

### Kurt Tyler | Senior Associate



#### EDUCATION

- Georgia Institute of Technology
  - Bachelor of Science, Civil Engineering, 2008
  - Master of Science, Civil Engineering, 2009

#### PRACTICE AREAS

- Structural Evaluation
- Repair and Rehabilitation Design
- Failure Investigation
- Condition Assessment
- Structural Analysis/Computer Modeling
- Load Testing
- Testing and Instrumentation

#### REGISTRATIONS

- Civil Engineer in LA
- Professional Engineer in MS and TX

#### PROFESSIONAL AFFILIATIONS

- American Concrete Institute
- International Concrete Repair Institute

#### CONTACT

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#### EXPERIENCE

Kurt Tyler conducts condition assessments and structural evaluations and performs structural analyses, computer modeling, and repair designs for concrete, steel, and masonry structures. He has broad-based experience in performing failure investigations of concrete and steel structures. Mr. Tyler prepares construction documents involving repair designs, creates graphical details, and repair specifications. In addition, he is experienced in utilizing nondestructive testing techniques covering various equipment and materials.

#### REPRESENTATIVE PROJECTS

##### Structural Evaluation

- Refinery - Pasadena, TX: Assessment of existing structures for structural capacity; unit-wide structural evaluation of existing structures for repair prioritization
- Chemical Plant - Borger, TX: Plant-wide structural evaluation of existing steel structures for repair prioritization
- Refinery - Port Arthur, TX: Assessment of existing structure for structural capacity
- Maravilla Condominiums - Galveston, TX: Inspection of precast hollow core planks and structural steel members exposed to fire
- Multiplate Steel Culvert - Elgin, TX: Assessment of existing structure for structural capacity
- Palo Verde Water Reclamation Facility - Palo Verde, AZ: Visual materials condition assessment for concrete water-retaining structures

##### Repair and Rehabilitation Design

- Martindale Army Airfield - San Antonio, TX: Design of replacement runway for rotary wing aircraft
- Palo Verde Water Reclamation Facility - Palo Verde, AZ: Repair of concrete and steel structures due to corrosion deterioration; emergency repair design of thickener structure
- Refinery - Houston, TX: Repair design of sulfur pit roof
- Chemical Plant - Deer Park, TX: Repair design of tank foundation

##### Failure Investigation

- Heldenfels Enterprises Precast Plant - Buda, TX: Investigation of failed stressing assembly
- Port Freeport Velasco Terminal - Freeport, TX: Investigation of failed soil anchor rods

##### Condition Assessment

- Chemical Processing Facility - Freeport, TX: Investigation of through-slab cracking and roof-cause determination of leakage; repair design to mitigate leakage
- NASA Vehicle Assembly Building - Titusville, FL: Condition assessment of concrete slabs
- Palo Verde Nuclear Generation Station - Palo Verde, AZ: Semiannual condition assessment of cooling tower structures
- Jesse H. Jones Hall for the Performing Arts - Houston, TX: Exterior travertine wall cladding periodic condition assessment

##### Structural Analysis/Computer Modeling

- Palo Verde Nuclear Generation Station - Palo Verde, AZ: Nonlinear finite element modeling of distressed structure to determine structural adequacy
- Duke Energy Buck Steam Station Power Plant - Salisbury, NC: Finite element modeling of as-built structure to determine structural adequacy
- Multistory Office Building - Houston, TX: Analysis of gravity and lateral load resisting systems for superstructure

##### Load Testing

- Capital One Tower - Houston, TX: Load testing of roof tieback anchors for facade access