



ROBERT N. KENNEY, P.E., CxA+BE
PRINCIPAL

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Mr. Robert Kenney is a Principal for Engineering Systems Inc. (ESi). Projects ranging from simple failure investigations to complex engineering studies are undertaken.

Mr. Kenney specializes in complex failure investigations of structures and building systems, soils and related structural settlement, hydrology, hydraulics and pipeline systems, and product performance. He has over thirty-five years of experience in diverse structural and manufacturing failure investigations, identifying the cause and improper design, fabrication, or construction associated with flood, fire, lightning, explosion, earthquake, wind, soil erosion, drainage and sediment control, and moisture intrusion damage. His experience includes premise liability and cases related to employees being injured or fatally wounded at industrial and commercial facilities operating machinery and heavy construction equipment like bulldozers and excavators.

Mr. Kenney has investigated failures or damage to industrial, commercial, and residential systems and structures. This includes multi-story EIFS buildings and operations, mining operations, large roofs, parking decks, tall retaining walls and billboards, railroad tunnels and grade-crossings, gores, bifurcation and super elevation issues, roadway paving (both flexible and rigid), subgrade analysis, construction defects and bridges, standard of care and maintenance of manhole and meter covers and safety codes associated with covers, and other materials and components like crash barriers, guard rails and noise barriers. He has served as an inspector for compliance to DOT plans and specifications and has opined on the application of MUTCD in both arbitration and trial. He has also investigated multiple earthen and Roller Compacted Concrete dam failures including discharge pipe and emergency spillway washouts.

He has investigated or tested large industrial equipment failures like cranes and other lifting equipment for proper operation. He has investigated industrial process systems, including production equipment, piping, valving, oven and other heating equipment venting, and closed vapor collection systems. He has investigated pre-stressed and precast concrete beams, standing seam roofs, handrails, windows, curtain walls and storefronts, doors, egress doors, both sliding and revolving, including solid and sectioned rollup doors and cladding, escalators and elevators, including mechanical operation, controls, and pit construction. He has performed multiple evaluations of construction material installations, soil-pipe interaction, pipe coupling, and weld joint integrity.

Mr. Kenney has been involved in multiple OSHA work site claims involving injuries and death due to construction and manufacturing equipment usage, including machine guarding, and fires and explosions as a result of chemical processes and hazardous materials release. He has analyzed watershed hydrological and hydraulic pipe failures including fire sprinkler systems and pumps per

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NFPA 13 and performed multiple NFPA 25 sprinkler system and other code inspections. He has also investigated soil erosion, settlement and collapses, industrial accidents, and mechanical system failures, including improper manufacturing, construction, and code violations, including slip/trip/fall situations.

Mr. Kenney has investigated industrial processes and pipeline systems for reliability, durability, maintainability, risk assessment, and operational practices. He has analyzed natural gas (NG) distribution systems for proper operations. He has developed multiple cost estimates for repair, replacement, relocation, and restoration of most utilities including gas, liquid, electrical, telecommunications, and low voltage underground utilities. Mr. Kenney has testified by deposition and/or at trial in federal, state, and superior courts.

Areas of Specialization

Structures and Construction Defects Failure Analysis
Building Envelop Moisture Intrusion Analysis
Premises and Professional Liability
Hydrology and Flooding Analysis
Hydraulic and Pipeline Design and Failure Analysis
Roadways and Soil Mechanics and Settlement Analysis
Product and Operational System Safety and Failure Analysis
Wind and Water Damage Investigations
Construction Costs and Techniques and Methods Analysis
Fuel Gas Systems Operation and Protection

Education

Florida State University, MS, 1971
Georgia Institute of Technology, BSCE, 1969

Licensed Professional Engineer (P.E.)

