# PERSONNEL QUALIFICATIONS



# **Trent L. Tinney** | Senior Associate



#### **EDUCATION**

- University of Washington
  - Bachelor of Science, Civil Engineering, 2011
  - Master of Science, Civil Engineering, 2012

#### **PRACTICE AREAS**

- Concrete Structures
- Facade Access
- Facade Assessment
- Failure/Damage Investigations
- Repair and Rehabilitation
- Steel Structures
- Structural Analysis/Computer Applications
- Wood Structures

#### **REGISTRATIONS**

- Civil Engineer in AZ
- Professional (Civil) Engineer in CA
- Professional Engineer in MT, OR, and WA

#### **PROFESSIONAL AFFILIATIONS**

- American Society of Civil Engineers
- Structural Engineers Association of Washington

## CONTACT

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#### **EXPERIENCE**

Trent Tinney is experienced as both a project manager and lead engineer in structural evaluation and repair design projects involving wood, concrete, steel, and masonry. Many of Mr. Tinney's projects involve investigation and development of repair documents for permit, including navigating the permitting process for clients in various jurisdictions. Mr. Tinney has accomplished numerous field investigations of failed structures due to snow load, wind, fire, and vehicle impact damage. He conducts code review, performs finite element analyses, and develops project specific Excel analysis programs using the Visual Basic for Applications language.

## **REPRESENTATIVE PROJECTS**

#### **Concrete Structures**

- Seattle Pacific University North Transfer Station - Seattle, WA: Investigation of concrete cracking
- Seattle Tunnel Project WA: Investigation and structural assessment of multiple structures
- Northwest Corporate Park Kent, WA: Slabon-ground cracking assessment and repair development
- Underground Concrete Vault Quincy, WA: 3-D structural analysis to investigate and develop repairs for an underground concrete vault

# **Facade Access**

- 202 Westlake Avenue North Seattle, WA: Roof anchor testing
- The Westin Building Seattle, WA: Roof access and anchor testing
- Downtown Seattle Public Library WA: Testing and certification of facade access system
- 1915 Terry Seattle, WA: Roof anchor testing
- The Summit Seattle, WA: Testing and certification of facade access system

#### **Facade Assessment**

- Exchange Building Seattle, WA: Swing stage visual inspections during construction period for terra cotta cladding repairs
- Positano Homes Irving, TX: Stucco investigation of mid- and low-rise apartments

 Macklyn Cove Condominiums - Brookings, OR: Investigation of structural damages related to water intrusion through stucco cladding

## **Failure/Damage Investigations**

- King Mountain Tobacco Building White Swan, WA: Investigation of steel building collapse after snow accumulation on roof
- Mt. Rainier Pool Building Des Moines, WA: Investigation of cracking and spalling of load bearing brick masonry walls
- Shadow Development Everett, WA:
  Investigation of fire damage, permit drawing development, and repair design
- Major Retail Chain Nationwide: Evaluation of damage to and repair design for open-web steel joists; lead investigator and analyst of more than 150 facilities in twenty-nine states
- Hart Hangars Building Pendleton, OR: Analysis and repair design for failed heavy timber roof trusses
- Claremont Village QFC Building- Everett, WA: Evaluation of damage due to vehicle impact and development of repair design drawings for permit
- Walker Construction Steel Building -Woodinville, WA: Evaluation of fire damage and repair scope development

#### **Wood Structures**

- Douglas High School Winston, OR: Analysis of damaged wood roof trusses
- Bend-La Pine School District Bend, OR:
  Evaluation and analysis of damaged heavy glulam roof trusses
- India Palace Restaurant Salem, OR: Analysis of charred roof trusses
- Apostolic Faith Church Portland, OR: Bowstring truss analysis and repair design
- Westview Apartments Kirkland, WA: Investigation of fire damage and development of repair design documents for permit

# **PUBLICATIONS**

 "Collapse of Two Steel Buildings after Snow Accumulated on their Roofs" - ASCE Forensic Engineering Conference, Austin, Texas, November 2018

