



# 2023 Masonry Seminar

Tuesday, March 28

8:30AM - 3:30PM

King's Material Block Plant  
650 12th Ave SW, Cedar Rapids, IA

Art & Environment Center  
4500 N 10th St, Marion, IA

presented by the Masonry Institute of Iowa

**EARN UP TO  
5.5 HOURS OF  
CONTINUING  
EDUCATION!**

## Programs

- King's Material block plant tour
- Case Studies in Masonry - St. Louis Masonry Institute
- Integrating Masonry & Roofing Systems, Norbert Krogstad, WJE
- Engineer Tract - Cathleen Jacinto: Structural Clay Masonry & How to Design Efficient Masonry Buildings
- Architecture Tract - Pat Conway, International Masonry Institute:  
Single Wythe Masonry Walls & What Non-Engineers Need to Know About Structural Masonry

Register online at  
[www.masonryinstituteofiowa.org](http://www.masonryinstituteofiowa.org)



Masonry Institute of Iowa (MII) is a Registered Provider with the AIA Continuing Education System. Participants in all workshops presented by MII earn Learning Unit Credits.

# 2023 Masonry Institute of Iowa Masonry Seminar Schedule

## PRICING

Registration includes continental breakfast, two breaks, lunch and up to 5.5 hours of AIA/HSW learning credits.

Early Bird Pricing - on/before Friday, March 20

MII Member - \$45 first registration; \$40 for additional  
Non-member Architects/Engineers - \$60 per registration

Pricing after March 20

MII Member - \$60 first registration; \$50 for additional  
Non-member Architects/Engineers- \$80 per registration



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### 8:10 - 8:30am: Registration and Continental Breakfast at King's Material

#### 8:30 - 9:30am

#### King's Material Block Plant Tour

*Tour will be led by King's Material employees*  
Participants will learn first-hand through instruction and observing the manufacturing process how concrete masonry and hardscape units are made. Additionally, because of the highly specialized process and equipment used in their manufacture, concrete masonry units are structurally sound and sustainable construction products.

#### Objectives:

- Understand how units are designed to obtain the most structural benefit.
- See how the use of extremely high pressure and vibration, creates very strong, durable and sustainable concrete masonry and hardscape products.
- How concrete masonry is used to form a cohesive, strong structural assembly that can effectively resist the design loads.
- CMU is fire resistance rating of a masonry block assembly easily can be determined according to the amount of material and the aggregate type used in the manufacture of the unit.

### Programming will be held at Art & Environment Center in Marion

#### 10:00 - 11:00am

#### Case Studies in Masonry

#### Presented by the St. Louis Masonry Institute

Representatives from the St. Louis Masonry Institute will present on their Masonry Structural Coalition. The purpose of the coalition is to assist on properly designing masonry structures that are cost effective, durable and safe for its occupants. Their services include design and structural assistance as well as current market pricing analysis. This presentation will include case studies showing how masonry can be a cost-effective choice for structural building design.

#### Objectives:

- Explore building design utilizing structural masonry.
- Look at initial building costs of masonry buildings in comparison to other materials.
- Examine case studies and how they utilized masonry in their design.

Explain additional benefits of building with masonry.

#### 11:00 - 11:15am: BREAK

**11:15am - 12:15pm**

**Norbert Krogstad, AIA**

**Wiss, Janney, Elstner Associates, Inc.**

Most moisture problems within building envelopes typically occur due to rainwater leakage or condensation associated with breaches in the air barrier, water resistive barrier, vapor retarder, and insulation control layers. Roof to wall interface conditions are one of the most difficult and frequently overlooked contributors to such problems. In general, envelope systems today are lighter, tighter, and better insulated than their predecessors because of energy codes, construction costs, and operating costs. As a result, these new wall systems are often less forgiving than the lesser insulated of the past. This is because older systems, such as masonry mass wall systems, had greater heat transfer and therefore greater drying potential and could often store small amounts of moisture without damage. Therefore, understanding proper integration of control layers at such interfaces is more important than ever. This presentation will review details to maintain the integrity of these control layers at roof to wall interface conditions.

**Objectives:**

- Summarize the function of air barrier, water resistive barrier, vapor retarder, and insulation control layers.
- Identify common breaches in the control layers at roof to wall interface conditions.
- Describe common approaches for maintaining the continuity of the four control layers.
- Develop details to implement these basic approaches at roof to wall interfaces in building assemblies.

**12:15 - 12:45pm: LUNCH**

**12:45 - 3:30pm**

**Two tracts are offered - please pick one tract - ARCHITECTURE OR ENGINEERING TRACT**

**2:15 - 2:30pm: BREAK**

**ENGINEERING TRACT**

**Speaker: Cathleen Jacinto, PE**

**FORSE Consulting**

**How to Design Efficient Masonry Buildings (1.5 hrs)**

Review case studies showcasing structurally effective and efficient masonry design. These case studies, involving real construction projects, cover a variety of building types. We'll compare several different structural systems and their impacts to cost and schedule. Using higher compressive strength values and software analysis, structural masonry walls can be designed to be more efficient

**Objectives:**

- Review important aspect of masonry design criteria,
- Consider the construction cost effects of design choices and how to detail structural masonry effectively.
- Acquire design insights on efficient partition walls and high-performing lintels.
- Discuss best practices and review case studies for effective masonry designs.

