

Brickworks Supply Center - Chicagoland, Educational Seminar Lineup

All Presentations can be done in person or virtual. Lunch is provided for both.

Also available are tours of any of our brick plants located throughout the US. (Credit – 2 AIA CE)

Presenter: Jesse Settle of Brickworks Supply Center, Wall Systems

Technical Advances in Structural Insulated Sheathing (Credit - 1 AIA CE)

Today we will review various hybridized sheathing solutions and show how the integration of advanced technology has improved performance, capability, and sustainability of SIS.

Introduction to Thin Brick Wall Systems (Credit - 1 AIA CE)

One of the new developments in construction is the increased use of thin veneer systems. Clay brick is a perfect fit for these types of installations. We will discuss basic wall detailing and construction. There are a variety of systems in which thin brick can be installed. We will minimize the confusion and give you a clear and concise way to achieve a sound thin brick wall.

Adding Interest with Brick Shapes (Credit - 1 AIA CE)

This program focuses on the use of shapes, not only to increase the aesthetic quality of brickwork, but also toward accomplishing better detailing and better performing brickwork. Many applications involve units that are not normally considered to be brick shapes. Increased water penetration resistance, reducing the size of expansion joints, and the proper design of acute angle corners, can all be realized using shapes.

Avoiding Cracks in Brickwork (Credit - 1 AIA CE)

Major causes of movement: thermal, moisture, deflection, and creep, along with the proper way to control these movements are the focus of this presentation. Proper detailing and installation of movement joints, reinforcement, and brick veneer wall movement, is discussed in detail.

Aesthetic and Performance Capabilities of Glazed and Surface Coated Brick (Credit - 1 AIA CE)

This program will familiarize designers with the manufacturing process, design capabilities, material characteristics and installation practices for glazed and surface coated brick that provide superior performance in a wide variety of building applications from subways to schools and prisons to palaces.

Basics Of Brickwork Detailing (Credit - 1 AIA CE)

The concept behind the 'brick veneer drainage wall' is discussed in detail, as well as the proper materials to specify to maximize a wall's water penetration resistance.

Beyond The Brick: Masonry Wall Assemblies to Optimize Performance (Credit - 1 AIA CE)

This presentation attempts to close the gap between architect and contractor to ensure optimum performance and adherence to masonry cavity wall assemblies to industry best practices.







Brick Manufacturing & Specifications (Credit - 1 AIA CE)

This presentation focuses on how brick is made, including discussion regarding: appropriate raw material, forming of brick units, surface colors and textures, firing and testing of brick units to ensure a durable finished product.

Demystifying Masonry Anchors (Credit - 1 AIA CE)

This course provides simple but detailed guidance for choosing masonry anchors that provide the best performance and compatibility with other wall assembly components.

Brick Product Technical Specifications (Credit - 1 AIA CE)

This presentation will elaborate upon the information typically presented in a brick product technical data sheet. An overview of frequently encountered brick ASTM standards will be provided.

Enhancing Thin Masonry Veneer: Metal Support Systems (Credit - 1 AIA CE)

This program examines the design and performance characteristics of metal backing systems that mechanically support thin masonry veneers.

Designing Masonry for Energy Efficiency and Code Compliance (Credit - 1 AIA CE)

This presentation addresses changes in the building code concerning energy efficiency, fire safety and their impact on masonry wall construction from air barriers, insulation, anchors, and veneer.

Exploring the Many Advantages of Big Brick (Credit - 1 AIA CE)

Clay brick provides you with many advantages. Hundreds of different colors, shapes and textures are just a few examples. We can also manufacture brick in many different sizes. Employing larger brick on your project can reduce the installed cost of masonry drastically and enhance its sustainability, energy efficiency, as well as reduce maintenance cost.

How to Pick the Right Brick (Credit - 1 AIA CE)

With the many methods of manufacturing brick today, designers have plenty of options when selecting brick. In this discussion, we will look at the different styles available in clay brick and how to match that style to your building. We will also discuss the multiple sizes, bonding patterns, and pricing structures that you will encounter.

