STYRO SYSTEMS MANUFACTURERS'

2022 PRESENTATION LIST

Provider: EMSEAL JOINT SYSTEMS

AIA Course-- BENVO4 A

Learning Units: 1
Course Designation: LU/HSW/SD

Course Title: "Fire-Rated Expansion Joints - Principles, Products, Practice and Innovation"

Fire Rated Expansion Joints - Principles, Products, Practice and Innovation

Description: The breakthrough family of single-install, multi-function, fire-rated, waterproof, soundproof, hurricane-resistant, high movement expansion joint sealant technology will be discussed and contrasted with existing technologies and principles of the industry.

Learning Objectives:

- Analyze how watertight, energy efficient, fire-rated expansion joints are the consequence of a process in which we design, detail, specify, bid erect, manufacture, and install in 3-D.
- Learn why it is critical to require certified performance and test reports from national laboratories in specifications.
- Investigate how fire-rated expansion joints can contribute to sound attenuation, reduce energy loads for heating and cooling, eliminate high-emitting VOCs, and save in materials and resources through long life-cycle material choices.
- How to meet life safety obligations while practicing good building science

Provider: EMSEAL JOINT SYSTEMS

AIA Course-BENVO1

Learning Units: 1
Course Designation: LU/HSW/SD

Course Title: "Sealing the Building Envelope--Principles, Products & Practice"

Sealing the Building Envelope: Principles, Products & Practices / - BENV01 / 2011

Description: SEALING THE BUILDING ENVELOPE: PRINCIPLES, PRODUCTS & PRACTICES - WHY BUILDINGS LEAK – TYPICAL PROBLEMS

Learning Objective: Analyze how watertight, energy efficient, fire-rated expansion joints are the consequence of a process in which we design, detail, and specify in 3-D.

- Forces that cause moisture ingress, improperly sealed or failed joint seals.
- Joint Sealing-types of joints to include structural expansion joints and abutment joints between structures (ex. new and existing)
- Fundamental design issues affecting joint sealing
- Joint sealant product types
- Fire rated joints achieved with a single installation and factory fabricated universal 90s
- LEED contributions including R-value, STC & OITC ratings, and longevity

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Provider: American Hydrotech

Length: 1 Hour

Program #: # AEC232 **Credits:** 1 LU/ SD/HSW/ Hour

Program: Green Roofs: A Sustainable Strategy **HSW:** YES

Description: Tangible and practical knowledge on specifying, detailing and installing hot applied rubberized asphalt in horizontal and vertical applications. Total green roof assembly approach. Gain perspective on how rainwater harvesting & vegetated roofs contribute to an overall storm water management plan.

Learning Objectives: This program will educate the participant on the following:

- List and define the types of green/vegetated roofs
- State the environmental, technical and owner/occupant benefits of vegetated roofs
- Identify the components of a vegetated roof assembly
- Explain the design considerations and standards relating to vegetated roofs

Provider: American Hydrotech

Length: 1 Hour **HSW:** YES

Program #: 000024 **Credits:** 1 LU/ SD/HSW/ Hour

Program: Waterproofing with Hot-Applied Rubberized Asphalt Membranes

Description: Tangible and practical knowledge on specifying, detailing and installing hot applied rubberized asphalt in horizontal and vertical applications. Benefits of hot-applied

rubberized asphalt, such as 100% bond to the substrate, absence of seams, ease of detailing and product thickness, are presented.

Learning Objectives: This program will educate the participant on the following:

- Define the system types
- Benefits of hot-applied rubberized asphalt
- Identify the components of a waterproofing system
- Explain the design considerations and standards

Provider: American Hydrotech

Length: 1 Hour **HSW:** YES

Program #: 000024 **Credits:** 1 LU/ SD/HSW/ Hour

Program: Taking Stormwater by Storm

Description: Tangible and practical knowledge on specifying, detailing and installing hot applied rubberized asphalt in horizontal and vertical applications. Benefits of hot-applied rubberized asphalt, such as 100% bond to the substrate, absence of seams, ease of detailing and product thickness, are presented.

