



## 2017 AIA Akron & Akron-Canton CSI Lunch & Learn Schedule

**ONLINE REGISTRATION – notices will be delivered by email prior to each meeting. Must register to receive box lunch.**

The deadline to register is noon Friday prior to the meeting date. This is an **ONLINE** Registration program. Notifications are sent through Constant Contact. If you are not receiving a notice, please contact Joanne Brussee, 330-699-9788.

Location:	AIA/CSI Office, 2841 Riviera Drive, Suite 120, Fairlawn OH 44333 Enter at the back of the building, down the stairs, and first door on right. Free parking is available in separate lot directly behind Riviera Bowling Lanes (next to AIA/CSI Office Building)
Time:	<b>Lunch &amp; Learn times: 12:00 noon to 1:00 pm</b> Lunch is provided. Arrive about 15 minutes early so you may receive your lunch and the presentation will begin promptly at noon.
Cost:	AIA Akron & Akron-Canton CSI Chapter Members Free, <b>non-members of AIA Akron &amp; Akron-Canton CSI \$25</b>
Learning Units:	Credits will be issued for the Lunch and Learn presentation for AIA members. All presentations will be equal to 1.0 contact hours for other organizations requiring continuing education.

### **January 11, 2017 Mark Pittmann – Firestone Roofing**

1 LU/HSW

#### Roof Selection Criteria

We will discuss the critical factors to consider when deciding on a new roof.

1. Form an understanding of what a warranty means, and the what it does and does not do
2. Form an understanding of setting realistic expectation for what a new roof can and cannot do.
3. Form an understanding of managing those expectations through maintenance as necessary for achieving optimal roof life.

### **January 25, 2017 Ray Redmond – STO Corp.**

1 LU/HSW

#### Design & Detail for Air/Moisture Barriers & Continuous Insulation Solutions

#### Learning Objectives:

1. EIFS Essential Components & Critical Details
2. Building Enclosure Evolution
3. Current Building & Energy Code Requirements
4. Air/Moisture Barriers & Building Envelope Design
5. Critical Details
6. Creative Finish Options

### **February 8, 2017 Jim Brocious -**

1 LU/HSW

#### Understanding Poly-Ash Siding and the Other Categories of the Siding Market

#### Course Description

An examination of the new Poly-Ash category of exterior siding as it relates to other types of siding, specifically around the areas of installation, maintenance, and sustainability.

### Learning Objectives

1. Identify the various types of exterior siding and material composition
2. Understand the key attributes of each siding category and installation concerns
3. Define the Poly-Ash category of exterior siding and performance attributes of the material
4. Identify key applications and installation guidelines for Poly-Ash siding

### **February 22, 2017 Steve Hall – Parksite**

1 LU/HSW

#### Description:

This seminar is a basic review of heat, air and moisture transport mechanisms across the building enclosure and the design control strategies. The first section will discuss heat transport mechanisms and heat management. There are 3 main mechanisms of heat transport: conduction, convection and radiation. Heat flow by conduction (through materials) is discussed in the first section which includes a brief review of thermal insulation materials and energy code requirements for thermal insulation. Heat flow by convection (through air currents) is controlled with a Continuous Air Barrier. A summary review of the overall impact of air leakage on building enclosure performance and the importance of air leakage control is provided in the second section. Air leakage and Air Barriers are addressed in more details in other CES presentations by the same provider (Air Barrier-1 and Air Barrier-2). Heat flow by radiation (through space) is not discussed in this seminar and it is more important for fenestration than for the opaque envelope. The last section is a brief review of moisture sources in buildings, moisture transport mechanisms, and moisture control strategies. The building science principles behind the moisture management are briefly discussed. Moisture management principles are addressed in more details in other CES presentations by the same provider (Moisture 1 and Moisture 2).

