

James A. Mahaney | Principal



EDUCATION

- University of California, Berkeley
 - Bachelor of Science, Structural Engineering, 1975
 - Master of Science, Structural Engineering, 1976

PRACTICE AREAS

- Construction Documents and Specifications
- Earthquake Damage Assessment
- Fire Damage Investigation
- Litigation Consulting
- Repair and Rehabilitation Design
- Seismic Repair and Retrofit Design
- Structural Evaluation
- Wood Structures

REGISTRATIONS

- Civil Engineer in CA and NV
- Professional Engineer in MI
- Structural Engineer in CA, NV, and WA

PROFESSIONAL AFFILIATIONS

- American Society of Civil Engineers (ASCE)
- Earthquake Engineering Research Institute (EERI)
- Structural Engineers Association of Central California (SEAOC)

CONTACT

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EXPERIENCE

James Mahaney has expertise in the investigation of existing structures and design of new structures, having completed more than five hundred investigation, evaluation, and design projects since joining WJE in 1986. Mr. Mahaney has evaluated the structural performance of existing buildings, taking in-place conditions and materials into account. He has designed structural modifications with special regard to code conformance, structural performance, architectural form and function, and construction costs.

Mr. Mahaney's experience also includes new building designs, seismic upgrades, failure investigations, fire-related damage investigations, and performance evaluations. He has written numerous technical papers and has received a California Preservation Foundation Design Award for the Alcatraz Cellhouse seismic retrofit. Prior to joining WJE, Mr. Mahaney served as a principal of an engineering architectural firm, where he provided a variety of design services for property and business owners, developers, and governmental agencies.

REPRESENTATIVE PROJECTS

Construction Documents and Specifications

- Placer County Water Agency - Auburn, CA: Occupancy conversion of historic wood-framed building with stone foundation
- Recology Transfer Facility - Auburn, CA: Modifications to existing tilt-up-wall, steel frame building to accommodate new transfer system
- Ridgeview Office Complex - Auburn, CA: Design development for steel- and wood-framed buildings
- Twenty-Story Tower - Sacramento, CA: Conceptual design of tower with underground parking for feasibility study

Earthquake Damage Assessment

- Twelve-Story Concrete Shear-Wall Building - Burlingame, CA: Damage survey, analysis, and repairs
- Twelve-Story Concrete Moment-Frame Building - Guam: Damage survey and analysis with concept repairs
- 1930s Reinforced Concrete Buildings - Napa, CA: Condition assessment

Fire Damage Investigation

- High-Rise Steel Frame Office Complex - Los Angeles, CA: Evaluation and repair recommendations
- Coking Facility - Rodeo, CA: Concrete damage assessment, repair design, and construction observation
- Motel - South Lake Tahoe, CA: Masonry wall and wood-frame damage assessment

Repair and Rehabilitation Design

- California State University, Sacramento: Evaluation and strengthening of scaffold-type bleachers
- Mertz Office Building - Auburn, CA: Seismic upgrade and supplemental roof for major facade remodel
- 4417 Oakport Street - Oakland, CA: Modifications to existing steel and wood-truss buildings and design and construction of new office building

Seismic Repair and Retrofit Design

- Alcatraz Island Cellhouse - San Francisco, CA: Seismic evaluation and upgrade
- 155 Filbert Street - Oakland, CA: Evaluation and upgrade design for an unreinforced masonry building
- Presidio Building 314 - San Francisco, CA: Upgrade of three-story reinforced-concrete building to "essential" facility seismic performance level

Structural Evaluation

- Wood-Framed Structures - CA: Field testing, analysis, and repair recommendations
- Balcony Investigation - Marysville, CA: Analysis and ACI load test of cantilevered concrete balcony
- Modesto Irrigation District - CA: Structural analyses, materials testing, and condition surveys

Wood Structures

- Wind-Damaged Roof System - Yuba City, CA: Investigation, analysis, and repair design
- CUREE Wood Frame Project - Richmond, CA: Testing of more than fifty shear walls with a variety of sill plate anchors

TECHNICAL COMMITTEES

- American Wood Council - Wood Design Standards Committee