Learning Objectives: This program will educate the participant on the following:

- Gain perspective on how rainwater harvesting and vegetated roofs contribute to an overall storm water management plan
- Perform sound calculations for right-sizing rainwater cisterns
- Identify good specification strategies for rainwater storage tanks, drainage, filtration and disinfection
- Quantify green roof performance in terms of storm water runoff rates and volumes

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Provider: Evonik Corporation

Program: Increasing Sustainability of Building Façades

Program Number: BSM10A

HSW: Yes **Length:** 1.25 hour **Credits:** 1.0 AIA/CES Learning Unit

Description: Participants will recognize conditions that reduce concrete and masonry façades sustainability and acquire measures to correct deficiencies.

Learning Objectives: By identifying methods to improve façade life cycle assessment, mass absorption efficiency and by allowing the preservation/reuse of existing facades a more sustainable building can be achieved. Participants will receive information on how these technologies work, how to choose the proper system, and practical job site tips.

Provider: Evonik Corporation

Program: Specifying Clear Water Repellents

Program Number: 00H202

HSW: Yes

Length: 1.25 hour

Credits: 1.25 LU Hour

Description: The presentation provides detailed information on the proper evaluation procedures and language to properly specify above grade clear water repellent treatments for design and construction of commercial projects.

Learning Objectives: The presentation will define information on the proper selection process of specifying commercially available above grade clear water-repellent treatments. Participants will evaluate the techniques and matrix to choose the correct water repellent and the performance tests to ensure a clear precise specification can be written.

Provider: Evonik Corporation

Program: Anti-graffiti Solutions for Concrete and Masonry Surfaces

Program Number: PAG101

HSW: Yes

Length: 1.25 hour

Credits: 1.25 AIA/CES Learning Unit

Description: This course explores the different types of graffiti and how graffiti is currently being dealt with to include methods of removal and prevention.

Learning Objectives: The learning objectives of this course will be to identify the different types of graffiti, what techniques are currently used to remove graffiti and the various methods of protection

Provider: Evonik Corporation

Program: Corrosion of Steel Reinforced Concrete – Causes and Prevention

Program Number: COR2017

HSW: Yes

Length: 1.25 hour

Credits: 1.25 AIA/CES Learning Unit

Description: The presentation provides detailed information on the electrochemical process which causes steel corrosion in concrete. The relationship between concrete quality, design, protective systems and corrosion initiation will be presented.

Learning Objectives: Learn basics of concrete steel reinforced corrosion, including electrochemical theory, environmental factors and economic consequences. Learn protective measures to prevent corrosion for new construction. Understand remediation techniques to mitigate active corrosion on existing structures. Learn to evaluate alternate remediation methods and their life cycle costs.

Provider: Sika Corporation (US)

Length: 1 Hour

Program #: SIK608 **Credits:** 1.0 LU

Program: Repair and Protection of Concrete (Parking Garages) **HSW:** YES

Description: The program is an informational and educational program that will assist with many complicated aspects related to concrete repair and protection as it relates to parking garage problems.

Learning Objectives:

- Common problems and concerns
- Review repair techniques
- Review protection techniques

Definitions:

- Repair techniques - Fix visible damage such as spalls and cracks as well as failed joints and sealants
- Protection techniques - Traffic coatings, sealants, penetrating repellents

Provider: Sika Corporation (US)

Length: 1 Hour

Program #: Sik401 **Credits:** 1.0 LU

Program: Sealants & Adhesives for Construction **HSW:** YES

Description: Determine the general purpose and role of sealants and adhesives in construction

Learning Objectives:

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

- Define sealant classifications and their properties using ASTM C920 and other trade association industry guidelines to help design proper joint details in working drawings.
- Analyze the various chemistries standard in the industry and their performance expectations for the intended application

- Apply the proper quality control procedures for sealant installation and removal using manufacturers' data sheets and industry best practice methods.
- Examine existing structure air and water infiltration problems by analyzing sealant performance or installation issues using SWRI, EIMA and manufacturers guidelines to prevent similar issues during renovation.

Provider: Sika Corporation (US)

Program: BREATHABLE AIR BARRIER SYSTEMS FOR THE BUILDING ENVELOPE (SIK701)

Recent changes in energy codes to increase the energy efficiency of buildings include higher R-value insulation, continuous insulation, high performance fenestrations and reduced air infiltration systems (e.g. continuous air barriers). These measures can reduce heating and cooling costs by minimizing building enclosure thermal loads.

