

FINAL 7/31/10



**National Association of State Fire Marshals
Green Buildings and Fire Safety
Advisory Working Group Meeting
June 22, 2010
Meeting Notes**

Attendees:

Chief Ben Barksdale, International Association of Fire Chiefs
Ed Comeau, National Association of State Fire Marshals
Karen Deppa, National Association of State Fire Marshals
Roy Deppa, Marchica & Deppa, for NASFM Science Advisory Committee
David Conover, Pacific Northwest National Laboratory, US Department of Energy
Robert James, Underwriters Laboratories
Dominick Kasmauskas, National Fire Sprinkler Association
Ed Kirkpatrick, National Association of State Fire Marshals
Ken Lauziere, Vision 20/20
Nick Marchica, Marchica & Deppa, for NASFM Science Advisory Committee
Ron McGraw, International Association of Fire Fighters
Nancy McNabb, National Fire Protection Association
Jim Narva, National Association of State Fire Marshals
Carole Plato, National Association of State Fire Marshals
Lucas Pfannenstiel, Liberty Mutual Property
Jon Roberts, Office of Oklahoma State Fire Marshal
Michael Rupert (luncheon speaker), District of Columbia Department of Consumer and Regulatory Affairs
Steven Sawyer, International Fire Marshals Association
Bill Spencer, National Association of State Fire Marshals
Jim Tidwell, Fire Equipment Manufacturers Association and NASFM
Justin Wiley, International Code Council

The agenda is attached to these meeting notes.

After attendees' introductions, Karen Deppa and her project team provided an update on the status of project deliverables to date, including the www.greenbuildingfiresafety.org website, the Fire Service Guide to Green Construction, and outreach and media efforts both within and outside the fire community.

On the development of the website, Webmaster Ed Kirkpatrick explained how the site has evolved since its debut, and noted that as the NASFM project team becomes aware of new resources to feature on the site, it will continue to be fleshed out.

The Working Group discussed the need to encourage participation by visitors in the Discussion Forum, which is the portion of the site that gives visitors the opportunity to raise issues, ask questions, and share their own experiences. Ms. Deppa asked all Advisory Working Group members to visit the Discussion Forum portion of the website and contribute their input to topics, start new discussion threads, and direct others to the site that may have information to contribute.

The Working Group agreed that a section on what is going on with green building related requirements in the states would be a useful addition to the website, with an overview that introduces the information presented and then a state-by-state summary, including a form in which local officials can input information about local green building requirements. Links to sources of updated information on energy codes and green building projects would also be a useful addition to this section. Ms. Deppa invited Working Group members to review draft state write-ups and submit any comments and corrections they may have.

On the Fire Service Guide to Green Construction, lead author Jim Tidwell explained that the purpose of the guide is to provide a primer on green building related safety concerns for both the code enforcement community and the firefighter/emergency responder community. The guide is also envisioned as being useful to the environmental and design communities in that it will highlight fire service concerns that they may not have previously considered. It will include two sets of checklists, one focusing on plan review issues and the other on suppression issues.

The Working Group discussed a recommendation that overviews based on the completed guide could be prepared for various audiences as an introduction to these issues, including designers, green advocates, testing laboratories and government agencies, in addition to the fire service.

Ms. Deppa also described the participation of the NASFM Model Codes Committee (MCC, an advisor to the NASFM Fire Safety and Green Buildings Program) in the public comment period of the new International Green Construction Code (IGCC). (The proposed changes to the code submitted by the MCC will be posted on www.greenbuildingfiresafety.org.) The group discussed how even though the IGCC is intended as an overlay code to the model building, fire and related codes that are adopted in a jurisdiction, there are many jurisdictions that do not have fire and building codes; if such jurisdictions adopt the IGCC, there may need to be fallback provisions within the IGCC that ensure the safety that otherwise would be provided by fire and building codes.

Urban villages (designed as a sustainable antidote to “urban sprawl”) were discussed as presenting potential safety concerns in the placement of structures, vehicle access and the use of co-generation plants, among other things.

Ms. Deppa described her recent meeting with a representative of the US Green Building Council, who explained that the LEED rating system is not a code and thus assumes that buildings will meet the minimum levels of safety as prescribed by fire and building codes. The Working Group wondered about the possibility of having such an assumption at least articulated within the preamble to the LEED system.

