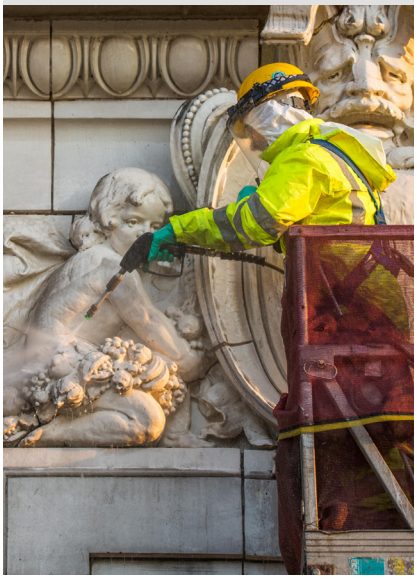
TEAM IMTEF
INTERNATIONAL MASONRY TRAINING AND EDUCATION FOUNDATION

BAC/IMI National Training Center
17101 Science Dr., Bowie, MD 20715



HISTORIC MASONRY PRESERVATION CERTIFICATE PROGRAM (HMPC)

PURPOSE

As the list of historic buildings and structures increases, so does the demand for qualified masons who have the necessary skill and knowledge to preserve them. Traditional craft skills and contemporary repair techniques are critical to the preservation of historic buildings and structures. To assure understanding and compliance related to masonry restoration and historic preservation, the International Masonry Institute (IMI) and the International Masonry Training Education Foundation (IMTEF) offers the Historic Masonry Preservation Certificate Program (HMPC). The program gives members of the International Union of Bricklayers and Allied Craftworkers (BAC) integrated knowledge in historic masonry preservation.

BENEFITS

FOR BUILDING OWNERS AND DESIGN PROFESSIONALS

- Manage quality control on preservation projects
- Take advantage of the opportunity to present project-specific information to the craftworkers on your project
- Ensure quality craftsmanship by including HMPC as a pre-qualification in project specification language. See sample specification language on page 4 or online at **imiweb.org/training/hmpc.**

FOR BAC CRAFTWORKERS

- Increase your work opportunities with a recognized credential included in project specifications
- Establish your expertise as a preservationist by learning traditional and contemporary techniques from renowned practitioners

CURRICULUM

HMPC is a 50-hour program covering the role of craftworkers in the overall execution of a preservation project, including the theory and history behind the preservation movement and an in-depth understanding of traditional materials/methods and advancements in preservation technology. The learning modules actively engage masonry craftworkers – many of whom have already been involved in high-level restoration work – through lecture and hands-on training sessions lead by experienced IMI and IMTEF instructors. The course also draws heavily on assistance and participation from building owners, members of the preservation design community, and product manufacturers.

CORE MODULES

FUNDAMENTALS OF HISTORIC PRESERVATION

This module discusses the history of the preservation movement as well as current trends in the field of preservation. Participants gain an in-depth understanding on the 4 major treatment approaches: Preservation, Rehabilitation, Restoration, and Reconstruction.

INTRODUCTION TO MASONRY BUILDING MATERIALS/ TECHNOLOGY/DETERIORATION

This module covers the evolution of the construction process, including the timeline of building technology and its impact on the American way of building. Participants receive an overview of basic architectural vocabulary and examine the properties of building materials and the mechanism of deterioration. Other topics include diagnostic methods, including examining and evaluating historic fabric, and sustainability issues. Upon completion participants have a better understanding of the building as a system.

HISTORIC STRUCTURE SURVEY AND CONDITION REPORTS

This module introduces the types of research, survey, and testing that takes place before physical restoration work begins. The module follows the work of the architect, engineer, and conservator and explains the role each plays in understanding the deterioration phenomenon and selecting repair methods and materials.

TRADITIONAL AND CONTEMPORARY REPAIR METHODS

This module provides an overview of both traditional repair methods and materials as well as contemporary and cutting-edge approaches. Specialized materials to be used in the hands-on portion of the program are also discussed.

MORTARS IN PRESERVATION

This module covers the development and use of masonry mortars in the U.S. Participants gain an in-depth understanding of lime-based mortars, natural cements, use of pozzolans, and hydraulic-based mortars. Lectures focus on the chemistry behind mortars and their appropriateness depending on masonry types, masonry quality, and location. A hands-on portion gives participants the opportunity to prepare and install lime-based mortars and practice several mortar extraction methods.

ELECTIVE MODULES

The following modules are offered on a rotating basis according to the training needs of students enrolled in the program.

- Brick Restoration
- Terra Cotta Restoration
- Stone Carving and Dutchman Repair
- Concrete Repair
- Masonry Cleaning
- Mold Making and Casting
- Caulking and Sealants
- Consolidants and Coatings
- Pinning & Grout Injection
- Safety Awareness Training

INSTRUCTOR QUALIFICATIONS

All classroom training sessions are presented by individuals with advanced degrees in historic preservation or a related field (such as engineering or architecture) and/or presented by individuals with extensive knowledge and experience in masonry preservation. A minimum of two instructors will deliver the program. Hands-on training sessions are presented by graduates or enrolled members of IMTEF's Instructor Certificate Program (ICP) or by IMI technical staff.

CERTIFICATE REQUIREMENTS

To earn the HMPC, participants must:

- Be BAC journeyworkers in good standing with at least 5 years of journey-level trade experience
- Attend all training modules offered during the program
- Pass a 50-question written exam
- Pass all hands-on portions of the program

MAINTAINING THE CERTIFICATE

To maintain HMPC, certificate holders must attend continuing education training classes every 7 years. The length and subject matter of the training sessions will be determined by the program committee based on technological advances in the field of masonry preservation as well as the needs of the member. This updated training will be conducted via web-based courses and at local training centers whenever possible. Upon completion, participants will receive a renewed certificate in historic masonry and documentation in the IMI/IMTEF Training Management System.

PROGRAM AVAILABILITY AND LOCATIONS

HMPC is offered in the following locations:

- The BAC/IMI John J. Flynn International Training Center outside Washington, DC
- Regional BAC training centers
- Job sites for site-specific training on an as-needed basis

BAC members should contact their local training center or coordinator to inquire about program availability. BAC Local Officers and Training Coordinators can contact Serenia Holland, IMTEF Training Coordinator, to enroll members or to get additional information about program availability at the International Training Center:
sholland@imtef.org, (301)-291-2105.

SAMPLE SPECIFICATION LANGUAGE

Design professionals can insert the following pre-qualification language into specifications to help ensure HMPC-trained craftworkers employed by BAC signatory contractors are placed on their project to perform sensitive restoration work.

OPTION 1:

"Superintendent and foreman for work in this section assigned to this project shall each have a minimum of ten (10) years' experience with this type of repair work an International Masonry Institute Historic Masonry Preservation Certificate (or equal) and to provide evidence of certification prior to the start of the project. References of projects they have completed shall be submitted to the Architect by the successful bidder. The project superintendent and foreman assigned to this project shall not be changed throughout the duration of the work without written request to and consent of the Architect."

OPTION 2:

"All team members of the Masonry Contractor Bidder will be required to have an International Masonry Institute Historic Masonry Preservation Certificate (or equal) and to provide evidence of prior certification or a statement of the firm's commitment to enroll in and initiate a training program relevant to the scope of work prior to the start of the project."