

MASONRY MONDAY SEMINAR SERIES



International
Masonry
Institute

www.imiweb.org

QUALITY MASONRY RESTORATION WORKSHOP

THANKS TO OUR INDUSTRY PARTNER (AIA CHICAGO), SEMINAR PARTICIPANT (RATHS RATHS & JOHNSON)
AND EVENT SPONSOR (HELIFIX).



WHEN:

Monday November 6th (11:30 am – 4:30 pm)

WHO:

Architects, building agencies, owners, preservationists that are actively involved in restoration of existing buildings.

Space is limited to first 75 registrants, preregistration is required.

LOCATION:

International Masonry Institute
2140 W. Corporate Dr., Addison, IL 60101

COST: \$10.00, Includes lunch provided by IMI.

FORMAT:

This half-day program consists of a two-part keynote seminar followed by demonstrations / hands-on sessions covering a variety of masonry restoration crafts and techniques and finally a classroom seminar. Participants will be divided into smaller groups for the demo / hands-on sessions to allow attendees the opportunity to work with the tools and engage in the crafts. For those willing to participate in the hands-on demonstrations of tuckpointing & caulking please come prepared with appropriate clothing & closed toe shoes. IMI will be providing gloves and safety glasses.

SCHEDULE:

11:30 am – 11:50 am	Registration & Seating
11:50 am – 12:00 pm	Welcome
12:00 pm – 1:00 pm	Keynote Seminar & Lunch
1:00 pm – 1:15 pm	Break
1:15 pm – 3:45 pm	Demo / Hands-On Sessions
3:45 pm – 4:00 pm	Break
4:00 pm – 4:30 pm	Classroom Session

CONTINUING EDUCATION:

Registered with AIA for 4 LU's / 4 Health Safety Welfare (HSW) LU's. Certificate of Completion provided for non-AIA member intending to self-report.



DEMO / HANDS-ON SESSION:

1. Tuckpointing

- Repoint masonry walls whose joints have been raked or ground out.
- Learn about properties of tuckpointing mortar and techniques for pointing.

2. Caulking

- Learn about the preparing sealant joints, different backer rod & sealant materials, & techniques for sealant application.

3. Terra Cotta & Stone Patching

- Apply patches.
- View mockups of Dutchman and other types of patching.
- Discuss terra cotta color matching.

4. Flashing & Lintel Replacement

- Review shoring of brickwork and removal of deteriorated lintels & flashing.
- Install new flashing using modern techniques for extended service life.

5. Masonry Restoration Anchors

- Install stainless steel helical remedial tying pins into masonry and perform load test.
- Permanently fix a cracked wall using hidden repair techniques.
- Create an invisible, loadbearing masonry beam within an existing mortar joint.
- Stabilize a façade using grouted anchors.

CLASSROOM SESSION:

Modern Masonry Stabilization Methods

Presented by: Brian Barnes, Helifix

This seminar will discuss concealed, non-disruptive installation techniques of stainless steel helical ties, mechanical expansion anchors, permanent crack stitching, and stucco pinning. It will also discuss the use of engineered stainless steel bar to create masonry beams for gravitational support and lintel replacement.

REGISTRATION:

Register online at: <https://goo.gl/Vpg99J>

Space is limited to the first 75 registrants, so register early. For additional information contact IMI at (630) 396-3144 or jdiqui@imiweb.org.

LUNCH KEYNOTE SEMINAR:

Restoration of Masonry

Presented by: George R. Mulholland, S.E., P.E., Senior Consulting Engineer
Raths Raths & Johnson



This program will utilize a case study format that will explore various masonry restoration related subjects that relate to distressed brick masonry interior loadbearing wall repairs, concealed terra cotta anchor distress, examples of investigative tools for masonry, and helical tie repairs. The attendee will learn from these case studies the load paths within the assemblies and sequencing of work, latent dangers with terra cotta, useful tools for investigating masonry along with methods for stabilizing masonry to the structure.

GEORGE R. MULHOLLAND, S.E., P.E.

Senior Consulting Engineer



+CONTACT

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George Mulholland is a licensed Structural and Professional Engineer with 29 years of experience specializing in the evaluation, investigation, and repair of distressed facades, buildings, and structures. His portfolio has encompassed cast-in-place, precast, and post-tensioned concrete, masonry, steel, and timber structures with a specialization in parking garages.

He has served as Project Manager on numerous investigation projects utilizing the latest techniques and testing approaches, ranging from exterior facade and masonry wall evaluations to concrete deterioration, steel corrosion, and other structural performance-related problems and collapses. His investigative responsibilities consist of structural component surveys, structural strength evaluations, nondestructive testing, building code compliance, field testing, and material sampling. Project investigations have included destructive openings; concrete crack and delamination mapping; steel corrosion, waterproofing membrane, and masonry wall evaluations; and exterior wall critical examinations. He has extensive knowledge of remedial design approaches for rehabilitation, durability, and strengthening of structural framing components and connections to prevent, manage, and control air, water, and vapor migration of building envelopes, and historic facade restoration.

Mr. Mulholland has performed structural analysis, finite element modeling, nonlinear analysis, and structural peer reviews on a range of building types.

With his extensive knowledge of structural and facade assessments and repair, he has provided litigation support and served as an expert witness on related failures.

■ EDUCATION

Master of Science in Structural Engineering, 1988
 University of Illinois at Urbana-Champaign
 Bachelor of Science in Civil Engineering, 1986
 Iowa State University

■ REGISTRATIONS

Licensed Structural Engineer in Illinois
 Licensed Professional Engineer in Arizona, Illinois, Iowa, Missouri, and South Carolina
 Registered Safety Assessment Program Evaluator,
 Disaster Service Worker

■ PROFESSIONAL AFFILIATIONS

American Society of Civil Engineers (ASCE)
 ASCE Standards Committee on Structural Condition Assessment, Chairman
 Precast/Prestressed Concrete Institute (PCI)
 PCI Building Code Committee
 Structural Engineers Association of Illinois (SEAOI)
 American Institute of Steel Construction (AISC)
 International Concrete Repair Institute (ICRI)
 Chicago Chapter, Director