

David Fagan | Associate III



EDUCATION

- Syracuse University
 - Bachelor of Science, Civil Engineering, 2014
- Cornell University
 - Master of Engineering, Structural Engineering, 2015
 - TA Concrete Materials and Concrete Design

PRACTICE AREAS

- Drone/UAS Flight and Aerial Inspection
- 3D Modeling and Photogrammetry
- Roofing and Waterproofing
- Water/Air Leakage Assessment
- Architectural Testing
- Structural Analysis and Repair Design
- Bridge Inspection

REGISTRATIONS

- FAA Certified Remote Pilot
- Level 1 sUAS Thermographer
- Professional Engineer in CT
- TCCA RPAS Pilot

CONTACT

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EXPERIENCE

David Fagan is an Associate III at WJE and has been with the firm at the New Haven, CT, office since 2017. He is the local representative for the New and Existing Technologies and Information Technologies groups at WJE. He is also an FAA and TCCA licensed remote drone pilot.

REPRESENTATIVE PROJECTS

Drone/UAS Flight, Aerial Inspection, and 3D Modeling

- Carnegie Hall - New York, NY: Interior drone inspections of historic plaster ceilings
- Kuwait Towers - Kuwait City, Kuwait: Photo documentation and 3D modeling of three 500-foot-tall towers
- St. Anne's Church - Waterbury, CT: Photo and video documentation of historic marble steeples; inspection of stone masonry for locations of missing mortar, cracking, and bulging
- Yale University, Yale Bowl - New Haven, CT: Drone survey and 3D modeling of entire historic football stadium
- Metropolitan Museum of Art - New York, NY: Interior drone survey of underside of skylights above Temple of Dendur; documentation of leaks, skylight damage, and loose insulation
- Center Church on the Green (1812–1815) - New Haven, CT: Drone assessment and modeling of 220-foot timber-framed steeple designed by Ithiel Town

Roofing and Waterproofing

- Yale Science Building - New Haven, CT: Third-party observation of waterproofing and roofing installation
- Yale West Campus Power Plant - West Haven, CT: Investigation of existing EPDM roofing system, design of new modified bitumen roofing system, and construction administration services during roof replacement
- Yale Sterling Hall of Medicine - New Haven CT: Assessment of existing roof and creation of construction documents for a new modified bitumen roofing system
- Norwalk DMV - Norwalk, CT: Investigation and replacement of EPDM roof

Water/Air Leakage Assessment

- 461 Dean Street - Brooklyn, NY: Investigation of air and water leakage at curtain wall system
- Whitney Center - Hamden, CT: Investigation of water leakage at EIFS facade

Architectural Testing

- Metropolitan Museum of Art - New York, NY: ASTM C1601 water penetration testing at historic brick facade
- Clark Sports Center - Cooperstown, NY: Modified ASTM D4541 adhesion testing at parquet flooring
- Yale Baker Hall - New Haven, CT: ASTM E1105 and E783 window and curtain wall air/water leakage testing
- Yale Science Building - New Haven, CT: ASTM E1186 air leakage testing of air/vapor barrier system

Structural Analysis and Repair Design

- New York Public Libraries - NY: Condition assessment of ninety-two buildings
- MerrittView Parking Garage - Norwalk, CT: Condition assessment of parking garage followed by repair design of corroded steel joists and girders
- St. Anne's Church - Waterbury, CT: Condition assessment and analysis of existing wood-framed choir loft
- University of New Haven Library - New Haven, CT: Analysis of cracked and corroded composite concrete and corrugated steel deck
- Yara Americas, Fertilizer Terminal - Contrecoeur, QC: Analysis and in-situ repair of thin shell-wood domes spanning 124 feet

Bridge Inspection

- Mississippi DOT: NBIS bridge inspections and load ratings on selected wood bridges statewide, including resistance drilling, timber pile assessment, and load testing