#### Learning Objectives:

After attending this seminar, you will be able to understand:

1. Heat flow mechanisms and heat control strategies
2. Air transport mechanisms and air leakage control strategies
3. Moisture transport mechanisms and moisture control strategies
4. The importance of heat, air and moisture management in buildings

### **March 8, 2017 Paul Nalette – Nalette & Associates, Inc.**

1 LU/HSW

#### Solutions for Large Openings

##### Description:

NanaWall Systems, the leader in opening glass wall technology, cordially invites you to schedule an AIA breakfast, lunch or dinner seminar entitled "Solutions for Large Openings" Our knowledgeable North American Architectural Consultant and local Rep will present the information you need to confidently design innovative projects using operable glass walls. You will learn the differences between folding and single track sliding wall systems and how and where they are used. Learn how stringent product testing supports design freedom, and view imaginative new applications in an ever increasing market place.

Challenge yourself to blur the lines between landscape and living space

##### Discussion of the following:

1. Building envelope, sustainable design and accessibility
2. Acoustics and interior design
3. Energy efficiency and natural hazards
4. Renovation and adaptive use
5. Security
6. Structural considerations

#### Learning Objectives

1. Familiarize architects with the definitions, capabilities, and usages of large moveable glass wall systems.
2. Provide answers on how large operable glass walls can improve the health, safety and welfare of building occupants.
3. Demonstrate new and innovative ideas to take into the design process for schools, hospitals and other commercial applications, and to help you through that process.

#### March 22, 2017 Murray Leight – Construction Specialties Inc.

1 LU/HSW

#### Sustainable Solutions for Shading & Daylighting

##### Description:

One hour seminar detailing the use of sun controls on commercial buildings. Presentation includes LEED drivers and sustainable design aspects of the system and how best to utilize sun controls for the reduction of energy usage within a building design.

##### Learning Objectives:

1. Identify economic, environmental and human performance factors that support sustainable shading and day lighting design.
2. Understand shading dynamics and the role of modeling.
3. Explore effective strategies for optimized thermal performance and interior illumination.
4. Consider sun control design options, construction methods, and crucial engineering considerations.
5. Establish a decision process for design and selection of sustainable shading and daylighting systems.

#### April 12, 2017 Bill Wittlinger - W.R. Meadows, Inc.

1 LU|HSW

#### Detailing Air Barriers

##### Description:

Air barriers are required by code in most states. While most architects understand the "whys"-- they are not clear on the installation details. This important layer of the building envelope requires careful detailing and installation. Some firms are even requiring meetings with installation contractors to be sure details are correctly executed. This course covers tricky details, including rough openings, roof to walls, and joints between different building materials.

##### Learning Objectives

1. Review air barrier systems and why they are important to a building's energy savings.
2. Identify difficult air barrier details in various types of building envelope construction.
3. Discuss installation and applications of liquid and membrane air barriers around rough openings, corners, building joints, and junctions of different materials.
4. Illustrate methods that save time or improve application and installation,

#### April 26, 2017 Danny Gum – Sierra Pacific Industries

1 HSW

#### High Performance Glazing Systems WPI 002

##### Description:

Understanding curtain wall systems.

##### Learning Objectives:

1. Understanding the basic function of three CurtainWall systems.
2. Identify these systems by functionality or cross section.
3. Air and Water Infiltration

#### 4. Designing for loads

- Wind Loads
- Dead Load
- Live Loads
- Snow Loads
- Sheer walls

Danny A. Gum

Danny has over 20 years in the construction industry. His work history includes construction, construction management, design, personnel management, accounting, and most recently, president of a window and door distribution company.

Danny is now employed by Sierra Pacific windows as their Architectural Consultant for Ohio, West Virginia, and Michigan. He and his wife Kim live in Mt. Vernon, OH with their 2 dogs, Miss Weezie and Baxter.

