



LANDMARKS ILLINOIS & IMI ANNUAL HISTORIC PRESERVATION EVENT

TERRA COTTA CONSTRUCTION & RESTORATION



Thursday, February 18, 2021

WHO:

Landmarks Illinois Stakeholders, Preservationists, Architects, Owners, Developers, General Contractors, BAC Signatory Contractors, Gov't Officials.

WHEN:

Thursday, February 18, 2021

9:00 am - 1:45 pm

NOTE: please login 5 minutes prior for a 9:00 start.

WHERE:

Held virtually via webinar using Zoom.

COST:

The cost to attend this event is FREE.

CONTINUING EDUCATION:

This program meets AIA/CES requirements for continuing education and qualifies for 4.0

HSW/LU credits.



QUESTIONS:

Jeff Diqui, jdiqui@imiweb.org or (630) 606-8220

SCHEDULE:

9:00 - 9:05:

Welcome

9:05 - 9:10:

Opening Remarks

Bonnie McDonald, President & CEO, Landmarks Illinois

9:10 - 9:15:

Opening Remarks

Jim Allen, President, Bricklayers & Allied Craftworkers

9:15 - 9:25:

Presentation: Historic Masonry Preservation Certificate Program

Jeff Diqui, Technical Director, IMI

9:25 - 10:25:

Presentation: Terra Cotta Construction & Restoration

Amy Lamb Woods, Technical Director, IMI

10:25 - 11:25:

Presentation: Old Cook County Hospital Masonry Restoration Case Study

Rachel Will, Associate Principal, WJE

11:25 - 11:45:

Break

11:45 - 1:30:

Demonstrations of Terra Cotta Restoration:

- Patching
- Glaze Repairs & Color Matching
- Unit Setting/Anchoring & Flashing

1:30 - 1:45:

Q & A / Closing Remarks

REGISTRATION (Zoom):

For online registration, click or visit:

<http://bit.ly/3igOwG7>

NOTE: Upon completing registration, you will receive a confirmation link with the webinar login link and will also have the option to add the event to your calendar that includes the login link.

PRESENTATION DESCRIPTIONS:

Terra Cotta Construction & Restoration:

Architectural Terra Cotta began as features within (brick) masonry facade assemblies and evolved into full building clad systems. The presentation will give an overview of general terra cotta facade construction and how the wall system functions. Characteristics of the material will be discussed along with its pathological tendencies. The material properties and its construction are contributors to both its success and beauty as well as its vulnerability to damage. Understanding the material and its vulnerabilities will help in developing appropriate repair and restoration solutions. The presentation will provide an overview of appropriate solutions for in-situ repairs, supplemental anchorage, replacement units, improved water management, and treatment of corroded steel. Craftworkers that are trained and educated in terra cotta masonry restoration are assets to project teams and play a significant role in successful historic terra cotta masonry projects.

Old Cook County Hospital Masonry Restoration Case Study:

The Old Cook County Hospital exterior masonry facade repairs designed by WJE and performed by Mark1 Restoration and MBB Masonry, included repairing the brick, stone and terra cotta masonry on all facades. The brick, stone and terra cotta units that were deteriorated beyond repair were addressed with in-kind replacement units. This also included the removal and rebuilding of select areas with salvaged units. Approximately 10,000 square feet of brick were removed and replaced or reinstalled. Granite units were replaced at the base of the building as necessary. Approximately 4,000 terra cotta units were removed and replaced with new material manufactured by Gladding McBean. An approximate additional 10,000 terra cotta units were removed and reinstalled as part of the repairs to address the underlying steel. This presentation will focus on the terra cotta restoration process, including discussing the investigation, design, manufacturing and installation steps in the Old Cook County Hospital masonry facade repairs.

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TERRA COTTA REPAIR DEMONSTRATIONS:

A virtual tour of the IMI/BAC training facilities historic preservation work stations specific to terra cotta will be conducted to observe:

- Patching including step by step repair procedures, supplemental anchorage, etc.
- Glaze repair process and color matching techniques.
- Removal of existing and rebuilding with salvaged or new terra cotta units process including lifting mechanism, shimming, anchoring, flashing system, detailing of joints.

PRESENTER BIO'S:

Amy Lamb Woods, P.E. is the Director of Technical Education with the International Masonry Institute (IMI) and a licensed Professional Engineer in multiple states. Her background combines architecture, historic preservation, and civil engineering materials. Ms. Woods has over 20 years of experience in the field of forensic engineering of building materials, both historic and contemporary structures. Her experience includes facade and failure investigations with materials such as brick masonry, terra cotta, stone, concrete, terrazzo, and stucco. Her primary interest is with projects involving the investigation and repair of historic masonry and concrete materials. From the University of Illinois at Urbana-Champaign, Ms. Woods obtained a BS in Architecture, MA in Architecture Historic Preservation, and an MS in Civil Engineering Building Materials with a focus on cement chemistry. She is a Board member for the Association for Preservation Technology International (APT), past Board member of the International Concrete Repair Institute (ICRI) Seattle and Chicago chapters, and founder of Women in Restoration & Engineering (WiRE).

Rachel Will is an Associate Principal and Associate Director of Knowledge Sharing with Wiss, Janney, Elstner Associates, Inc. She has been with WJE since 2006. Ms. Will received her Master of Science degree in Historic Preservation from The School of the Art Institute of Chicago in 2007. She received her Bachelor of Science degree in Civil Engineering with an emphasis in Structures from Iowa State University in 2005. She has experience related to the investigation and repair of existing and historic building facades. She has performed numerous evaluations of historic masonry facades and prepared repair documents along with provided construction period observations for many terra cotta clad buildings. She has authored multiple articles and given many presentations related to masonry, terra cotta and historic preservation.

OLD COOK COUNTY HOSPITAL RESOURCES:

Compliments of Landmarks Illinois are the following links to a few resources on the history of the preservation efforts:

- Preservation Perseverance: A 22-Year Effort To Save Old Cook County Hospital: <http://bit.ly/3qiNM6g>
- Meet: Walsh Construction Project Engineer: <http://bit.ly/3bAjesp>



Photo credit: Walsh Construction

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