

David Taylor, PE

Forensic Engineering Expertise

Structural Analysis/Design

Review appropriate documents, including project plans and specifications as it relates to the building structure for purposes of failure analysis and extent of resulting damages. In addition, being a licensed professional and structural engineer, replacement designs are provided upon request. Examples of past work include failure analysis of collapsed structures (concrete, steel, wood, masonry), various building components (windows, doors, roofing, exterior and interior cladding), damage assessment of building structures after a fire, vehicle impact, snow overload, tornado, and hurricane.

Origin & Cause

Determine the source and responsible party or element related to the failure of a structural or architectural element. Examples of past work include failure of roofing and wall cladding causing moisture entry, humidity and condensation related losses, and groundwater entry, including expert witness testimony related to the aforementioned items.

Inspection and Evaluation of Roofing Systems

This includes steep and low-slope roofs, as well as various types of roofing materials, including both common and unique roofing applications. Past work involved offering opinions and repairs related to installation deficiencies and storm-related damages, including for hail and wind.

Building Pathology/Construction Defects

The building pathologist relies on an in-depth knowledge of building design, construction, use, and changes, as well as assessing the environment of use and the materials and how these interrelate to systematically identify, investigate, and diagnose defects in a building.

Qualifications & Training

- Concrete Anchorage According to IBC 2012, Structural Engineer's Association – Kansas & Missouri, April 2015
- Air Movement for Energy-Efficient Comfort in Conditioned Spaces, B.A. Fans, November 2014
- Sustainable Design Details for Single Wythe Masonry to Eliminate Mold and Moisture, The National Concrete Masonry Association (NCMA), November 2012
- The Joplin Tornado: Damage Assessment, Conclusions and Recommendations, National Council of Structural Engineers Association (NCSEA), November 2012

Education

Bachelor of Science in Civil Engineering

University of Missouri – Kansas City, Kansas City, MO

December 2007

Inducted into Chi Epsilon (The Civil Engineering Honor Society), served as president of chapter in 2007.

Educational Presentations

Newforma - RFI, Submittals, Email, and Transmittals
August 2017

Structural Site Inspections – What to Look for
August 2015

Licenses & Certifications

PE - Professional Engineer

Licensed by the State of Alabama - Number 35020
Licensed by the State of Arizona - Number 62957
Licensed by the State of Delaware - Number 20683
Licensed by the State of Iowa - Number P26446
Licensed by the State of Kansas - Number 28076
Licensed by the State of Kentucky - Number 29291
Licensed by the State of Louisiana - Number 37938
Licensed by the State of Massachusetts - Number 52833
Licensed by the State of Michigan - Number 6201060240
Licensed by the State of Mississippi - Number 21249
Licensed by the State of Missouri - Number 2013000642
Licensed by the State of Nevada - Number 22513
Licensed by the State of New Jersey - Number 24GE05240200
Licensed by the State of New York - Number 095600-1
Licensed by the State of North Carolina - Number 42207
Licensed by the State of Ohio - Number 78159
Licensed by the State of Oklahoma - Number 26600
Licensed by the State of Oregon - Number 90936PE
Licensed by the State of Tennessee - Number 116867
Licensed by the State of Texas - Number 113815
Licensed by the State of Virginia - Number 0402053308
Licensed by the State of Washington - Number 52538
Licensed by the State of Wisconsin - Number 42934-6

Certified Building Inspection Engineer (CBIE)

Certification held under continuing legacy maintenance by the National Academy of Building Inspection Engineers (NABIE)

Employment History

Forensic Engineer

Nederveld, Inc.

2017 - Present

Duties include forensic engineering analysis relating to building pathology, fire loss damage, structural damage from vehicle impacts, storm damage (wind, snow, hail), seismic and water loss events, calculations, and plan of repair design.

Structural Engineer

TK Architects, International, Kansas City, MO

2009 - 2017

Duties included managing structural department at a full service A-E firm, structural analysis and design of commercial, industrial, and residential buildings. Designs included large multi-story 140k sf complexes, movie theatres, and specialty designs such as screen frames.

Structural Engineer in Training
Needham - DBS, Lenexa, KS
2005 - 2009

Duties included structural design and analysis of commercial, residential, industrial, including design of alterations and additions to existing structures, tilt-up concrete wall, and FEMA-350 seismic steel moment connections.

Structural Engineer in Training (subcontracted from Needham)
Kiewit Engineering, Lenexa, KS
2008

Duties included structural design and analysis of power facilities including design of on turbine/power machinery foundations and pipe rack/support steel.

Nuclear Reactor Plant Operator
USS Augusta (SSN 710), United States Navy, Groton, CT
1997 - 2003

Duties included operation and maintenance of the reactor plant of a fast attack submarine including maintenance of secondary systems such as HVAC, low- and high-pressure compressors, and lube oil systems.

Professional Affiliations

Member: Structural Engineer's Association of Kansas & Missouri (SEAKM)
Member: American Institute of Steel Construction (AISC)
Member: National Council of Examiners for Engineering and Surveying (NCEES)
Civil Structural Exam Committee
Member: National Roofing Contractors Association (NRCA)

Publications

Post Installed Anchors and the "Or Equal"
LinkedIn Article
May, 2015
Stadium Seating – What is the Most Cost Effective Construction?
LinkedIn Article
September, 2015

Expert Witness Experience

Depositions

October 2024
North Cypress Fitness Studio, LLC v. National Casualty Company
Eastern District of Louisiana, Case No. 2:23-cv-01760

May 2024
KC Residence, LLC et al. v. Columbia Mutual Insurance Company
United States District Court, District of Kansas, Case No. 2:23-cv-02342-EFM-ADM

January 2024
Haddock v. Auto-Owners Insurance
Southern District of Illinois, Case No. 3:23-cv-00124-SMY

October 2023
Jones v. McNeal
Hamilton Circuit Court, State of Indiana, Case No. 29C01-2106-PL-004212