The Working Group discussed adding a topic to the Discussion Forum related to the use of recycled materials that may not have a track record in terms of fire safety.

The group recommended that the American Institute of Architects be briefed on NASFM's Fire Safety & Green Buildings program and invited to join the Advisory Working Group. It was suggested that NASFM consider presenting at the AIA's 2011 convention, which will be held next May in New Orleans. Dom Kasmauskas mentioned that the National Fire Sprinkler Association conducts a 6-hour program for AIA members on how designers can increase the fire protection for their designs while controlling construction costs.

The group also discussed the Solar Decathlon that is held by the Department of Energy in Washington, DC, and how NASFM might encourage the DOE to incorporate fire safety features in the specifications for the competition. Sponsors might include an additional scoring point or prize money to integrate fire safety features in buildings.

Luncheon Speaker: Social Media Marketing Strategies

Michael Rupert, communications manager for the Washington, DC, Department of Consumer and Regulatory Affairs, addressed the group on strategies for using social media to help augment an organization's outreach and messaging strategies. He stressed the importance of knowing the overall goal of the organization and its communications strategy, and then fitting the social media piece into that overall goal. Organizations cannot just build a website and expect people to come; social media tools can help guide people to your site.

Mr. Rupert shared the following advice on incorporating social media into a communications strategy – both generally and specifically for the NASFM Fire Safety and Green Buildings program:

- Find out who is already saying things about your topic using search.twitter.com; use targeted search terms to set up alerts
- Using # with the search term will help identify everything that is said about a topic (and put #greenfire at the end of all of our tweets to track re-tweets)
- Seek out free tools to measure the impact of your message
- Engage people as soon as they get to the website's home page; don't assume they will take the time to find your discussion forum
- Once a Twitter account is set up, it takes only half a minute to post on it
- It may take 6 months to get a good community going with regular Twitter feeds

- Re-tweets, in which your community members share your tweets with their communities, help to spread the word beyond your community (for example, NFPA, NFSA and ICC all have Twitter accounts that can help get the ball rolling for NASFM's program with re-tweets)
- Put links in your tweets to drive people toward your site
- Make sure your tweets are relevant, and do not put out too many at once
- LinkedIn is another good place to publish links to your site
- To get people involved in the discussion forum, consider focusing on a couple of the hotter issues – ask the question in a tweet, and then put a link to send people directly to the discussion forum section of the site.

Discussion Topics

After lunch, the Working Group dealt with specific issues that members had raised for discussion:

- *Thermal envelope insulating materials:* Mr. Conover said that he is seeing buildings that are putting 6-8 inches of exterior foam on steel frame buildings (sometimes using 2 layers of 3- or 4-inch foam) in an effort to eke more energy savings from them. The concern is that this practice might circumvent smoke development and flame spread ratings in the codes. ASHRAE's Envelope Committee was set up to address cases in which the energy code is directly or indirectly in conflict with the fire code. This issue might benefit from an open discussion with industry to explore other options that might be available.

Working Group members raised similar fire safety concerns about wood trusses on the underside of a roof deck being sprayed with insulation to help condition the attic of a home; the use of lightweight construction (not just wood but steel), and the increased melting of vinyl siding on neighboring houses because of reflectants in low-emissivity windows.

The Working Group recommended that NASFM contact the Department of Energy to suggest that DOE look at such issues so that fire problems are not inadvertently caused in the pursuit of increased energy savings.

- *Standards for photovoltaic installations:* Mr. Marchica described the need for more prescriptive requirements for photovoltaic (PV) installations, including labeling, shutoffs, and placement. Working Group members pointed out that PV panels are being installed not only on roofs but also on exterior walls of buildings, as well as integrated into window glazing. Will the fire service be prepared to deal with these developments? The Fire Protection Research Foundation recently held a workshop on solar panels that resulted in a series of action items that will result in projects to address each item. UL and NIST are co-hosting a workshop at NIST headquarters in Gaithersburg on PV systems on Sept. 23-24, and input from the fire service is needed.

