



**Architectural Testing**  
**Blaize Baehrens**  
**Project Engineer—Forensic Services**

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## **PROFESSIONAL SUMMARY**

5 years experience as an engineer in design and testing with 2 years experience as a consulting engineer specializing in the design, investigation, and testing of commercial façade assemblies.

**Architectural Testing, Inc. - Project Engineer** **June 2008 – Present**

- Consulting engineering services on new and existing construction.
- Forensic investigation including testing and remediation of moisture intrusion.

**Johnson Design – Project Engineer** **January 2007 – May 2008**

- Conceptual and practical design of fluid flow control products.
- Structural and fluid flow computational analysis.
- Prototyping and testing for design verification and performance benchmarking.

**Independent Consultant** **June 06 – Dec 06**

- Provide technical review of documentation for Simpson Gumpertz & Heger Inc. with regards to building technology and waterproofing of the building envelope.

**Simpson Gumpertz and Heger Inc. - Engineer** **June 05 – June 06**

- Technical design and review of construction documents, including architectural plans and shop drawings with regards to waterproofing of the building envelope.
- On-site construction administration to provide review, guidance, and problem-solving capabilities for variant building conditions.
- Model and execute condensation and thermal transfer analysis through elements of the building envelope.

## **EDUCATION/INDUSTRY ACCREDITATIONS**

Boston University, Boston, Massachusetts

- Bachelor of Mechanical Engineering, 2003

US Green Building Council (USGBC) – Orange County Chapter Member

## REPRESENTATIVE PROJECTS

### Existing Buildings

- Eastern Columbia, Los Angeles, California (under employment of SGH)

13-story terra cotta tile clad condominium conversion of historical building (listed in the National Register of Historic Places).

  - Conducted water penetration testing of existing steel windows and made design recommendations to seal against water penetration without replacing historic elements.
  - Used moisture probes to determine the level of saturation of the mortar layer anchoring the terra cotta façade.
  - Coordinated the analysis of the existing mortar to create a compatible mortar for repairs.
  - Inspected the existing condition of the building exterior and made recommendations with regards to cleaning, need and methods for repair, and replacement of sealant joints.
  - Made design recommendations to inhibit moisture penetration of the rooftop clock tower, which houses the mechanical platform.

### Investigation

- The Getty Center Museum, Los Angeles, California (under employment of SGH)
  - Investigated reported water leakage into art storage area.
  - Conducted water penetration testing of travertine tile wall cladding, door systems, and plaza deck waterproofing systems with no disruption to museum operation.
  - Provided design recommendations for the repair of the leakage sites.
  - Created a full report of the investigation including repair recommendations.

### New Construction

- Del Mar Station Transit Village, Pasadena, California (under employment of SGH)

Stucco clad apartment and retail buildings surrounding a light rail line incorporating the historical Santa Fe Depot. 347 Apartment Units and approximately 20,000 s.f. of retail space with two levels of subterranean parking.

  - Reviewed as-built field conditions of the building envelope systems to check for conformance to contract documents.
  - Conducted investigation and water penetration testing of reported water leakage sites and made design recommendations to remediate the observed leakage. The investigated components included, but were not limited to, windows and louvers, sliding glass doors and balcony decks, building expansion joints, mechanical platforms, exterior stairwells, and raised walkways.
  - Reviewed the installation of repairs at water leakage sites and verified performance through additional water penetration testing.
  - Provided full reports on inspection, testing, and design recommendations for each site visit.