Alabama (32196-E)	Nebraska (E-19370)
Arkansas (15099)	New York (091247)
Colorado (46682)	North Carolina (039376)
Florida (27493)	Ohio (79534)
Georgia (10731)	Oklahoma (32681)
Illinois (062-042509)	Pennsylvania (080105)
Kentucky (28764)	South Carolina (29761)
Louisiana (18198)	Tennessee (115723)
Maryland (52456)	Texas (112009)
Michigan (6201059876)	Utah (13825603-2202)
Mississippi (20680)	West Virginia (25118)
Missouri (201202424)	



NCEES Record (47437)
Diplomat American Academy of Environmental Engineers (83-10028)
Level II Certified Design Professional for Soil & Water Erosion Control (40303)

Continued Education

Air and Waste Management Hazardous Waste, Title V and HAPs training - 1 week
American Association of State Highway and Transportation Officials (AASHTO), Design of Pavement Structures
American Board of Industrial Hygiene, Mold Removal Protocol
American Concrete Institute, Concrete Joints in Slabs, Pavements and Flatwork
American Concrete Institute, Flat Slab and Vertical Wall Crack Investigation
American Concrete Institute, Precast and Prestressed Concrete Elements
American Concrete Institute, Rehabilitation of Concrete Structures
American Industrial Hygiene Association, Detection Methods for Employee Exposure
American Industrial Hygiene Association, Mold Evaluation and Identification
American Public Works Association, Texas Chapter, Geotechnical Considerations for Slope Stability, Ditches, Embankments and Detention Ponds
American Society of Civil Engineers, Design and Renovation of Wood Structures
American Society of Civil Engineers, Design, Construction, and Renovation of Masonry Structures
American Society of Civil Engineers, Design of Cold Formed Steel Structures
American Society of Civil Engineers, Earth Retaining Structures, Selection, Design, Construction and Inspection
American Society of Civil Engineers, Storm Water Monitoring and Compliance
American Society of Civil Engineers, Structural Condition Assessment
American Society of Civil Engineers, Structural Design of Residential Buildings
American Society of Civil Engineers, Structural Renovation of Buildings
American Society of Civil Engineers, Underground Tank Installation and Removal
American Society of Civil Engineers, Wind loads for Buildings
American Society of Heating, Refrigeration and Air-Conditioning Engineers Basic HVAC Sizing for Cooling and Heating Load Calculations
American Society of Testing and Materials, Concrete Crack Causes and Cures
American Society of Mechanical Engineers, Product Safety and Risk in Life Cycle Analysis
American Society of Mechanical Engineers, Risk Assessment and Analysis of Human Error in Industrial Operations Environment
Building Science Institute, Building Systems Evaluation
Concrete Material Suppliers, Foundations Repair and Pressure Grouting
Concrete Reinforcing Steel Institute, Reinforcing Placement
Concrete Specification Institute, Tilt-up Wall Requirements

Continued Education

GeoTech Engineering and Testing, Evaluation of Foundation Distress and Causation for Distress of Building Structures
English Slip Resistance Measurement Device training
Georgia Water Professionals Association (GWPA), Design and Construction of Stormwater Controls
Georgia Water Professionals Association (GWPA), Erosion and Sediment Control Plan Design Certification Course
ICC ADA Standards for Accessible Design
ICC Mechanical and Physical Properties and Structural Design of Wood
Infrared Tomography, Building Envelope Institute
Mine Safety & Health Admin “Mine Academy” Mine Construction, Management and Repair
Mycometer Surface Fungi, Sampling & Analysis Proficiency Training Program
National Association of Corrosion Engineers, Cathodic Protection Interference Short Course
National Concrete Masonry Association, Structural Masonry Installation
National Corrugated Steel Pipe Association, Storm Water Detention Design
National Electrical Code Review, 2014
National Fire Protection Association (NFPA), Safe Practices for Hazardous Dust Processes
National Fire Protection Association (NFPA), Sprinkler Systems Hydraulic Design
National Roofing Contractors Association, Roof Installation and Repair
National Safety Council, Accident Investigation and Root Cause Analysis
OSHA, Safety Hoisting and Crane and Other Lifting Equipment
OSHA, Toxic Substances Control Act (TSCA), Personal Protection Equipment, Accident Prevention, General Compliance and Process Safety, Fire/Explosion, Lock Out/Tag Out, Material Safety Data, Confined Space, Toxic Material Handling, Machine Guarding, Ventilation Training. Several courses ranging from 1 day to 1 week
Portland Cement Association, Design of Stucco, EIFS and Other Cementitious Finishes
Portland Cement Association, Cement-lime Plaster Installation
Powder and Bulk Engineering Dust & Gas/Liquid Flow Fundamentals & Control of Explosion Hazards
PPI Structural Engineering Review Course, Vertical and Lateral Forces
IIBEC, Building Moisture Intrusion Evaluation
Seismic Design Manual and Application of the 2010 AISC Seismic Provision
Six Sigma Institute, Six Sigma Training - 6 weeks
Southern Pine Wood Products Council, Commercial Wood Building Design
US EPA Hazardous Waste Handling and Disposal, CWA, CAA, RCRA, CERCLA, TRI, EPCRA, SWPPP, SPCC and SARA Training. Several courses ranging from 1 day to 1 week.
University of Maryland, Fire Protection Engineering, Fire Assessment Methods
University of Wisconsin-Madison, Commissioning Authority+Building Enclosure Knowledge Requirements Certification (CxA+BE)
University of Wisconsin-Madison, Water Entry Prevention and Moisture Control in Buildings, Roofing, Exterior Wall Systems

