

Building Envelope Symposium Dallas, Texas • Grand Kempinski Hotel October 16-17, 1997

By CHRIS CLARKE

THE SITE OF RCI'S UPCOMING CONFERENCE and trade show (April 4-9, 1998) recently served as the location of the first Building Envelope Symposium held in Dallas. The 75 attendees were exposed to a variety of topics regarding the design, installation and maintenance of the various components of buildings that are designed to function as a barrier for moisture infiltration or to evacuate water. Information on products and services related to the topics covered was supplied by ten exhibitors at table-top displays.

Warren French, PE, RRC, RCI Treasurer, acted as the opening day emcee. He reminded those in attendance of the programs, exhibits and demonstrations that will be featured at RCI's 13th International Conference and Trade Show. A poll of the audience showed the majority represented architectural firms, property managers, and contractors.

Building Code Standards for Roofing Systems

Steve Patterson, PE, (Roof Technical Services, Fort Worth, TX), launched the formal presentations with a discussion of building code requirements for general building design. Comparisons were made regarding the three national codes—UBC, SBC, and BOCA, in relation to five key issues: roof drainage, structural, retrofit installations, fire rating and wind resistance. The building code standards for roof drainage received special emphasis.

Exterior Insulation and Finishing Systems

Warren French (French Engineering, Houston, TX) examined the practical uses and potential limitations of Exterior Insulation and Finish Systems (EIFS). He reviewed the basic components, designs and installation methods for generic applications and problems encountered with these as a result of his extensive field investigations. Recommendations for the proper design and utilization of EIFS were pointed out.

Failure Mechanisms in Curtain Walls

David Nicastro, PE (Engineering Diagnostics, Houston, TX). Drawing upon a series of case histories, Nicastro presented a wide range of failure mechanisms in curtain wall construction. After a brief review of the functions of curtain walls, failures in elastomeric sealants, window components, and brick and stone masonry, (in addition to cementitious panels), were highlighted with a slide presentation. Properties of the individual components and improper installations that contribute to the failures were reviewed.

Sealants

Bob Swisher, RCI (Dow Corning, Atlanta, GA). The most commonly-used sealant types and their performance characteristics provided the basis of Swisher's presentation. Advantages and limitations of the various sealant types were discussed, along with emphasis on types of joints and proper design. Reference standards for ASTM test methods relative to sealant performance were included in the final segment.

Proper Parapet Design

Christine Beall, NCARB, CCS, ASTM (consulting architect, McQueeney, Texas). Leak sources other than roofing components were the focus of Beall's presentation. Examples of design problems that contribute to moisture infiltration as it relates to coping and parapet details were reviewed. Proper masonry parapet design principles were emphasized, with a series of "Do's and Don'ts."

Water Repellants and Elastomeric Coatings

Kit Broussard, CAS (independent manufacturer's rep., McKinney, TX). A review of the different types of water repellants and elastomeric coatings, along with the advantages and disadvantages of each, were presented. Broussard analyzed the differences between products classified as water repellants and those used as waterproofing agents. Application guidelines for elastomeric coatings and water repellants on a variety of substrates were also included.