This technical seminar will review:

- Recent changes in North America energy codes.
- Water and air management challenges for durable wall assemblies.
- Design features to manage air movement, provide effective ventilation and adequate drainage.

Learning Units: 1LU/HSW/SD

Provider: Sika Corporation (US)

DESIGN CONSIDERATIONS FOR THE MODERN BUILDING ENVELOPE (SIK700)

Premature deterioration of construction materials due to water intrusion, weathering and/or air leakage is preventable in both new and existing construction.

This technical seminar will examine the building envelope as a complete system:

- The evolution of the building envelope and modern design expectations.
- Examine the Control Layers Approach to building envelope system design.
- Discuss the benefits of a systematic approach to the various elements of the building envelope.

Learning Units: 1LU/HSW

Provider: Sika Corporation (US)

PROTECTIVE COATINGS FOR THE BUILDING ENVELOPE (SIK702)

Protective coatings waterproof or improve water resistance of porous materials used in the building façade while keeping long lasting aesthetic characteristics. Gain insight and knowledge into color matching, preparation steps, application, and testing. Preparation and testing are essential to prevent the different modes of concrete failure covered in this presentation.

Learning Units: 1LU

Provider: Sika Corporation (US)

ADHESIVE ANCHORING (SIK 200)

A rising trend in construction is the use of adhesive anchors in place of mechanical anchors. Chemical anchors can be used for highway doweling, masonry pinning, seismic upgrades, pick-proof sealing and many more applications.

- Learn the advantages of adhesive anchoring and the design recommendations for greatest performance.
- Know the importance of chemistry, preparation, and design in ensuring a proper and safe application.

Learning Units: 1LU/HSW

Provider: Sika Corporation (US)

EPOXIES IN CONSTRUCTION (SIK 607)

This program examines the variety of uses for epoxies in modern construction.

Typical applications include bonding agents, floor finishes, protective coatings, adhesive anchoring, crack sealing and structural repair materials.

Seminar goals are:

- Establish a general understanding of the types and uses of construction epoxies.
- Understand the basic installation techniques and testing methods for epoxy repairs.
- Discuss epoxy use for crack repairs, overlays, coatings and anchoring.

Learning Units: 1LU

Provider: Sika Corporation (US)

REPAIR AND PROTECTION OF CONCRETE (SIK602)

Many years of research and development, plus decades of practical experience, has enabled Sika to provide systems to restore concrete and masonry structures that have deteriorated due to corrosion, structural damage, water infiltration, seismic activity, reactive aggregates and other means.

- Why concrete fails – means and methods to diagnose problems.
- Explore installation techniques and repair material options.
- Review protection techniques including corrosion inhibitors.

Learning Units: 1LU

Provider: Sika Corporation (US)

REPAIR AND PROTECTION OF PARKING STRUCTURES (SIK 604)

Very few structures are subjected to the extreme traffic demands and continuous exposure to the elements that parking structures must withstand.

Attendees will examine the following topics:

- Parking structure common repair means and methods
- Sealant selection and joint design for high traffic areas
- Traffic deck coatings – types, design considerations and installation techniques

Learning Units: 1LU

Provider: Sika Corporation (US)

STRUCTURAL STRENGTHENING WITH FRP COMPOSITES (SIK 301)

Fiber reinforced polymers (FRP) are a proven technology for upgrading and strengthening concrete, masonry, timber and steel structures. These advanced composite materials have exceptionally high-strength yet are very lightweight and easy to install.

They are used for increasing the capacity of existing buildings, seismically upgrading bridges, correcting construction errors and allowing changes in use.

- Why structures need strengthening
- Composites strengthening vs. steel
- Typical field installation methods

Learning Units: 1LU/HSW

Provider: Sika Corporation (US)

TOTAL CORROSION MANAGEMENT (SIK 600)

This seminar examines the various root causes of corrosion in concrete and steel frame construction. Significant emphasis is placed on thorough inspection techniques and design considerations regarding corrosion repair, control and management.

