Quentin Scott Ragan, SE, PE | Forensic Structural and Civil Engineer

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Professional Summary:

Mr. Ragan has more than thirty years of experience in building, designing, and investigating medical office buildings, churches, restaurants, retaining structures, schools, single-family and multi-family residential buildings, and specialty structures such as signs, utility equipment, and grain bins. Designed projects also included stream and river flow and bridges. Investigated projects included bridge damage, building explosions and collapse, roof and buildings affected by wind, hail, tornado, and other weather-related claims, moisture-intrusion claims, code-related deficiencies, piping systems, EIFS wall systems, new construction failures and deficiencies, mine subsidence, and more.

- HAAG Roofing Seminars Completed
- Mechanical Systems Inspected
- University Professor Experience

Licenses and Certifications:

Professional Engineer:

Alabama, 35908
Arkansas, 12133
Indiana, PE 11300171
Iowa, 21564
Kansas, 22851
Kentucky, 29210
Louisiana, PE40853
Michigan, 6201059982
Minnesota, 50659
Mississippi, 27382
Missouri, 2003010614
Nebraska, E-11579
North Dakota, PE-8504
Oklahoma, PE 22364
South Dakota, 11664
Tennessee, 00104546
Wisconsin, 42901-6

Structural Engineer:

Illinois, 081.006385

Project Experience:

These projects are a small sampling of the types of projects and losses regularly investigated. For further information or additional examples, please contact EFI Global.

DG Equipment Movers, Nashville, TN
Bridge Damage Claim
Team Inspection of an Interstate 40 Bridge Due to Vehicle Impact

Hawks Nest Condominiums, Marathon, FL
Hurricane Damage Claim
Team Inspection of a Multi-Story Condominium Building Due to Claimed Damages from Hurricane Irma Winds and Wave Action

Project Experience (Continued):

Management Resources Development, El Paso, TX
Wind Damage Claim
Inspection of Multiple Apartment Buildings due to Claims of Wind Damage to Asphalt Roof Shingles

Crown Road Estates, Gulfport, MS
Wind Damage Claim
Team Inspection of 450+ Residential Asphalt Shingle Roofs for Hail Impact

Multiple Buildings, West, TX
Explosion Damage Claim
Team Inspection of 60+ Commercial and Residential Buildings to Assess the Effects of a Fertilizer Plant Explosion

Daily Feed and Grain, Indiana
Grain Bin Construction Deficiency Claim
Team Inspection of grain bins and grain dryer for construction deficiencies

Multiple Residences, Illinois
Mine Subsidence Claims
Collapse of Underground Mines Resulting in Differential Dwelling Movement

Multiple Buildings, Multiple States
Tornado Impact Claims
Inspection of Buildings for Tornado-Related Damage

Multiple Buildings, Multiple States
Hail Impact Claims
Inspection of Buildings for Hail-Related Damage

Expert Witness Testimony: Court Qualifications/Depositions/Testimony:

Mr. Ragan has extensive experience testifying as an expert witness in mediation, arbitration, depositions, and trials and has been accepted as an expert witness in numerous jurisdictions.

**List of Expert Witness Testimony Experience is Available Upon Request*

Professional Experience:

Olivet Nazarene University, Associate Professor, 2019-Present
EFI Global, Forensic Structural and Civil Engineer, 2019-Present
Unified Investigations & Sciences, Inc., Forensic Structural Engineer, 2011-2018
Project Time & Cost (PT&C), Forensic Structural and Civil Engineer, 2010-2011
EFI Global, Forensic Structural and Civil Engineer, 2004-2010
Drury University, Adjunct and Assistant Professor, 2003-2009
Great River Engineering, Structural and Civil Engineer, 2003-2004
Stanley D. Lindsey and Associates, Structural Engineer, 1999-2002
Architectural Services Group, Structural and Civil Engineer, 1998-1999
Technical Engineering Consultants, Structural Engineer, 1993-1999

Formal Education:

PhD work in Civil Engineering, University of Arkansas, Fayetteville, AR, ongoing
Master of Science, University of Tennessee, Knoxville, TN, 1999
Bachelor of Science in Civil Engineering, University of Tennessee, Knoxville, TN, 1993

Specialized Education/Training:

