



Sensible Security

By Jon A. Schmidt, P.E., SECB

The green building movement has had a profound influence on the design and construction industries in recent years. This is largely due to the still-growing popularity of the U.S. Green Building Council's Leadership in Energy and Environmental Design (LEED®) rating system and accreditation program. By recognizing buildings and individuals based on certain principles of sustainability, LEED has completely altered the typical approach to projects. Even so, structural engineers generally do not find themselves heavily involved in the process of pursuing LEED certification for their buildings.

However, something new is in the works that will be relevant to all disciplines, including — and in some ways, especially — structural engineers. The Building Security Council (BSC) is an initiative of ASCE with the vision of enhancing public safety by promoting building security. Inspired by LEED, the BSC's two main pillars are a voluntary rating system for buildings and a voluntary certification program for individuals. The obvious difference is that the focus is on security, rather than sustainability. FEMA 426, *Reference Manual to Mitigate Potential Terrorist Attacks Against Buildings*, serves as the BSC's primary foundation.

The main benefit of the BSC rating system will be the rationalization of building security efforts. Like I often say, the events of September 11, 2001 did not really change the threat of terrorism in this country, but they certainly altered the perception of that threat. As a result, a lot of facility owners and managers responded with what amounted to "knee-jerk" reactions that had no firm basis in a systematic assessment of the legitimate risks — addressing credible scenarios, the consequences of a successful attack, and the inherent vulnerabilities of their buildings. The BSC rating system is intended to become an industry-wide decision-making tool by presenting physical and operational security alternatives that provide a real, measurable return on investment within a framework that is broad, flexible, and simple.

The first step is classification of the building based on factors that influence its attractiveness as a target. A series of checklists then provides an extensive set of physical and operational countermeasures associated with each "precious metal" rating category. Some of these are mandatory, but most have points assigned to them based on their relative implementation costs and actual value in mitigating specific threats. In addition, bonus points may be awarded for innovative countermeasures. A building must have all of the mandatory countermeasures and a certain percentage of the points available in the desired rating category, as well as all of the mandatory countermeasures and a certain (higher) percentage of the points available in every lower rating category.

The BSC has submitted its rating system to the Department of Homeland Security (DHS) for designation as a Qualified Anti-Terrorism Technology under the Support Anti-terrorism by Fostering Effective Technologies Act of 2002 (SAFETY Act). If terrorists successfully attack a rated building, SAFETY Act coverage would mean that only the BSC could be sued for damages specifically on the basis of the building's rating — the owner and any consultants involved would be exempt, and the BSC's liability would be capped at a predetermined (insured) amount. If all goes well with the SAFETY Act approval process, ratings for fee will begin in the first quarter of 2007.

The BSC recognizes that widespread implementation of its rating system will require the support and participation of competent design and security professionals who will be retained by building owners and managers to prepare the necessary documentation. Building Security Certified Professionals (BSCP) will be individuals who have demonstrated knowledge and understanding of the multidisciplinary security considerations that are relevant to the entire life-cycle of a building. To ensure a minimum basic level of qualifications, candidates will need to satisfy one of the following prerequisites:

- A valid license from any United States jurisdiction as a professional engineer, architect, or landscape architect.
- Certification by ASIS International as a Certified Protection Professional (CPP) or Physical Security Professional (PSP).

A three-hour written examination will include 100 questions covering seven domains of knowledge: Project Process, Risk Assessment, Site Considerations, Building Envelope, Interior Space, Facility Operations, and Rating System. The examination will be delivered by computer to testing centers throughout the United States beginning early in 2007.

The BSC hopes that BSCP's will adopt and spread the philosophy of sensible security so that, like sustainability, it will eventually become an integral part of planning, designing, constructing, operating, and evaluating buildings of every type. Will you join me in this worthwhile effort? ■

The BSC is conducting a two-day seminar on the content of the BSCP examination, including the new BSC rating system, on November 27-28 at ASCE Headquarters in Reston, Virginia. Attendees will receive 13 professional development hours. For more information about the BSC, the BSCP, and the seminar, please visit www.buildingsecuritycouncil.org. ■

Jon A. Schmidt, P.E., SECB, is a senior structural engineer and the Director of Antiterrorism Services at Burns & McDonnell in Kansas City, Missouri. He chairs the BSC Certification Program Development Committee, as well as the STRUCTURE magazine Editorial Board (chair@STRUCTUREmag.org).

Editorial Board

Chair

Jon A. Schmidt, P.E., SECB
Burns & McDonnell
Kansas City, MO
chair@structuremag.org

Executive Editor

Jeanne M. Vogelzang
NCSEA
Chicago, IL
ncsea@structuremag.org

Craig E. Barnes, P.E., S.E.
CBI Consulting, Inc.
Boston, MA

David Biggs, P.E.
Ryan-Biggs Associates, P.C.
Troy, NY

Daniel Falconer, P.E.
American Concrete Institute
Farmington Hills, MI

Richard Hess, S.E., SECB
Hess Engineering Inc.
Los Alamitos, CA

Mark W. Holmberg, P.E.
Heath & Lineback Engineers, Inc.
Marietta, GA

Brian J. Leshko, P.E.
Robert W. Hunt Company
Pittsburgh, PA

Bill Liddy
American Institute of
Steel Construction, Chicago, IL

John A. Mercer, Jr., P.E.
Mercer Engineering, PC
Minot, ND

Evans Mountzouris, P.E.
The DiSalvo Ericson Group
Ridgefield, CT

Greg Schindler, P.E., S.E.
KPFF Consulting Engineers
Seattle, WA

Stephen P. Schneider, Ph.D., P.E.
Kramer Gehlen & Associates, Inc.
Vancouver, WA

John "Buddy" Showalter, P.E.
AF & PA/American Wood Council
Washington, DC