Professional Affiliations

American Academy of Environmental Engineers (AAEE)

Member

American Institute of Steel Construction (AISC)

Member

American Society of Civil Engineers (ASCE)

Life Member

American Society of Safety Engineers (ASSE)

Member

American Society of Testing and Materials (ASTM)

Member

Air and Waste Management Association (AWMA)

Member

American Water Works Association (AWWA)

Member

Community Associations Institute (CAI)

Member

Georgia Society of Professional Engineers (GSPE)

Member

Georgia Water Professionals Association (GWPA)

Life Member

International Institute of Building Enclosure Consultants (IIBEC)

Committee Chair

Water Environment Federation (WEF)

Member



Positions Held

Engineering Systems Inc., Peachtree Corners, Georgia

2009 – Present

Kimley-Horn & Associates, Norcross, Georgia

2005 – 2009

GDS & Associates, Marietta, Georgia

2004 – 2005

Cerny & Ivey Engineers, Inc., Norcross, Georgia

2001 – 2004

Avery Dennison Corporation, Inc., Doraville, Georgia

1995 – 2001

Jordan, Jones and Goulding, Inc., Atlanta, Georgia

1986 – 1995

Norfolk Southern Corporation, Inc., Atlanta, Georgia

1976 – 1986

Action Construction, Inc., Stone Mountain, Georgia

1972 – 1975

Publications & Presentations

Kenney R., Abubakar N., "Fall Protection for Buildings: Usage, Responsibilities, and Risk," North Carolina Association of Defense Attorneys featured article, published April 27, 2018.

Kenney, R.N. (2018, February). *Fall Protection for Buildings: Usage, Responsibilities and Risk*. Presented at the North Carolina Association of Defense Attorneys (NCADA) 2018 Winter Workshop, Durham, NC.

Kenney, R.N. (2017, June). *First-Party Claims: The Rise (And Fall) of Tailings Dams*. Presented at the Loss Executives Association (LEA) 86th Anniversary Meeting, Newport, RI.

"So What Codes Apply Here?" Bob Kenney, Georgia Defense Lawyers Association (GDLA) magazine, Volume XI, Issue III, Winter 2014, pages 7 – 9. Presented at the GDLA Annual Meeting, Florida.

Kenney, R.N. (2012). *Requirements for Handrails*. Presented at the PLRB Large Loss Conference.

"Avoiding Accidents and OSHA Citations by Knowing Your Combustible Dust Hazards" Michael L. Hanks and Robert N. Kenney, Powder and Bulk Engineering magazine, December 2012, pages 41 – 45.

Kenney, R.N. (2011, August). *Building Codes Relating to Construction Defects*. Presented at the Southern Loss Association (SLA) Annual Property Seminar.

Kenney, R.N. (2008, June). *Greenhouse Gas Registry: What is it?* Presented at the National Association of Environmental Managers (NAEM) Conference, Mobile, AL.

"Find Out Who Really Runs the Show" Robert Kenney and Richard MacLean, Environmental Magazine, March 2001, pages 6 – 8. Presented at the National Association of Environmental Managers (NAEM) Conference.

Water Environment Federation, Manual of Operations FD-3, contributing author, 1994, ISBN 1-881369-89-7.