How to Build The Impossible (Credit - 1 AIA CE)

This presentation takes an in depth looks at the masonry component of the Dr. Chau Chak Wing Building façade. Shaped like a crumpled-up paper bag, Frank Ghery's complex design required the development of five unique brick shapes produced by Brickworks.

Exterior Paving with Clay Masonry (Credit - 1 AIA CE)

The presentation discusses proven systems which perform successfully in most applications, including mortared (rigid) assemblies as well as un-mortared (flexible) assemblies. Proper detailing and installation of each of the common elements in a masonry paving (sub-grade, base, setting bed, and wearing surface) are discussed in detail.







Manufactured Stone Veneer (Credit - 1 AIA CE)

Recent developments in construction detailing and installation have resulted in the increased use of manufactured stone veneer systems. The stone look has been popular for centuries and new systems have been created to get a natural stone appearance and a very durable veneer system while reducing wall costs.

Sustainable Design in Clay Masonry (Credit - 1 AIA CE)

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.

Presenter: Russ Hawkins of MAC Metal Architecture

Introduction to Steel Siding (Credit - 1 AIA CE)

This program will cover the different types of steel profiles in the family of metal coatings. It will lead the participant to understand the qualities of the distinct paint systems used in the industry and to understand their particularities. This course will also cover warranties, LEED program, types of poses as well as profiling methods.

Presenter: Matt Bunch of County Materials

County Materials Block and Paver Plant Tour (Credit 1 AIA HWS)

Tour an active manufacturing facility and experience firsthand how raw materials are transformed into architectural masonry and hardscape products that enhance the environments we live in. Follow and learn about the manufacturing process, from production and quality control testing to packaging and shipping. Manufacturing processes included: concrete brick, concrete veneer, burnished masonry units, retaining wall units, pavers, and slabs.

Concrete Masonry Veneer Units (Credit 1 AIA HWS)

An introduction to concrete masonry veneers, focusing on material properties and attributes, proper assembly and construction practices, sustainability, and aesthetic use in architectural masonry design.

Burnished Concrete Masonry (Credit - 1 AIA CE)

An introduction to ground face/ burnished concrete masonry, covering applicable standards, aesthetic options, and construction techniques to ensure a successful burnished masonry application.

Decorative Concrete Face Brick (Credit – 1 AIA CE)

Discover the advantages of decorative concrete brick in comparison to clay. This presentation covers material properties and attributes, proper assembly and construction practices, and concrete brick as a preferred, sustainable choice.







Presenter: Marty Sweeny of Reading Rock

Architectural Design with Cast Stone (Credit 1 AIA HWS)

Attendees will have a clear understanding of Cast Stone, how it is produced, and how it differs from associated materials. The various applications of Cast Stone for residential, commercial, municipal, educational, and other uses will be presented. Also discussed will be design recommendations, as well as anchoring details and inherent sustainable attributes of Cast Stone and LEED.

Effective Design for Cast Stone Performance (Credit 1 AIA HWS)

The program covers Cast Stone manufacturing process and use as veneers; including details to reduce both water penetration and veneer cracking.

The Making of Cast Stone (Plant Tour) (Credit 1 AIA HWS)

Participants will be able to understand how cast stone production shop drawings are generated from architectural plans. Learn how molds are made to form the cast stone as specified in the drawings. Become familiar with at least one method of cast stone production. Understand the major aspects of the Cast Stone Institute Quality Control Program for cast stone production and shipping.

The Nature of Thin and Lightweight Stone Veneers (Credit 1 AIA HWS)

This program provides an overview of how stone veneer, as a building material, has evolved in today's construction techniques utilizing thin and lightweight products as a Veneer/Trim, and, how they are quickly becoming an alternative for masons, architects, and designers. Emphasis will be on installation methods utilizing adhered, rain screen and mechanical/adhered with EPS foam core installations.

Presenter: Reid Johnstone of Rademann Stone

Natural Stone 101 (Credit - 1 AIA CE)

This presentation discusses the different types of natural stones found in Northern America, the limitations of each material, properties applicable to unique climates and different ways to manipulate natural stone to incorporate this into your projects.

