



# National Preservation Institute

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## Preservation Maintenance: Understanding and Preserving Historic Buildings

### Seminar Overview

Performing—or not performing—minor maintenance often can have unintended consequences. Learn how to read your building and understand the effects of daily, monthly, and annual maintenance activities between larger capital projects. Identifying, caring for, and maintaining historic materials is critical to this process. Discuss the nature of building materials, how they age, and how they fail. Learn when to bring in a specialist to help identify the problem or a contractor to handle a specific task.

### Agenda

#### Introduction

- What is Maintenance?
- Historic Buildings vs. Modern Buildings
- Preservation Ethos

#### Overview of issues affecting both wooden and masonry structures

- How to identify material types
- Understanding materials in context—historic building assemblies
- The conservation process—from documentation through intervention
- Training of staff—managers vs. maintenance employees
- The affect of building environment on historic materials
- Conservation maintenance

#### Wooden Structures

- The nature of wood materials and assemblies
- Historic building technology
- Agents of change—moisture, visitors, pests
- Foundations, framing, the building envelope (roofing, siding)
- Repair strategies and conservation options
- Case Studies: an 1850's plank house; a 1780's log structure; an 1860's frame house

#### Masonry structures

- The nature of masonry materials and assemblies
- Historic building technology
- Agents of change—moisture, settlement, mechanical anchorage failure, wind, water
- Intrinsic failure of materials due to materials choice and detailing
- Foundations, framing, the building envelope (bearing, rubble, stone/brick veneer issues)
- Repair strategies and conservation options
- Case Studies: an 1830's hospital; an 1840's school; a 1920's department store; a 1940's airport terminal

#### Professional Services

- Condition Assessments
- Maintenance Manual
- Construction Documents
- Specifications for Maintenance
- Service Providers: Architects, Contractors, and Vendors

#### Maintenance Program

- In-house vs. Outside Help
- Supervision
- Maintenance Contracting
- Personnel

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## Baseline Information

- Historic Materials Inventory
- Maintenance Reports and Manuals
- Maintenance Logs
- Construction Documents
- Building Environment Records
- Record Keeping

## Maintenance Manuals

- What they are and why you need one.

## Materials for Proper Maintenance

- Material Types
- Storage
- Safety

## Cyclical Maintenance of Historic Building Materials

- Site
- The Building Envelope: Masonry, Wood, Roofs, Windows, and Doors
- Interiors: Floors, Walls, Decorative Finishes, and Special Materials
- Systems: Mechanical, Electrical, and Plumbing
- Pests: Insects, Pigeons, Rodents, etc.
- Special Issues

## Special Topics

- Moisture
- Museums
- Roofs and Gutters
- Alterations and Modifications