Summer Education Seminar - 13 July 2023



IIBEC Mid-Atlantic Chapter

Soprema Training Center at Convoy Supply 231 W Hampton Pl Capitol Heights, MD 20743

The IIBEC Mid-Atlantic Chapter Summer Educational Seminar scheduled for Thursday, July 13, 2023 is quickly approaching. As always, it should prove to be a stimulating and informative gathering.

1. Liquid Applied Roofing and Waterproofing Membranes

Presenter: Tom Stuewe - Soprema

<u>About the Presentation</u>: This presentation will compare polymeric liquid applied membranes to traditional membrane roofing and waterproofing systems and highlight recover and reroof options to eliminate tear-off, allowing for less use of landfills. The presenter will discuss differences in application techniques for different liquid applied membranes and its effects on performance and safety while highlighting the advantages of polymeric liquid applied roofing and waterproofing membranes.

Learning Objectives:

- 1. Highlight history and performance attributes of PMMA resins.
- 2. Discuss versatility and features of liquid applied PMMA membranes.
- 3. Identify PMMA technology can solve common roofing and waterproofing problems.

<u>About the Presenter:</u> Tom Stuewe graduated from The Ohio State University with a degree in Construction Systems Management. Since 2006, Tom served as Senior Product Manager for a roofing manufacturer, where he managed the Coatings, Plaza Deck, Air Barrier and Adhesive product lines. During his tenure with SOPREMA, Tom has been instrumental in developing the Product Management Team based on his knowledge of commercial low-slope roofing systems and the market needs for these products. He is well-versed in both multi-ply modified bitumen and singleply synthetic roofing, as well as liquid-applied waterproofing systems.

2. Building Enclosures on Mid-Rise Wood-Frame Multifamily Developments in 2023 – Addressing Timeless Performance Challenges While Adopting Emerging Trends

Presenters: John Karras and Sierra Scott - Simpson Gumpertz & Heger Inc.

<u>About the Presentation</u>: Mid-rise wood-frame buildings have long been a common feature of new multifamily developments. The design and construction of building enclosure systems on these projects continually present challenges, and the variables that project teams navigate as they deliver reliably performing enclosures are many. Despite their benefits, industry trends such as evolving code provisions and increasing building enclosure product offerings can further increase the complexity of the building enclosure project delivery process. This presentation will review several key subsystems of the building enclosure from the standpoint of addressing timeless performance challenges while adopting emerging building enclosure trends relevant to mid-rise wood-frame developments. The authors will also highlight some building enclosure design fundamentals and stress the importance of maintaining a holistic thought process when assessing specific building enclosure design decisions.

Learning Objectives:

1. Review fundamental design principles related to key building enclosure subsystems on mid-rise wood-frame multifamily projects.

- 2. Examine salient system selection considerations for certain building enclosure systems.
- 3. Discuss the interdependence among common building enclosure design decisions.
- 4. Highlight select code evolutions that affect building enclosure design on mid-rise wood-frame multifamily projects.

<u>About the Presenters:</u> Sierra L. Scott is a member of Simpson Gumpertz & Heger Inc.'s (SGH) Washington, DC Building Technology team who has contributed to a variety of building enclosure assignments in the Greater Washington area. John Karras is an Associate Principal in SGH's Washington, DC Building Technology group. John has more than twenty years of building enclosure consulting and construction management experience on commercial, institutional, and multifamily buildings. His professional building enclosure experience includes assignments ranging from design consulting, rehabilitation design, assessment, and investigation projects in several US East Coast regions.

3. Fundamentals of Foundation Waterproofing

Presenters: Warren Burns and Lisa Haering – GCP Technologies

<u>About the Presentation</u>: The presentation will explain what foundation waterproofing is and why it is utilized. The presenter will primarily address the challenges of pre-applied waterproofing and identify some issues that have been seen to contribute to jobsite failures. Critical performance attributes of a pre-applied waterproofing system will be identified for consideration and to help ensure a successful waterproofing system. Namely the importance of long-term bond to concrete and lateral water migration resistance will be discussed and the benefits of both attributes will be explained.

Learning Objectives:

- 1. Detail the ways in which below-grade waterproofing is critical to the long-term performance of a structure.
- 2. Assess project and site-specific considerations for inclusion in the design and specification of below-grade waterproofing systems.
- 3. Identify the key differences between common waterproofing systems, including pre-applied and post-applied technologies.
- 4. Better manage risk through the development of comprehensive below-grade waterproofing specifications.
- 5. Consider the health, safety, and welfare of occupants in buildings.

