OVC-IIBEC Education Day Thursday, December 5, 2019 Tuesday, December 10, 2019 Course Descriptions

<u>Elements of Building Enclosure – Presented by Prime AE Roof and Envelope Division</u>

To present the primary functions of a building envelope which include the roof, walls and fenestration and to mitigate the water and air infiltration while providing a thermal barrier that reduces energy consumption. The envelope should provide light and air while increasing the occupant comfort and enjoyment of the space.

At the end of this course, participants will be able to:

- Identify the components, threats and material durability.
- Understand the air / water / vapor / barrier concepts of a building envelope
- Understand the principles of a practical roof and wall assembly
- Describe the do's and don'ts and lessons learned

<u>Introduction to Structural Insulated Sheathing Materials for Commercial Construction – Presented by Bill Spencer, Roofing & Exterior Products Services of Ohio (Reps of Ohio)</u>

This course is designed to help the commercial building designer to understand the new products being rapidly introduced into the market that assist in installation of multiple steps of a normal commercial exterior assembly control layers, such as: thermal, air, vapor, structure, and fire control into one or fewer steps that are traditionally used in many of today's building designs throughout the world.

Learning Objectives:

- Understand the key attributes of energy efficiency for commercial buildings and how Structural Insulated Sheathing panels can be used in design.
- Gain insight into Building and Energy Code requirements for commercial buildings.
- Be able to combat common problem elements to a commercial wall assembly and deteriorating from its efficiency.
- Understanding that designing an efficient Building Enclosure is a key component in low energy buildings of the future

<u>Liquid Applied PMMA Roofing & Waterproofing Membranes – Presented by Soprema</u>

Learning Objectives:

- Describe the origins and composition of liquid applied PMMA roofing and waterproofing membranes, specifically in regards to elimination of traditional roofing methods, including use of open flames and hot asphalt kettles
- Explain the performance characteristics and applications of liquid membranes, specifically in their use to preserve existing building components
- Demonstrate speed of application as it pertains to reduced impact on building's occupants

 Provide visual examples of liquid applied installations utilized in lieu of traditional waterproofing systems, where failure of traditional systems can lead to moisture infiltration and subsequent failure of numerous building components.

<u>High Density Fiber Cement Cladding Solutions in a Ventilated Rainscreen System – Presented by Patrick Harding, Eastern Architectural Products</u>

This course discusses various topics pertaining to high-density fiber cement and its use as a cladding material. This includes the manufacturing process, standard ventilated rainscreen system installation practices and benefits, design considerations and various fiber cement panel applications.

Learning Objectives:

- Learn how high-density fiber cement is manufactured and how it compares to other types of fiber cement.
- Learn the basic components of a ventilated rainscreen system
- Learn the functionality of a ventilated rainscreen and how it combats moisture intake
- Understand the structural design elements of creating a proper rainscreen system
- Learn the performance aspects and application of high density fiber cement

<u>Directory of Rood Assemblies (DORA) – Presented by Intertek</u>

The Directory of Roof Assemblies (DORA) (www.dora-directory.com) is a web application database of low slope roof systems tested in accordance with standards referenced in Chapter 15 of the International Building Code (IBC). Sponsored by SPRI and developed and administered by Intertek, this service lists wind uplift load capacity on single ply and modified bitumen roof systems. Pairing the latest advancements in user-friendly search technology with no charge to the public, DORA is a convenient and comprehensive solution.

DORA works through the voluntary participation of industry companies. Roof assemblies are created and submitted by participating companies and are accompanied by supporting documentation in the form of third-party validated test reports and qualified evaluations. Submissions are independently reviewed and verified by Intertek.

Upon completion of this session, participants will be able to:

- Demonstrate efficient methods in parametric and faceted searching techniques to find an applicable roof assembly meeting their specific performance and safety criteria.
- Select and store multiple roof assemblies that could be utilized on a unique project.
- Explain the aspects of DORA's scope that protect data integrity and the realworld applications of DORA.

Roofing Wind Speeds; ASCE 7, Uplift Ratings & Warranties – Presented by Carlisle

In the industry there is a need to sort out the confusion between the building codes, uplift rated assemblies, and warranties by explaining what each offers and how they should be considered. To understand the building code, we need to review how uplift is determined and the industry accepted rating method of roofing assemblies for comparison. After understanding the code criteria, how a roofing warranty wind speed coverage is regarded by the industry and building code will be reviewed to assist in clarification.

Objectives

- Learn the basic design process for choosing the correct roofing assembly
- Review the changes within the latest version of the ASCE 7
- Understand how roof assemblies are tested and rated for uplift pressures
- Realize the differences how warranty winds speeds are handled by roofing manufacturers and what to watch out for so the building owner receives the most comprehensive coverage.