

In an answer to this public demand, the International Green Construction Code (IGCC) is making its debut. Using the slogan “IGCC: Safe and Sustainable by the Book,” this newly released and enhanced building code is a milestone on the road to developing commercial building standards that achieve goals of sustainability while incorporating the input of public safety officials across the country.

The IGCC Public Version 1.0 was recently unveiled by the International Code Council (ICC) at its Washington, D.C., world headquarters office with participants from the fire safety community in attendance. The objective of the IGCC is to provide a green building code for traditional and high-performance buildings, and by referencing the residential occupancies that have qualities similar to commercial structures. It is consistent and coordinated with the ICC family of Codes and Standards. The ICC Codes and Standards use the same basic principles that have made these model codes the predominant choice for adoption. The Code Council is no stranger to the green building discussion – it has been developing energy efficiency codes for more than 30 years. During this time, it has been developing codes and services to support sustainable building in commercial and residential construction, as well as providing training, professional certifications and product evaluations.

The Importance of the IGCC

When the IGCC effort was initially launched it had two Cooperating Sponsors—the American Institute of Architects (AIA) and ASTM International. The work of the ICC/AIA/ASTM team in developing the IGCC was joined with a Standard developed by the American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE), the U.S. Green Building Council (USGBC) and the Illuminating Engineering Society (IES).

In addition to providing 12 chapters and four appendices guiding green construction, the IGCC will also reference the ANSI/ASHRAE/USGBC/IES Standard 189.1-2009 for the Design of High-Performance Green Buildings, Except Low-Rise Residential Buildings, as an alternative jurisdictional compliance option. The participants in designing this Standard have voiced their support for the new IGCC and its potential to significantly contribute to a more sustainable built environment. Development of the IGCC



included active voices and recognized leaders from an array of disciplines, occupations and industries including building safety and fire prevention.

Consideration of Fire Safety in Sustainable Design

The Code Council and its partners are encouraging the fire safety community and the public to become actively engaged in shaping the building codes that will help green building design and construction practices evolve and become more common. While fire safety professionals have provided some fire safety code related suggestions for green building code development, more input is being sought through the Code Council's Public Comment process to refine the details that encourage use of green building technologies in building construction, fire protection systems, the operation and maintenance of buildings, as well as emergency fire operations considerations. The Public Comment period runs through May 14, culminating in public hearings in August to review the comments and receive testimony that will result in the release of Public Version 2.0 in November.

There are wide-ranging areas of interest for the fire safety community to consider in the development of the IGCC from rooftops to sprinkler systems and recycled materials. The scope of the IGCC is designed to apply to all types of communities, taking into account jurisdictional needs and conditions.

New and perhaps uncommon sustainable construction materials, technologies, systems and design features will be seen in green buildings. It will be important for code officials and fire safety professionals to lead communities in correctly interpreting and applying existing building and fire safety codes, along with provisions in the new IGCC to embrace green building advances.

We Want to Hear from YOU!

The ICC is encouraging fire safety professionals to provide comment on Public Version 1.0 of the IGCC during the period of public comment of March 15 to May 14, 2010. In addition, the fire safety community is invited to participate by developing and submitting code change proposals for upcoming code hearings to help make the 2012 edition of the IGCC as complete and up-to-date as can be accomplished. Code change proposals will be considered at code development hearings and final action hearings in Dallas and Phoenix respectively during 2011, with publication of the 2012 IGCC to follow.