Thin Stone Veneer 101 (Credit – 1 AIA CE)

This presentation discusses the benefits of designing with natural thin stone veneer in comparison to the traditional full bed masonry. We will go over the wall system of thin veneer masonry as well as providing some insight to waterproofing and air barriers that can benefit the install and overall product of a thin veneer wall system.

Presenter: Mike Slagle of Halquist Stone

Wisconsin Limestone (Credit 1 AIA HWS)

The program will provide an overview of how Wisconsin Limestone is used as a building and landscaping material and why Halquist thin stone is quickly becoming the stone of choice for masons, architects, and designers.







Presenter: Steve Bell of SEMCO Stone

Sandstone and Limestone Quarrying: Behind the Scenes (Credit 1 AIA HWS)

Identify different quarry processes; Obtain a better understanding about how the mineral composition and formation of stone affects its performance as a building material; Gain a better understanding of the process and production of natural building stone from the quarry to the project; Gain knowledge about stone fabrication and finishing methods

Presenter: Gina Waitkus of Buechel Stone

Natural Full & Thin Stone Veneers: Best Practices on Sustainability (Credit - 1 AIA CE)

This program will describe the qualities of natural building stone and best practices associated with the quarrying, fabrication and product selection processes that support historically accurate aesthetics and sustainable design. Participants will acquire insights about the natural stone industry's advocacy for social, economic, and environmental responsibility while providing this valued building material for architectural use.

Presenter: Don Foster of Masonry Cosmetics

Creativity of Brick Matching (Credit - 1 AIA CE)

A one-hour program that teaches participants how to make new/existing construction match new/existing masonry. Participants will observe several projects in which matching was attempted and discover why some failed and others succeeded. Topics include selecting the right brick, making use of the physical brick-blending process, selecting a masonry coloring process, and specifying matching masonry.

Presenter: Joe Marxkors of Westlake Royal Stone Solutions

Designing Commercial Projects with Manufactured Masonry (Credit 1 AIA HWS)

AIA Design guidelines for sustainable manufactured stone veneer buildings, including product innovations and industry related education.

Precision & Performance with Manufactured Stone Veneer (Credit 1 AIA HWS)

Explore manufactured stone veneer as an inspirational design element, born from innovative technology and creative solutions.

Manufactured Stone Plant Tour (Credit 1 AIA HWS)

A one-hour tour of the manufacturing process of MSV, including detailed overview of accreditation, production, packing, storage, and transportation.

<u>Understanding Mortarless Stone Veneer & Other Stone Veneer Products</u> (Credit 1 AIA HWS)

Examination of the new Mortarless Stone Veneer category of cladding products as it relates to other types of stone veneer, specifically around the areas of installation and applications.







Presenter: Jeff Diqui of International Masonry Institute

Masonry Flashing and Moisture Control (Credit 1 AIA HWS)

This seminar defines best practice for design and construction of moisture management systems for masonry cavity and veneer wall systems. Code requirements, system components, workmanship and key details will be discussed. Key details include: base-of-wall, sills, heads, shelf angles, roof-to-wall interface, kick-outs, louvers and top-of-wall.

Masonry Movement Joints (Credit 1 AIA HWS)

Do you know the key differences between a CJ, EJ, IJ, BEJ? This seminar will teach you how to locate movement joints to accommodate or restrain building and material movement to avoid cracks or system failures. You will learn about control and expansion joints at corners, shelf angles, top-of-wall bond beams, loose & fixed lintels, cement-based veneers, loadbearing CMU walls, etc.. You will also learn how to select proper sealant color.