- *Safety issues associated with retrofitting existing buildings:* Mr. Lauziere talked about concerns related to occupant and emergency responder safety when existing buildings are retrofitted with green systems and features designed for energy efficiency – such as how the roof load is affected when a green roof or solar panels are installed; how lower lighting levels may affect exiting in stairwells; how sprinkler systems are affected by changes to the water supply; how glazing for ultraviolet protection affects the ability of firefighters to ventilate buildings in a fire.
- *Integrated Design Process – can code officials play a role?* The Working Group discussed the need to integrate code officials, fire protection engineers and fire marshals at the very beginning of the design process, and suggested adding a section to the website and/or guide on a part of the Integrated Design Process known as “building commissioning,” a systematic and documented process of ensuring that the owner's operational needs are met, building systems perform efficiently, and building operators are properly trained. This would provide an opportunity to discuss NFPA 3 (Recommended Practice on Commissioning and Integrated Testing of Fire Protection and Life Safety Systems), ASHRAE Guideline 0 (The Commissioning Process), and the National Institute of Building Sciences Total Building Commissioning Program.

Mr. Conover said that administrative processes need to drive some of the changes that are needed. Prescriptive provisions are being phased out in favor of an outcome-based focus that looks at how the building is actually performing. The administrative process needs to incorporate the fire safety concerns as well as energy efficiency concerns.

- *Credits/points for fire safety in green building rating systems:* Mr. Kasmauskas said that the National Fire Sprinkler Association is working on encouraging points for sprinklers in the LEED rating system, and is preparing a presentation to the US Green Building Council that would show increased water efficiency from the use of sprinklers. NASFM will be invited to participate in developing the Action Plan for this effort.
- *Collection of data on fires involving green buildings:* The group discussed possible ways to begin tracking fires in green buildings. NFIRS might include a question on whether the building that had the fire was LEED-certified. The www.greenbuildingfiresafety.org website might include a form for reporting such fires and allow a respondent to upload the incident report.

Future Directions and Areas of Focus for the Program

Ms. Deppa described overall goals for the future of the NASFM Fire Safety and Green Buildings Program, and the Working Group discussed potential sources of funding and areas of focus.

The meeting adjourned at 2:30 pm.



**Fire Safety and Green Buildings – Bridging the Gap
Advisory Working Group Meeting Agenda
June 22, 2010, 10 am – 2 pm
International Code Council Conference Room
500 New Jersey Avenue, NW, 6th Floor
Washington, DC**

1. Introductions
2. Summary of project status to date
 - a. Website development and promotion,
www.greenbuildingfiresafety.org
 - b. Guide for AHJs and Firefighters
 - c. Outreach within and outside the fire community
3. Specific Discussion Topics
 - a. Issues/concerns with thermal envelope insulating materials in general (types, thickness, etc.)
 - b. Standards for solar panel installation, labeling, shutoffs, etc.
 - c. Safety issues associated with retrofitting existing buildings
 - d. The Integrated Design Process – what is it, and how can code officials play a role?
 - e. Credits/points for fire safety in green building rating systems
 - f. Collection of data on fires involving green buildings
4. Future directions and areas of focus for project/potential funding sources

Luncheon speaker:

Michael Rupert, Communications Manager, District of Columbia
Department of Consumer and Regulatory Affairs, on “Social Media
Marketing Strategies”

Bridging the Gap – www.greenbuildingfiresafety.org

Goal:

Bridge the information and awareness gaps between fire safety needs and existing and emerging “Green” technologies.

Solution:

To create an accessible, timely and interesting Internet community of mutual interest and benefit.

Method:

- Develop a website of searchable topic areas containing links and information in conjunction with searchable Discussion Forums that are of importance to the Fire Safety community.
- Website pages easily navigated by graphical button links on the side and textual links at the bottom of each page.
- Page design is clean and simple, no dancing widgets, just the facts, links and information.
- Video embeds and Podcasts used as appropriate.
- Font types and sizes are clear and large enough to be readable without scaling.
- Website is searchable from each page.
- Further expanding our effectiveness by reaching out to communities of interest via social networking sites such as Facebook and Yahoo Groups.
- Pushing website out to major search engines, Google, MSN and Yahoo.
- Leveraging supporting group member contacts to spread the word.

Challenges:

- Sponsorship to continue and expand the project in the coming years.
- Discovery of new and interesting content
- Driving traffic to the site on a regular and continuous basis