# WJE

## PERSONNEL QUALIFICATIONS

Thomas J. Rowe | Principal



#### **EDUCATION**

- University of Texas at Austin
- Bachelor of Science, Architectural Engineering, 1975
- Northwestern University
  - Master of Science, Civil Engineering, 1983

#### **PRACTICE AREAS**

- Failure Investigation
- Facade Assessment
- Repair and Rehabilitation Design
- Testing and Instrumentation
- Nondestructive Evaluation

#### REGISTRATIONS

- Professional Engineer in TX
- Structural Engineer in IL

#### PROFESSIONAL AFFILIATIONS

- American Concrete Institute (ACI)
- ASTM International
- International Concrete Repair Institute (ICRI)
- Precast/Prestressed Concrete Institute (PCI)

### **TECHNICAL COMMITTEES**

- ACI 216 Fire Resistance and Protection of Structures
- ACI 228 Nondestructive Testing of Concrete

#### CONTACT

trowe@wje.com 847.272.7400 www.wje.com

#### **EXPERIENCE**

Thomas Rowe has twenty-five years of experience with WJE and has served as project engineer and project manager on more than four hundred projects covering a variety of services, including structural investigations, construction materials evaluations, construction assessments, laboratory test programs, nondestructive testing, fire damage assessments, and facade investigations. He has been responsible for large-scale field and laboratory testing activities, including load tests of concrete and steel structures, structural integrity verification testing of nuclear containment vessels, load-response testing of buried piping, and long-term creep and shrinkage studies of concrete.

Mr. Rowe has extensive experience in nondestructive testing of concrete structures to identify material quality degradation and internal discontinuities. This includes the use of through-transmission ultrasonic and impactecho testing techniques as well as infrared thermography.

Mr. Rowe has authored papers and presented seminars on nondestructive testing of concrete, behavior of concrete exposed to fire, serviceability designs of slab-on-grade, and repair and rehabilitation of concrete.

# REPRESENTATIVE PROJECTS

# Failure Investigation

- Monticello Power Plant Mt. Pleasants, TX: Investigation of collapse of six hundred-foottall concrete with brick liner chimney
- Cline Avenue Bridge East Chicago, IN: Investigation of collapse during construction of elevated bridge structure

#### **Facade Assessment**

- One Houston Center Houston, TX: Investigation of insulated glass unit failures
- Recats International Austin, TX: Investigation of glass fiber reinforce concrete (GFRC) panels and repair development
- Chicago Place Chicago, IL: Assessment of precast concrete panels
- University of Texas Health Science Center -Houston: Investigation, restoration design, and construction observations of limestone cladding

#### **Repair and Rehabilitation Design**

- University of Texas at Arlington, Pickard Hall -Arlington: Repair design of six-story exterior masonry walls
- Bradford Homes Suites Dallas, TX: Investigation of fire damage, structural concrete repair design, and construction observations
- Rowlett High School Rowlett, TX: Structural repair of concrete stadium structure
- Norwest Bank Building Fort Worth, TX: Complete recladding of five-story brick building

#### **Nondestructive Evaluation**

- U.S. Coast Guard Station Port Isabella, TX: Ultrasonic testing of reinforced concrete columns to assess extent of voiding
- DART 63 Line Garland, TX: Ultrasonic nondestructive testing and repair design of concrete bridge pier structure