Presenter: Craig Alwine of Polycor/Indiana Limestone

Indiana limestone History, Quarrying, and Fabrication (Credit 1 AIA HWS)

Specifics of designing with and specifying Indiana Limestone; Alternate applications of Indiana limestone other than traditional masonry; Comparison of Indiana limestone to man-made cast stone

<u>Lightweight Natural Stone Composite Panels: Durable, Versatile & Beautiful</u> (Credit 1 AIA HWS)

Aesthetics & Performance; Components & Fabrication; Selection Considerations; Cost & Jobsite Safety Benefits; Installation Techniques & Applications

Manmade vs. Natural Stone a Comparison of Cast Stone and Natural Stone (Credit 1 AIA HWS)

State the features and benefits of Natural Stone vs. Cast Stone; Understanding the manufacturing process of both materials; Examine Pros and Cons in Sustainability of Cast Stone vs. Natural Stone; State the cost of Cast Stone vs. Natural Stone.

Presenter: Sean Delaney of Westbrook Block

<u>Integrally Insulated Masonry and the International Energy Conservation Code</u> (Credit 1 AIA HWS)

Gain understanding of masonry wall systems code; Understand single wythe wall types; Learn how R value is derived; R value vs. U factor; Analyze post construction completed wall systems

Innovations in Masonry (Credit 1 AIA HWS)

How concrete and cement impact carbon footprint; Sustainable innovations in cmu manufacturing; Energy efficient concrete masonry units; Effects of sustainable products; Health and safety

Glazed Concrete Masonry (Credit 1 AIA HWS)

What is glazed concrete masonry; Sustainable benefits; Features, uses and applications; comparison to structural glazed facing tile and ceramic tile







Presenter: Zach Booker of Brick Industry Association

Brick Veneer / Steel Stud Walls (Credit 1 AIA HWS)

These cost-effective wall systems have come a long way since they first appeared in the 1960s. You'll learn to properly design and detail brick veneer/steel stud walls, including material specifications, wall ties, and insulation. You'll also learn more about typical brick detailing issues, such as flashing and expansion joints.

Cavity Wall Design and Construction (Credit 1 AIA HWS)

We cover the proper design of these long-lasting brick- and-block assemblies, with emphasis on water resistance and crack control. This talk also covers a short history of cavity walls and properties of cavity walls including fire resistance, thermal design, and wall tie requirements. Since workmanship issues have such an impact on performance, we discuss materials and installation procedures that promote proper performance.

Combinations of Materials (Credit 1 AIA HWS)

These days, most buildings include multiple exterior materials brick, steel, glass, stone – and systems, such as curtain walls and EIFS. Participants will learn how brick performs with other building materials and how to combine them without creating problems. Brick and mortar, steel, block and stone combinations will be discussed.

Incorporating the Forgotten Thermal Benefits of Brick (Credit 1 AIA HWS)

While frequently chosen for aesthetics and durability, clay brick is not often considered when energy efficiency is a primary concern, even though it historically played a significant role in occupant comfort before widespread use of HVAC systems. This course discusses the basics of heat transfer, relevant energy code provisions for walls, and how current research by the National Brick Research Center demonstrates the role that brick veneer can play in meeting or exceeding energy requirements in modern wall assemblies.

Movement Joints (Credit 1 AIA HWS)

We identify various types of cracks that occur in masonry and how to avoid them. Material properties that affect movement are explained and how and why movement joints used to accommodate these movements. Optimal sizing and spacing of expansion joints are explained. This is good, basic information that every designer should know. The participant will be able to successfully design movement joints into buildings after this seminar.

Proper Brick Masonry Detailing (Credit 1 AIA HWS)

Methods for keeping water out of the wall assembly is top priority in this talk. We'll also discuss movement (expansion joints), how to add accent materials to a masonry wall, and special details such as corbelling and curved brick walls.









Presenter: Zach Booker of Brick Industry Association

Unique Brick Architecture (Credit 1 AIA HWS)

Current trends in architecture include the desire to reintroduce traditional articulated detailing concepts in a modern way. This course discusses the various types of features that can be incorporated into anchored brick veneer, the limits of the prescriptive limits presented in the Building Code Requirements for Masonry Structures (TMS 402), and general detailing concepts to adapt these types of details to anchored brick veneer construction.

*Other programs available upon request, if there is a topic that would be beneficial to your firm please inquire.