#### **May 10, 2017 Ben Marnik - CENTRIA**

1 AIA LU/HSW

Description:

“Insulated Composite Back-up Panels - A Simpler Solution” and why they are an excellent option for building envelope weather barrier construction. The presentation explores exterior wall design performance; energy code requirements; the influence of air, moisture, thermal and vapor barriers; and actual project case studies are presented.

Learning Objectives:

1. Acquire knowledge about the history of rainscreen wall design
2. Understand the performance fundamentals of wall design
3. Identify key weaknesses in multi-component backup wall assemblies
4. Explore the advantages of insulated composite backup wall systems
5. Discover what makes Insulated Metal Panels a viable exterior wall cladding weather barrier.

#### **May 24, 2017 Joe Hetzel – Speed Door**

1 AIA LU/HSW

“High Speed Doors and Thermal Performance,”

presented by Joseph R. Hetzel, P.E., Door & Access Systems Manufacturers Association (DASMA)

Objective:

To provide an overview of high speed door usage in the marketplace where thermal performance is an important consideration.

Description: This session will cover critical aspects of thermal performance to clarify the decision making process involving high speed doors.

Learning Objectives:

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

1. Know what a high speed door is;
2. Know when and where high speed doors are typically used;
3. Know the thermal performance characteristics of a high speed door;
4. Know the key factor behind high speed door thermal performance.

Joseph R. Hetzel, P.E., Technical Director

Door & Access Systems Manufacturers Association

**June 14, 2017 Cancelled**

**June 28, 2017 No presentation**

**July 12, 2017 Tim Persing – Construction Specialties, Inc.**

1 LU/HSW

Description:

The course will provide an understanding of how to determine joint movement requirements and how to size joints properly based on those requirements. It provides an overview of expansion joint cover types including floor, wall, ceiling, interior and exterior. It will discuss fire protection and applicable codes that pertain to expansion joint cover systems.

Learning Objectives:

- Discuss and understand joint movement requirements and how to size joints properly.
- Understand the different types of expansion joint cover systems available and where they are most applicable.
- Understand testing and code requirements for fire barrier systems.
- Understand ADA code requirements that apply to expansion joint cover systems.

**July 26, 2017 - CTL Engineering, Inc.**

1 LU /HSW

Refraction Microtremor (ReMi) Testing and its Uses

Description:

The objective is to provide an understanding of Refraction Microtremor (ReMi) testing and how it can be utilized in assisting with design, construction and mapping. Participants will learn how ReMi testing works, what the benefits are to using this test and what the limitations are. There will be visual aids used in the presentation such as geophones and cables and there will be a question and answer session at the end of the presentation.

Learning Objectives:

1. The presentation will explain the fundamentals of how ReMi testing works and how the test is performed.
2. How the test can potentially save construction projects a significant amount of money by raising the seismic site classification.
3. How the test can be used to identify subsurface conditions by generating a two-dimensional graph.
4. Compare different methods of shear wave testing to understand the advantages and disadvantages of ReMi testing.

**August 9, 2017 Andrew Bell – Thomas Brick**

1 LU/HSW

Sustainable Design in Clay Masonry

Description:

Certain building professionals are attempting to take a more environmentally friendly approach to the design and construction of their buildings. Clay brick is an extremely green building product. We will discuss the processes manufacturers employ to keep clay brick as green as possible. Clay brick can also be a material that helps you attain LEED credits. In this talk, we will see what areas of your building you can expect to see a benefit from clay brick. Specific topics included in this presentation are:

### Manufacturing

We will look at how brick manufacturers handle the raw materials used to make brick. We will also investigate the use of recycled materials and the reclamation efforts of the quarries we use.

### Thermal Performance

How can a brick veneer wall with an air space contribute to a reduced heating and cooling load? What effect does thermal mass have?

### Paving

How can the use of clay brick pavers provide you with LEED credits?

### Jobsite Handling and Storage

A knowledgeable contractor can be of immense help with regard to waste, recycling, regional materials, low VOC materials, etc. We will examine the areas where a skilled masonry contractor can add expertise to a certified building.

