# April 24, 2025 - Building Enclosure Education Event



# IIBEC Mid-Atlantic Chapter Continuing Education Seminar

Hosted by Structural Technologies 10150 Old Columbia Road, Columbia, MD 21046

The IIBEC Mid-Atlantic Chapter educational seminar scheduled for Thursday, April 24, 2025 is quickly approaching. This seminar will be held at the corporate headquarters of Structural Technologies (10150 Old Columbia Road, Columbia MD, 21046). We look forward to connecting and learning with you at this engaging and informative event! Course information is provided below.

#### 1. Below-Grade Building Envelope Water Mitigation Techniques

Presenter: Brent Anderson, P.E. - Senior Engineering Consultant (Structural Technologies)

<u>Abstract:</u> This course highlights the importance of controlling groundwater during construction and throughout the lifecycle of a structure and the appropriate mitigation techniques for below-grade water infiltration. Attendees will learn about the 5 classic techniques for addressing below-grade infiltration and the criteria to help a consultant confidently select the most appropriate technique for a reliable solution. This course will also include guidance on how and why concrete cracks, criteria for intermittent and continuous water pressures on envelope components, classic approaches to leak mitigation, classic chemical grout injection procedures, and limitations of chemical grout injection procedures for leak mitigation.

<u>About the Presenter:</u> Brent Anderson has extensive experience in below-grade and plaza deck waterproofing products, chemical grouting with urethanes, micro-fine cements, bentonites, acrylamides, acrylics, and epoxies. He is experienced in supporting forensic foundation engineering for concrete problems (cracking, corrosion, excessive deflection, soil settlement), water leakage claims (roofs, cavity walls, air / vapor barriers, floors), and evaluation of parking garage deterioration issues.

#### 2. Building Enclosure Commissioning – The Purpose, The Value, and The Future

Presenters: Brian Rose, P.E. - Senior Project Manager (SGH), and Sierra Scott, P.E. - Consulting Engineer (SGH)

<u>Abstract:</u> This course will outline Building Enclosure Commissioning (BECx), a quality-focused process for enhancing the delivery of a project. The process focuses upon verifying and documenting that the building systems and assemblies are planned, designed, installed, tested, operated, and maintained to meet the Owner's Project Requirements (OPR). Using established guidelines and project examples, the course will describe the BECx process, outline the roles and responsibilities of the BECx Provider, discuss the value inherent with the BECx process, and examine the future of BECx.

<u>About the Presenters:</u> Brian Rose is experienced with enclosure consulting and commissioning for new construction, rehabilitation, preservation, and investigation for a variety of owners, architects, and general contractors. Alongside Brian in SGH's Washington DC office, Sierra Scott has contributed to a variety of building enclosure projects in the Mid-Atlantic area. Her work includes field investigations, functional performance testing, design and monitoring of repairs, building enclosure commissioning, and design consulting for new building enclosure systems.

#### 3. Sustainability and the Contributions of Commercial Roofing

Presenter: Jeff Moore – Sustainable Solutions Business Manager, Soprema

Abstract: Sustainability is the balance between the environment, equity, and economy. Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs. Project stakeholders involved with constructing new or renovating existing buildings increasingly prioritize sustainability when making design decisions related to project scope and material choices. This mindset also holds true for one of the subsets of building construction/renovation, commercial roofing. In the context of evolving dynamics related to building designs, this course will provide information related to how commercial roofing decisions can affect sustainable approaches including: reviewing common terminology and how embodied carbon is measured, explaining the role of sustainability in sourcing (e.g., what to look for in roofing products and manufacturing practices), reviewing sustainability metrics commonly used in industry certifications (e.g., LEED), and reviewing commercial roofing options to maximize sustainable product attributes.

About the Presenter: Jeff Moore leads the Soprema Group in developing sustainable processes with its products, systems and technologies. He is a degreed civil engineer with over 30 years of practical experience working with architects and engineers to innovate products and services across many markets in the construction industry. In addition to building products that support LEED® certification, Moore's background includes developing renewable energy technology and working with Fortune 500 companies to capture and divert organic waste materials to produce CNG clean energy for motor vehicle fuel.

### 4. Preserving Baltimore City Hall's Marble Façade – A Case Study

Presenter: Patrick O'Brien, P.E. – Director (BECS)

Abstract: Baltimore City Hall, occupying the city block between East Lexington and East Fayette Streets, has stood as a symbol of civic pride since its completion in 1875. Clad in robust brick masonry and crowned with distinctive mansard slate roofing, the building is also adorned with Maryland marble quarried at the Beaver Dam. Over time, leaky roofs, crumbling marble, and outdated systems cried out for attention. In 2016, BECS was engaged as principal consultant on a comprehensive restoration project involving a range of treatments, from deep cleaning the masonry to replacing damaged stones with carefully matched originals or salvaged pieces. This case study tells a firsthand preservation story and features key building history, prior renovations history, information regarding the 2016 lightning strike that triggered the latest renovation, and a summary of BECS's investigation and design work including stone analysis, mockups, repairs, and how they addressed unanticipated challenges.

About the Presenter: Patrick O'Brien is a building enclosure consultant and registered Professional Engineer overseeing BECS's Baltimore Branch consultancy operations. Patrick is Team Lead and Sr. Project Manager providing technical and management support to both clients and colleagues throughout a project's lifecycle. Brian's professional focus is on building enclosure restoration engineering and historic preservation/adaptive reuse. Brian currently leads AIA Baltimore's Historic Resources Committee as Co-Chair, and recently served as Marketing Co-Chair for the Association of Preservation Technology (DC Chapter).

## April 24, 2025 - Event Schedule

8:30 -- 10:00 Presentation 1

10:00 -- 10:15 Break

10:15 -- 11:45 Presentation 2

12:00 -- 12:30 Lunch Break

12:30 -- 2:00 Presentation 3

2:00 -- 2:15 Break

2:15 -- 3:45 Presentation 4



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

Registration and payment with PayPal is preferred.

To pay using PayPal or credit card, please visit <a href="https://mid-atlantic.iibec.org/">https://mid-atlantic.iibec.org/</a> 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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Please email a completed registration form to <a href="mailto:IIBECMidAtlantic@gmail.com">IIBEC CEH</a> Certificate at the end of the Seminar.

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Bonnie Hoppa, CDT IIBEC Mid-Atlantic Chapter Treasurer c/o BECS 875 Hollins Street, Box 4, Baltimore, MD 21201

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

For specific questions or additional educational program information, please contact: Education Chair, John Karras at <a href="mailto:jnkarras@sgh.com">jnkarras@sgh.com</a>
Chapter President, Justin Long at <a href="mailto:justinl@skaengineers.com">justinl@skaengineers.com</a>