

Richard A. Dethlefs | Principal



EDUCATION

- University of Washington
 - Bachelor of Science, Civil Engineering, 1994
 - Master of Science, Civil (Structural) Engineering, 1996

PRACTICE AREAS

- Concrete Assessment
- Earthquake Damage Investigation
- Failure Investigation
- Fire Damage Investigation
- Repair and Rehabilitation Design
- Seismic Evaluation
- Structural Evaluation
- Wood Structures

REGISTRATIONS

- Civil Engineer in CA
- Professional (Civil) Engineer in AK and WA
- Professional Engineer in OR
- Structural Engineer in OR and WA

PROFESSIONAL AFFILIATIONS

- APA - The Engineered Wood Association
- Structural Engineers Association of Washington (SEAW)

CONTACT

rdethlefs@wje.com
206.622.1441
www.wje.com

EXPERIENCE

Richard Dethlefs is experienced in structural investigations. He has assessed many types of structures, including bridges, buildings, parking structures, and containment facilities. Mr. Dethlefs is also knowledgeable in a variety of construction materials, including concrete, steel, wood, and masonry. Most of his projects have included the evaluation of deterioration or distress, computer modeling and analysis, nondestructive testing, repair or rehabilitation design, and litigation consulting. Mr. Dethlefs' projects have also included the evaluation of fire damage, earthquake damage and seismic assessments, decay, corrosion, wind damage, impact, construction defects, fatigue, snow load, failure or collapse, and soil settlement.

REPRESENTATIVE PROJECTS

Concrete Assessment

- 2704 Hanford Building - Hanford, WA: Analysis and load rating of composite concrete floor decks
- Korea High-Speed Rail System - South Korea: Nondestructive testing and condition assessment of concrete bridge piers
- Miami International Airport Parking Garage - FL: Analysis and load testing of prestressed concrete girders
- River Park Square Parking Garage - Spokane, WA: Assessment of corrosion-induced deterioration of concrete decks

Failure Investigation

- City of Ocean Shores Fire Department - WA: Assessment of settlement damage and report and repair documents
- Like Nu Car Wash - Caldwell, ID: Condition assessment of corroded steel joists and concrete deck and collapse investigation
- Rodeo Arena - Eugene, OR: Inspection and assessment of wind-induced collapse of steel-frame arena
- Starbucks - Seattle, WA: Earthquake damage assessment

Fire Damage Investigation

- Frantz H. Coe Elementary School - Seattle, WA: Fire damage assessment, concrete materials analysis, and trial repairs
- Satellite Hall at Rosario Resort - Orcas Island, WA: Fire damage and impact assessment and repair and rehabilitation documents

Wood Structures

- Major Restaurant Chain - Pacific Northwest: Analysis, inspection, and repair of plate-connected wood trusses
- North Kitsap Aquatic Center - Poulsbo, WA: Moisture survey of decay-damaged wood facility
- Sierra at Klahanie - Issaquah, WA: Litigation consulting
- Taiyo Condominiums - Seattle, WA: Framing repair, drawings, and specifications

TECHNICAL COMMITTEES

- SEAW - Lateral Forces Task Group