**Structural Clay Masonry (1 hr)**

The presentation will cover clay masonry strength considerations, movement joints, and constructibility considerations for practical masonry detailing and specification.

**Objectives:**

- Acquire insights about the history and basics components of a structural clay masonry wall.
- Build knowledge about materials that make up a clay masonry system from a structural engineer's perspective.
- Discover how the local strength of clay and concrete masonry affects the many different areas of masonry design.
- Comprehend best practices and software programs can be used to design structural masonry efficiently.

## ARCHITECTURE TRACT

Speaker: Pat Conway, AIA

International Masonry Institute

### What Non-Engineers Need to Know About Structural Masonry (1.5 hrs)

This seminar is for designers and contractors who would like to be more knowledgeable about typical and not-so-typical structural masonry applications and delivery methods. Attendees will learn about structural masonry system options, loadbearing and non-loadbearing applications, masonry lintels, and lessons-learned from the field.

#### Objectives:

- Understand basic and advanced structural masonry design strategies.
- Review how modern building codes and industry standards support efficient structural masonry designs.
- Discover how pure structural masonry solutions avoid conflicts with embedded structural steel elements.
- Learn how to develop structural masonry details that are budget-friendly and logical to assemble to create durable and aesthetically pleasing architectural details.

### Single Wythe Masonry Wall Design (1 hr)

Learn strategies for efficient and economical single-wythe masonry walls to control budget, moisture, movement, and thermal issues. Discover the pros and cons of face-sealed, barrier, and drainage design strategies and how to get single-wythe walls to pass energy codes.

#### Objectives:

- Learn ways to design efficient and economical single-wythe masonry wall systems.
- Discover how to effectively manage moisture in single wythe masonry walls.
- Identify single wythe energy code strategies.
- Understand how single wythe walls perform as a building envelope, dealing with air, moisture, and thermal issues, providing a safe space for occupants.

## ADDITIONAL INFORMATION

### Registration Info

Registration for the 2023 Masonry Seminar includes breakfast, two breaks, lunch and all the handouts and material needed for the programming.

### Professional Development Credit

Attendees will earn up to 5.5 hours of professional development. Learning units will be applied to AIA within 10 business days. Please check your AIA account to make sure they were applied accurately. Certificates of Attendance will be emailed out after the seminar to those without AIA numbers.

### Block Plant Tour

King's Material will provide protective hearing wear for the tour. Please wear closed toe shoes. Hard hats and high vis are not required.

### Cancellation Policy

Refunds, minus a \$20 processing fees, will be given through March 21. After March 21 no refunds will be given.

### Parking

Parking is available but limited at King's Material. Please try to carpool. Additional street parking is several blocks away - please plan accordingly. Free parking is available at the Art & Environment Center in Marion.

### About MII

The Masonry Institute of Iowa (MII) is the nonprofit association for the masonry industry. Members include masonry contractors, brick manufacturers, block manufacturers, stone manufacturers, brick, block & stone distributors, and suppliers in Iowa who come together to promote quality masonry construction. MII is a great resource for all your masonry questions.

Masonry Institute of Iowa

PO Box 393

Johnston, IA 50131

515-252-0637

[MasonryInstituteofIowa.org](http://MasonryInstituteofIowa.org)



# 2023 MII Masonry Seminar Registration Form

Register online at [www.masonryinstituteofiowa.org](http://www.masonryinstituteofiowa.org) (under Events).

Company Name \_\_\_\_\_

Phone \_\_\_\_\_

## ATTENDEE REGISTRATIONS

Name \_\_\_\_\_ Email \_\_\_\_\_

AIA or Professional Development # \_\_\_\_\_

Registering as a  Architect  Engineer  MII Member

Please check all the programming the attendee will be attending:

- Block Plant Tour     Case Studies in Masonry     Integrating Masonry and Roofing Systems  
 Afternoon Architectural Program (Pat Conway)     Afternoon Engineering Program (Cathleen Jacinto)

Name \_\_\_\_\_ Email \_\_\_\_\_

AIA or Professional Development # \_\_\_\_\_

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# 2023 MII Masonry Seminar Registration Form Continued

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## Pricing after March 20

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Sponsorships are still  
available - to learn  
more visit  
[MasonryInstituteofIowa.org](http://MasonryInstituteofIowa.org)

Lunch requirements: \_\_\_\_\_  
\_\_\_\_\_

**TOTAL AMOUNT DUE:** \_\_\_\_\_

Payment Method:  Credit Card  Check

### *Credit Card Information*

Company Name \_\_\_\_\_

Name on Card \_\_\_\_\_

Card # \_\_\_\_\_ Exp Date \_\_\_\_\_ CID # \_\_\_\_\_

Address Associated with the Card \_\_\_\_\_

Phone \_\_\_\_\_

**Total Amount Due** \_\_\_\_\_

Please return the form to [jirlmeier@masonryinstituteofiowa.org](mailto:jirlmeier@masonryinstituteofiowa.org) or mail back to MII.

Masonry Institute of Iowa

PO Box 393

Johnston, IA 50131

Phone: 515-252-0637 Fax: 515-282-9117

[MasonryInstituteofIowa.org](http://MasonryInstituteofIowa.org)



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