Seminar topics include:

- Failure mechanisms for steel frame building facades.
- Strategies to repair and protect steel frame structures to prevent further facade failures.
- Review corrosion monitoring means and methods.

Learning Units: 1LU

Provider: Sika Corporation (US)

LIQUID APPLIED ROOFING AND WATERPROOFING MEMBRANES (SIK 501)

Liquid applied membranes should not be confused with coatings. The effectiveness and versatility of fluid applied membranes often make them the only viable solution for complex waterproofing problems. This seminar will focus on the use of such systems as an alternative to conventional roof systems and a solution to challenging waterproofing problems.

The use of these systems in historic preservation, façade repair and building envelope waterproofing will also be examined.

- Gain an overall awareness of the various fluid applied roofing & waterproofing membranes.
- Examine the basic differences between fluid applied membranes and coatings.
- Review field installation considerations.

Learning Units: 1LU/HSW

Provider: Sika Corporation (US)

SEPARATING COOL ROOFING FACTS FROM MYTHS (COOL 101)

Understand the concept of “cool roofing,” how they function, and how they are defined and qualified in various energy and environmental codes and standards.

- Assess the potential environmental impacts of broad implementation of cool roofing strategies.
- Evaluate the energy benefits of cool roofing materials in northern climates.
- Review the performance of some cool roofing materials in practice over the past decades.

Learning Units: 1LU/HSW

Provider: Sika Corporation (US)

JOINT SEALANTS - THEIR DESIGN AND USE (SIK 400)

Joint sealants seal penetrations between construction elements—a critical part of the building envelope. They prevent ingress of water/moisture into the building interior or through joints/gaps. They also play a role in the prevention of reinforced concrete corrosion, which can lead to structural failures.

- Various sealant types and uses.
- Proper joint design and sealant selection criteria.
- Critical success factors and field installation techniques.

Learning Units: 1LU/HSW

Provider: The Dow Chemical Company
Program #: RL7

Length: 1 hour
Credits: 1 LU
HSW: Yes

Program: Direct Metal Deck Applications using Extruded & Polyisocyanurate Under Standing Seam Roof Applications

Presentation will discuss the following:

- Standing Seam
- Open Perlin application using Thermax Sheathing

- LEED benefits and life cycle cost benefits
- New code changes; reduce labor, increase productivity and time savings
- Lowered installed cost
- 30-Year Replacement warranty
- Exposed applications for gymnasiums and natatoriums

Provider: The Dow Chemical Company **Length:** 1 hour
Program #: R6 **Credits:** 1 LU

Program: Protection Membrane Roofing **HSW:** Yes

Description:

Protected Membrane Roof has represented the best in flat roof technology since 1970. The presentation will cover the installation of the assembly and the many possible options above the membrane. The options include stone ballast, concrete ballast, plaza deck with pavers and green roof.

Provider: The Dow Chemical Company **Length:** 1 hour
Program #: C6 **Credits:** 1 LU

Program: Moisture Management in Steel Stud Walls **HSW:** Yes

Description: - Insulation Update

- Roofing applications understanding seam roofs, rigid foam insulation for cavity wall and steel stud construction
- Code update covering ASHRAE 90-1 2007 and other code changes
- Benefits of using insulation for LEED program

Provider: The Dow Chemical Company **Length:** 1 hour
Program #: EEWALL **Credits:** 1 LU

Program: Designing Energy Efficient Steel Stud Wall **HSW:** Yes

Description:
As the world's attention becomes more focused on global warming, architects and other building professionals are challenged to meet increasingly stringent energy-efficiency standards. How will you meet those requirements while maintaining the integrity of your creative vision?

Dow offers a simple solution: The THERMAX™ Wall System. This groundbreaking and cost-effective approach to steel stud wall design combines three simple parts into a system that delivers exceptional results.

Presentation will discuss the following:

- Designing steel stud walls to meet the new codes challenges
- How ASHRAE 90 -1 2007 energy code will change current designs
- How to meet the ASTM E2357 air barrier requirements using rigid insulation
- Understanding NFPA 285 fire test requirements for multistory construction
- How to recognize if a building is meeting code
- How the newest version of ASHRAE 90-1 will increase insulation requirements beyond the current ASHRAE 90-1 2007
