



## PERSONNEL QUALIFICATIONS

### Emma Cardini | Principal and Unit Manager



#### EDUCATION

- Tufts University
  - Bachelor of Science in Civil Engineering, 2001
  - Master of Engineering Science in Structural Engineering, 2009

#### PRACTICE AREAS

- Facade Assessment
- Construction Administration
- Condition Surveys
- Masonry
- Difficult Access Inspections
- Historic Preservation
- Structural Evaluation
- Failure Investigation
- Cleaning and Coating Assessments

#### REGISTRATIONS

- Professional Engineer in CT, MA, and RI

#### PROFESSIONAL AFFILIATIONS

- International Institute of Building Enclosure Consultants (IIBEC)
- The Masonry Society (TMS)

#### TECHNICAL COMMITTEES

- IIBEC - Building Envelope Symposium Technical Committee
- TMS - Existing Masonry Committee

#### CONTACT

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#### EXPERIENCE

Since joining WJE in 2003, Emma Cardini has developed experience in the repair of masonry structures and has performed numerous facade investigations. She has been involved in structural condition assessments and has led field investigations and condition surveys to investigate deterioration, leakage, and structural problems in existing building enclosure systems. Ms. Cardini has designed and overseen repairs for a variety of materials, including stone, concrete, cast stone, brick masonry, terra cotta, and coatings and sealants. She has also participated in the assessment and repair of several historic structures.

Ms. Cardini is a member of WJE's Difficult Access Team. She has inspected structures as tall as 550 feet using industrial rope access techniques, documented conditions, and provided mitigation of falling hazards in areas that are difficult to access.

#### REPRESENTATIVE PROJECTS

##### Facade Assessment

- 197 Clarendon - Boston, MA: Investigation and repair of natural stone distress related to underlying steel corrosion
- Sawyer Hall - Boston, MA: Evaluation of deterioration at brick, stone, and cast stone facade; repair design and construction administration
- 50 Post Office Square - Boston, MA: Leak assessment and facade condition assessment of limestone masonry facade, preparation of contract documents, and construction administration
- 111 Westminster - Providence, RI: Industrial rope access inspections of stone, brick, and cast iron facade and annual maintenance inspections; preparation of repair documents
- Berkeley Building - Boston, MA: Rope access for stone facade inspection, condition assessment, and preparation of contract documents
- Landmark Center - Boston, MA: Condition assessment of brick and concrete masonry facade, preparation of contract documents, and construction administration

#### Historic Preservation

- Gateway Arch - St. Louis, MO: Industrial rope access inspection of stainless steel structure as part of staining assessment
- Fenway Park - Boston, MA: Annual concrete and waterproofing maintenance repair design
- St. Paul's Episcopal Church - Brookline, MA: Assessment of stone masonry steeple, repair design, and construction administration
- Omni Parker House Hotel - Boston, MA: Ongoing facade investigation and repair design/oversight for brick masonry facade
- Hartford Times Building - Hartford, CT: Evaluation of terra cotta distress and coating analysis as well as recommendations and repair design
- The Boston Athenaeum - Boston, MA: Evaluation of brick facade and cast iron, repair design, and construction administration
- Old South Church - Boston, MA: Industrial rope access inspection of interior plaster wall finishes, masonry arch, and bell tower
- Tribune Tower - Chicago, IL: Condition assessment of stone facade tower using industrial rope access techniques
- Washington Monument - Washington, D.C.: Condition assessment of post-seismic damage using industrial rope access techniques and repair recommendations

#### Failure Investigation

- 135 Clarendon - Boston, MA: Investigation of glass guardrail failure and review of delegated design
- Wilson Commons Glass Atrium - Rochester, NY: Peer review of leak investigation and schematic design for curtain wall replacement

#### Cleaning and Coating Assessments

- Cooper Street Parking Garage - Waltham, MA: Cleaning and trials for soot removal at precast concrete parking garage
- Necco Court Buildings - Boston, MA: Evaluation of historic coatings at corrugated metal clad bridge
- Mandarin Oriental - Boston, MA: Cleaning trials for biological growth at limestone facade