<u>About the Presenters:</u> Warren graduated from Old Dominion University with a BS in Civil Engineering Technology and has held a number of different positions in the construction industry including ready mixed concrete, concrete marketing & promotion, admixture manufacturer-engineering services, and building envelope sales. Warren is responsible for working with and supporting the A&E community, installers/applicators, and distributors. Lisa recently joined GCP as the technical services presence for the DC Metro area. Prior to that, she performed third party observations for all of the major below-grade waterproofing manufacturers, as well as other some forays into other portions of the building envelope.

4. Intricacies of the Intersection: When Bad Walls Get in the Way of Good Roofs

Presenters: Matthew Farmer, P.E. and Anthony Dukes, P.E., R.R.C., R.R.O. – Wiss, Janney, Elstner Associates, Inc.

About the Presentation: One of the first fundamental laws of building enclosures should state, "Where there is an exterior wall, there must be a roof." We know there will be horizontal surfaces protecting spaces below, we know there will be vertical surfaces enclosing that space, and we know those two will meet. Nevertheless, how exterior walls and roofs achieve their water, air, vapor, and thermal objectives and come together create a myriad of architectural combinations. During this discussion, Mr. Farmer and Mr. Dukes will review the mechanisms through which control layer continuity is achieved at roof-to-wall intersections and how design decisions influence that objective.

Learning Objectives:

- Review various wall construction types and the location of their control layers.
- Analyze the control layers in traditional and protected membrane roof assemblies.
- Learn the basic design process for creating continuity at rising walls, eaves, and parapets.
- Canvass examples of layer discontinuity and mitigation strategies implemented to address infiltration, condensation, or other building distress.

<u>About the Presenters:</u> Matthew Farmer has served as principal investigator on numerous evaluations of buildings and monuments since joining WJE in 1986; he has concentrated his practice in the area of masonry building enclosure systems engineering, design, investigation, analysis, and repair. Mr. Farmer received a Bachelor of Science in Architectural Engineering and a Bachelor of Environmental Design from the University of Colorado; and a Master of Civil Engineering from Cornell University. Anthony Dukes is a building enclosure consultant with experience in the investigation, assessment, peer review, and design of building enclosures throughout the United States and abroad. His specialty is roofing and waterproofing, including most contemporary low-slope and steep-slope roofing assemblies, waterproofing systems, insulation systems, and a wide variety of coatings as well as exterior wall assemblies, air barrier systems, glazed assemblies, and building science principles. Mr. Dukes received a Bachelor of Science in Civil Engineering from Clemson University.

JULY 13, 2023 - EVENT SCHEDULE

8:30 – 9:00 Registration and Sign-up 9:00 -- 10:30 Presentation 10:30 -- 12:00 Presentation 12:00 -- 12:30 Lunch Break 12:30 -- 2:00 Presentation 2:00 -- 3:30 Presentation



Attendance to all four presentations is worth a total of six (6) IIBEC Continuing Education Hours

Registration and payment with PayPal is preferred.

DECISTRATION FORM

To pay using PayPal or credit card, please visit <u>https://mid-atlantic.iibec.org/</u> and click on *Calendar. (PayPal account not required) Please note: If you are registering for someone else, please provide the name(s) of registered attendee(s) by clicking on "Note to Seller" within PayPal registration page.*

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Cost Information IIBEC Member	Each \$70.00	Quantity	Total	
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Please email a completed registration form to <u>CFByrne@sgh.com</u> and <u>IIBECMidAtlantic@gmail.com</u> to ensure that you receive an IIBEC CEH Certificate at the end of the Seminar. Be sure to include your Name (First and Last), Email, Company, and AIA Number (if applicable).

If using hard copy of Registration Form and paying by check, mail forms with payment to:

Justin Long IIBEC Mid-Atlantic Chapter c/o Smislova Kehnemui & Associates P.A. 12435 Park Potomac Ave #300, Potomac, MD 20854

If paying by check, please make payable to: <u>IIBEC Mid Atlantic Chapter</u> <u><i>Cancellation Policy</u>: *Cancellations will not be refunded.*

For specific questions or additional educational program information, please contact: Education Chair, Caroline Byrne at <u>cfbyrne@sgh.com</u> <u>mailto:ncrouse@drhroofsolutions.com</u>