

EDUCATION

2006 **Bachelor of Science, Civil Engineering**
 Iowa State University, Ames, Iowa

2011 **Master of Civil Engineering**
 University of Kansas, Lawrence, Kansas

EXPERIENCE

September 2020 to Present **Engineering Design & Testing Corp.
Lenexa, Kansas**
Consulting Engineer
For commercial, industrial and residential structures: assessment of hail and/or wind damage to roof coverings; scope of structural damage due to wind, fire, snow, vibrations, vehicle impacts, tree impacts; cause of moisture intrusion through building envelope and foundations; scope of foundation damage due to involuntary discharges of water, soil pressure and ground movement; evaluation of construction defects and building code compliance; failure analysis involving concrete, masonry, steel and wood structures; cost estimates; value of loss; laboratory and field testing of construction materials; damage segregation; infrared thermography.

April 2018 to July 2020 **SunSource Homes
Kansas City, Missouri**
Structural Engineer
Analysis of existing structures for structural capacity to support solar installation; Structural design of custom homes and other miscellaneous structures.

May 2006 to February 2018 **Burns & McDonnell
Kansas City, Missouri**
Sr. Structural Engineer
Design of concrete foundations and structural steel ductwork for power generation facilities; Design of concrete foundations and steel platforms for refinery facilities; Structural analysis of existing lattice steel high voltage transmission towers and design of high voltage transmission lines.

EXPERIENCE

Field Experience and Consulting Activity (partial list)

Floating Dock — Lee's Summit, Missouri

Determine scope of structural damage to floating dock.

Restaurant Fire — Kansas City, Kansas

Determine scope of structural damage due to fire and code evaluation.

Residential Roof — Clinton, Missouri

Evaluate roofs for wind and/or hail damage.

Multiple Hotels — Omaha, Nebraska

Evaluate roofs for wind and/or hail damage.

Vehicle Impact — Independence, Missouri

Determine scope of damage to residence resulting from vehicle impact.

Moisture Intrusion — Warrensburg, Missouri

Determine cause of moisture intrusion.

Residential Roof — Saint Joseph, Missouri

Determine scope of wind and/or hail damage to roof.

Residential Hail — Olathe, Kansas

Evaluate concrete roof tiles, windows and EIFS veneer for hail damage.

Grain Bin — Meadville, Missouri

Determine cause of damage to grain bin.

Commercial Building — Saint Joseph, Missouri

Determine cause of moisture intrusion through wall of commercial building.

Tree Impact — Stilwell, Kansas

Determine scope of residence damage due to tree impact.

Townhome Complex — Kansas City, Missouri

Evaluate roofs for hail damage.

Commercial Building Fire — Kansas City, Missouri

Determine scope of fire damage to building.

Residential Roof — Lee's Summit, Missouri

Evaluate roof for hail damage.

REGISTRATIONS and CERTIFICATIONS

Registered Professional Engineer in Arkansas (#19799)

Registered Professional Engineer in Colorado (#54524)

Registered Professional Engineer in Illinois (#62073689)

Registered Professional Engineer in Indiana (#PE12000638)

Registered Professional Engineer in Iowa (#P26209)

Registered Professional Engineer in Kansas (#21502)

Registered Professional Engineer in Minnesota (#60466)
Registered Professional Engineer in Missouri (#PE-2018019613)
Registered Professional Engineer in Nebraska (#E-18347)
Registered Professional Engineer in Oklahoma (#32174)
Registered Professional Engineer in Wisconsin (#49363-6)
National Council of Examiners for Engineers and Surveying Record (#12-583-44)

PROFESSIONAL ORGANIZATIONS

American Society of Civil Engineers (ASCE)

CONTINUING EDUCATION (partial list)

2025 *Structural Engineering Conference*; University of Kansas, Lawrence, KS
 Geotechnical Engineering Conference; University of Kansas, Lawrence, KS
 Design Aspects of Repairs; EDT, Columbia, SC
 Moisture Intrusion into Residential and Commercial Buildings; EDT, Columbia, SC
 Evaluation of Commercial Flat Roofs; EDT, Columbia, SC

2024 *Structural Engineering Conference*; University of Kansas, Lawrence, KS
 Hail Testing on Metal Roofs; EDT, Columbia, SC
 The Technical Challenges of Oceanic Wind Turbines; EDT, Columbia, SC
 Large Concrete Sewer Condition Assessment; EDT, Columbia, SC
 Heat, Air, and Moisture Control in Building Envelopes; EDT, Columbia, SC
 Workplace Strategies for Ethical Challenges; ASCE, Reston, VA

2023 *Structural Engineering Conference*; University of Kansas, Lawrence, KS
 Sink Holes and Structural Damage; EDT, Columbia, SC
 Exposure Category Determination; EDT, Columbia, SC
 Fire Investigation Processes; EDT, Columbia, SC
 Commercial Roof Information; EDT, Columbia, SC

2022 *Technical Issues Regarding Premise Liability Matter*; EDT, Columbia, SC
 Creative Engineering 101; EDT, Columbia, SC
 Construction Defects; EDT, Columbia, SC
 Wild and Urban Interface and Mitigation Strategies; EDT, Columbia, SC
 Investigating Internal Combustion Engine Failures; EDT, Columbia, SC

2021 *Photovoltaic and Energy Storage – How It Can All Go Wrong*; EDT, Columbia, SC
 Hailstones – Impact Damage to Asphalt Shingle Roof Coverings; EDT, Columbia, SC
 Hurricane Damage: Storm Surge vs Wind vs Wind-Driven Rain; EDT, Columbia, SC

Rooftop Solar Arrays: A Civil/Structural Perspective; EDT, Columbia, SC

Blast-Related Damage Evaluation of Residential Structures; EDT, Columbia, SC

Failure Analysis of Threaded Fasteners; EDT, Columbia, SC

2020 *Design of Roof Structures*; ASCE, Reston, VA
 Connection Solutions for Wood Framed Structures; ASCE, Reston, VA
 Elevating Wood Frame Structures; ASCE, Reston, VA
 Engineering Judgement – Structural Renovation of a 100-Year-Old Barn; ASCE, Reston, VA
 Evaluating Damage and Repairing Metal Plate Connected Wood Trusses; ASCE, Reston, VA
 Structural Considerations for Building Additions; ASCE, Reston, VA
 Antiquated Structural Systems; ASCE, Reston, VA
 Snow Loading for Non-Standard Roof Shapes; ASCE, Reston, VA
 Investigation of Winter Roof Failures; ASCE, Reston, VA
 The Structural Stability Game Show; AISC, Chicago, IL

2019 *The Fasteners and the Furious*; AWC, Leesburg, VA
 Essentials for Wood Construction; AWC, Leesburg, VA
 Demystifying Diaphragm Design; AWC, Leesburg, VA
 Tall Wood Structures; AWC, Leesburg, VA
 Special Inspections for Wood Construction; AWC, Leesburg, VA
 Engineered Lumber Design and Construction; Half Moon Education, Overland Park, KS
 CLT as a Floor or Roof Element; AWC, Leesburg, VA
 2018 NDS Changes; AWC, Leesburg, VA
 Cornucopia of Classic Connection Conundrums; AWC, Leesburg, VA