

Cool School addresses threats to metal

To the casual observer, the inaugural Cool School for Your Metal Roofing was a comprehensive review of the latest in the cool metal roofing movement, covering reflective pigments, the green building revolution, LEED credits, and more. But conference presenters were anything but casual in hammering home the key message of the conference: metal roofing is under attack by various building and energy codes, and embracing and promoting the concepts of cool metal roofing is critical to the industry's future.

About 125 attendees gathered at the Atlanta Airport Marriott in mid-August for the event, orchestrated by the Cool Metal Roofing Coalition. The day was sprinkled with light humor, and allusions to school and being "cool," but the presentations addressing threats to the future of metal roofing were anything but funny.

Take Title 24 in California. In 2000, the Golden State's legislature recognized an impending energy crisis, due in part to wasteful, uneconomic, inefficient, and unnecessary uses of power. A decision was made to overhaul the energy code, and 20 hearings and significant research were conducted over the next several years. The Title 24 Energy Code was adopted in October 2003, and will be implemented in October 2005.

Steel in construction, however, was not represented in the process, and several aspects of the new code will severely hurt metal roofing in California.

Under Title 24, every roof in California must be a cool roof, with a reflectivity of 0.70 or greater and emissivity of 0.75 or greater ("Warming up to Cool Metal," *Metal*



The Cool School panel of (from left) Lee Shoemaker, Chuck Praeger, Jim Robinson, Andre Desjarlais, Scott Kriner, Bob Scichili, and Greg Crawford answered questions from the crowd of approximately 125 at the class's conclusion. KEN LOYE PHOTOS

Roofing, April/May). Under those guidelines, unpainted, low-slope, through-fastened Galvalume roofs — which the Metal Building Manufacturers Association says accounts for 90 percent of its members' California shipments — will no longer be acceptable. To comply, buildings will have to consider a white painted roof, or trade-offs to increase energy efficiency in other areas of the building envelope, such as more wall insulation or energy-efficient windows. Bare Galvalume roofs can be used on unconditioned buildings.

The CMRC conducted a study on the cost impact to metal buildings and low-slope roof systems, wrote letters, and testified at California Energy Commission meetings, but to no avail. Development of the 2008 energy standard begins soon, and while the CMRC hopes to add language more favorable to low-slope unpainted metal roofing, any such amendments would not take place for several years.

Organizers aimed to drive home just how difficult a battle this is, and the importance of getting involved immediately. While California often marches out of step with the rest of the country (see its adoption of the NFPA Model Codes last year), the state regularly acts as a trendsetter for the rest of the nation. Jurisdictions that have already adopted codes making cool roofing either mandatory or favorable include Chicago, Georgia, Florida, South Carolina, Texas, and Arizona.

Attendees were urged to keep abreast of their home area or state energy initiatives, and alert the CMRC of any new developments so that metal may be included in the standard-setting process.

Presenters also addressed other threats to metal roofing, such as associations representing competing roof types, limited research data, and the most potentially dangerous threat —

apathy and ignorance from within the industry.

Not all of the presentations were so dire. Andre Desjarlais of Oak Ridge National Laboratory demonstrated tools that measure reflectivity and emissivity of various surfaces, and talked about the physics of cool metal roofing. Scott Kriner of the Metal Construction Association covered various ratings programs affecting metal roofing, including Energy Star, the Cool Roof Rating Council, Underwriters Laboratory's cool roof program, and the Leadership in Energy and Environmental Design credit 7.2.

Greg Crawford of the Steel Recycling Institute gave an introduction to the LEED system, which contains a small but potentially important section covering the benefits of metal roofing. Terry Burford and Jim Robinson of Architectural Metal Systems presented an in-depth look at how metal roofing compares to competing roof systems. Mark Ryan of Shepherd Color Company described infrared pigment technology, which has helped make more common metal roofing colors cool.

Pat Bush of U.S. Steel closed the day with an impassioned speech imploring students to spread cool metal roofing's story, and to be on the lookout for threats to the industry. A veteran of nearly four decades in the industry, Bush instructed attendees to know metal's strengths, use the resources at their disposal, learn the language of cool roofing, notify their associations of rumors regarding energy code changes, and recognize how cool roof initiatives can be good for business.

For more information on cool metal roofing, visit www.coolmetal-roofing.org. ■



Pat Bush of U.S. Steel (top) and MBMA's Praeger were among the Cool School presenters who spoke passionately about preserving the use of metal roofing in construction. KEN LOYE PHOTOS