### Learning Objectives:

- Identify clay brick manufacturing methods that conserve energy and raw materials.
- Review clay brick making practices that minimize the effects of operations on quarries and surrounding communities.
- Discuss advantages of clay brick in regard to green building performance (i.e. energy efficiency, sound transmission, longevity and security).
- Recall specific LEED credit categories where clay brick contributes to sustainable strategies.

### August 23, 2017 Josh Naragon – Ohio Masonry Assoc.

1 LU/HSW

Thermal Performance of Concrete Masonry Systems

NCMA/AIA CES Course – C303a

### Course Description:

Increased energy efficiency in both new and existing construction is continuing to play a larger factor behind the design decisions we make and materials we choose to integrate into our buildings.

This presentation illustrates how building envelopes including concrete masonry can not only meet minimum requirements, but exceed them as well.

### Learning Objectives:

- At the end of the course, participants will be able to understand:
- The role of thermal mass in building design, increased energy efficiency, and comfort.
- The role R-Values play in the design of building envelopes and code compliance.
- Options for complying with the IECC.
- Methods of controlling air infiltration and exfiltration for increased energy efficiency.

### September 13, 2017 Paul Nalette – Bristolite Daylighting Systems

1 LU/HSW

Health, Safety & Welfare (HSW) Aspects of Daylighting-F2F

Provider Number: 40107427

Course Number: B40101973

AIA Credit Received: One (1) AIA CES HSW Learning Unit

### Outline

1. Importance of Lighting in a Building (3 mins)
2. What is Daylighting? (2 mins)
3. Daylighting & Health (12 mins)
4. Health, Safety & Welfare and Productivity (3 mins)

5. Daylighting & Safety (15 mins)
6. Daylighting & Welfare (10 mins)
7. Daylighting Design (10 mins)
8. Quiz

### **September 27, 2017 Jason Cordon – LED Lighting**

AIA CES 1 HSW; NCQLP 1 LEU

Understanding Tunable White Light

#### **PROGRAM OVERVIEW:**

It is well known that overlaying the projection of one color of light with the projection of a different color of light will result in the creation of a third color on the reflected surface. And the use of computer networks to control lighting is nothing new, either. What is new is the continued reduction in cost of LED-based luminaires and the development of better, more affordable, user interfaces and controls, making a number of different approaches to white color tuning possible. This talk will explore the following:

#### **LEARNING OBJECTIVES:**

Attendees will:

- Understand color space, the “black body curve” and the tuning of “white” light
- Understand the design parameters of color-tuning systems for different applications
- Learn about current research into vision science and physiological response to light
- Learn the metrics used to specify a white color tuning system

### **October 11, 2017 Steve Hall – Parksite**

1 LU/HSW

#### **Description:**

Today's buildings are responsible for 38% of the world's energy usage, causing the demand for highly energy efficient and durable buildings to increase. One of the key elements in a highly energy efficient and durable building envelope is a continuous air barrier and water barrier system.

There are several different types of air barrier membranes that are commonly used in the industry, although fluid applied air barriers continue to increase in popularity. There are hundreds of fluid applied air barrier products currently available and they vary greatly in thickness and formulation. As commercial buildings become more energy efficient and complex, the need for a “high performance” fluid air barrier system is increasing.

This presentation will discuss some of the key differences and performance advantages of these new high performance air barrier chemical formulations in contrast to traditional fluid applied air barrier formulations.

#### **Learning Objectives:**

After attending this seminar, you will be able to:

1. Discuss the impact of air leakage on building performance
2. Distinguish between Fluid Applied Air Barrier technical properties using their formulation chemistries
3. Design building envelope systems with a Fluid Applied Air Barrier
4. Specify a Fluid Applied Air Barrier System to meet your project's performance requirements

### **October 25, 2017 - Benjamin Moore**

1 LU/HSW

### **November 8, 2017 Jim Brocious -**

1 LU/HSW