Multilple Sessions-Flexible and Rigid Pavement Design and Analysis, PDH Direct, 2025
Multilple Sessions-Flexible and Rigid Pavement Design and Analysis, ASCE, 2025
Multiple Sessions-Forensic Investigations, 10th Forensic Engineering Congress, ASCE, 2024
Multiple Sessions-Wind Damage Mitigation, 14th ACWE, 2022
Louisiana Laws and Rules for Professional Engineers, PDH Direct, 2018
International Residential Code 2015, Half Moon Education Services, 2018
Ethical Issues in Forensic Engineering, PDH Direct, 2017
Tornado Risks and Hazards in Southeastern USA, PDH Direct, 2017
Soil Mechanics, Bearing Capacity, & Slope Stabilization, Half Moon Edu. Services, 2017
Structural Forensic Engineering, Half Moon Edu. Services, 2017
ADA Standards for Accessible Design, PDH Direct, 2016
PE Professionalism and Ethics, PDH Direct, 2016
Rules for Professional Conduct for Tennessee Engineers, PDH Direct, 2016
Indiana Statute & Administration Rules for Prof. Engineers, PDH Direct, 2014, 2016, 2018
Indiana Ethics Course for Professional Engineers, PDH Direct, 2014, 2016, 2018
Standards of Professional Conduct for Civil Engineers, PDH Direct, 2014
Proper Use of Cold-Formed Steel Trusses to Resist Lateral Loads on Buildings, CSI, 2014
Performance Based Specs for Concrete, CSI, 2014
Ethics in Forensic Engineering, University of Arkansas, 2013
Finite Element Analysis of Structures, University of Arkansas, 2012
Computer Simulation of Wind-Structure Interaction, University of Arkansas, 2011-2015
Matrix Analysis of Structures, University of Arkansas, 2012
Wind Engineering of Structures, University of Arkansas, 2012
Structural Plates and Shells, University of Arkansas, 2011
Numerical Methods for Structural Engineering, University of Arkansas, 2011
Earthquake Engineering of Structures, University of Arkansas, 2011
Wind Damage to Structures and their Components, EFI Global, 2006
Commercial Roofs Damage Assessment, HAAG Engineering, 2006
Inspection, Evaluation of Residential Roofing, HAAG Engineering, 2005
Structural Design for Blasts and Explosions, ASCE, 2005
Fire, Blast and Progressive Collapse, American Society of Civil Engineering, 2005
Mold Prevention in Low Rise Construction, Soft Foam Manufacturer, 2004
Accessibility and the 2003 IBC, International Building Code Council, 2003
Special Inspections and the International Building Code, IBC, 2003
National Federal Insurance Program, MO Emergency Management, 2003

Specialized Education/Training (Continued):

Selling Services in the Construction Industry, PDH Online, 2002
Light Steel Framing and the Structural Engineer, PDH Online, 2002
Professional Liability in the Construction Process, DPIC Companies, 2002
Contract Review and Revision, DPIC Companies, 2002
Seismic Design East of the Rockies, American Institute of Steel Construction, 2002
An Introduction to Lightweight Insulating Concrete, Siplast, 2001
Fundamentals of Connection Design, American Institute of Steel Construction, 2001
Design of Post-Tensioned Structures, Post Tensioning Institute, 2001

Affiliations:

American Society of Civil Engineers, 1995

Courses Instructed/Guest Lecturer:

Introduction to Architectural Engineering
Statics and Strength of Materials
Structural Analysis
Wood Construction Design
Steel Construction Design
Reinforced Concrete Design
Introduction to Soil Mechanics
Storm Water Hydraulics and Hydrology
Transportation Design

Publications:

Ragan, Selvam. "Determining Tornado Velocity for Tornado Force Coefficients for a Thin-Cylinder Structure and Comparison to ASCE 7", ASCE 10th Congress of Forensic Engineering, Seattle, Washington, 2024.

Ragan, Selvan. "Understanding Tornado-Wind Velocity and Force Coefficients for Thin-Cylinder Structures Using Computer Modeling", 14th Americas Conference on Wind Engineering, Lubbock, TX, 2022.

Ragan, Selvam. "Wind Mill Reliability: Determining Tornado-Wind Force Coefficients for Thin-Cylinder Structures with Computer Modeling", International Journal of Civil and Structural Engineering Research, Vol. 9, Issue 2. pp. 16-26, October 2021-March 2022.

Ahmed, Strasser, Selvam, Ragan. "Observations of the Influence of Hilly Terrain on Tornado Path and Intensity from Damage Investigations on the 2014 Tornado in Mayflower, Arkansas", ASCE Structures Congress, Portland, OR, 2015.

Ragan, Selvam, Gorecki. "Tornado Induced Wind forces for Cylindrical Structures", 12th Americas Conference on Wind Engineering, Seattle, WA, 2013.

Publications:

Ragan, Selvam. "Mitigation of Tornado Damages: A Preliminary Study of the Effects of Hills", American Association of Wind Engineering Conference, Hyannis, MA, 2012.