



ROBERT N. KENNEY, P.E.

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 providing investigation of project management issues related to injuries, delays, defects and contract liabilities. Mr. Kenney has investigated failures or damage to industrial, commercial and residential structures including multi-story EIFS buildings, mining operations, large roofs, parking decks, tall retaining walls and billboards, railroad tunnels and grade-crossing, including roadway paving and bridges and other materials and components, including guard rails and barriers. 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, closed vapor collection systems. He has investigated prestressed and precast concrete beams, standing seam roofs, handrails, windows, curtain walls and storefronts, doors, including solid and sectioned rollup doors and cladding, and has performed multiple evaluations of construction material installations, soil-pipe interaction, pipe coupling, and weld joint integrity. He has analyzed watershed hydrological and hydraulic pipe failures including fire sprinkler systems and pumps per 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/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 performed multiple environmental and safety audits including shock and electrocution, and evaluated industry processes for proper hazardous material identification and handling, storage and disposal. Mr. Kenney has designed and provided construction management for 10 MGD water and wastewater treatment facilities; 2 MGD pump stations, and 72-inch diameter pipelines and high-pressure NG distribution pipelines. Mr. Kenney has testified by deposition and/or at trial in federal, state, and superior courts.

Areas of Specialization

Structurers & Cladding Failure Analysis
Building Envelop Moisture Intrusion Analysis
Hydrology and Flooding Analysis
Hydraulic & Pipeline Design & Failure Analysis
Soil Mechanics & Settlement Analysis
Product & Operational System Safety Analysis

June 2017



Wind & Water Damage Investigations
Construction Techniques & Methods Analysis
Explosion/Fire Causation
Fuel Gas Systems & Protection

Education

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

Licensed Professional Engineer (P.E.)

Alabama (32196-E)	Mississippi (20680)
Arkansas (15099)	Missouri (201202424)
Colorado (46682)	New York (091247)
Florida (27493)	North Carolina (039376)
Georgia (10731)	Ohio (79534)
Illinois (062-042509)	Pennsylvania (080105)
Kentucky (28764)	South Carolina (29761)
Louisiana (18198)	Tennessee (115723)
Michigan (6201059876)	Texas (112009)
NCEES Record # 47437	

Diplomat American Academy of Environmental Engineers (83-10028)
National Association of Fire Investigators Certified Fire & Explosion Investigator (20120810)
Level II Certified Design Professional for Soil & Water Erosion Control (40303)

Additional Training and Certification Courses

PPI Structural Engineering Review Course, Vertical and Lateral Forces
National Association of Corrosion Engineers – Cathodic Protection Interference Short Course
National Electrical Code Review, 2014
Seismic Design Manual and Application of the 2010 AISC Seismic Provision
Infrared Tomography, Building Envelope Institute
ASCE Earth Retaining Structures, Selection, Design, Construction and Inspection
NFPA Safe Practices for Hazardous Dust Processes
Powder and Bulk Engineering Dust & Gas/Liquid Flow Fundamentals & Control of Explosion Hazards
University of Wisconsin Water Entry Prevention & Moisture Control in Buildings, Roofing, Exterior Wall Systems
University of Maryland Fire Protection Engineering – Fire Assessment Methods
Prosoco Refining Construction Details Through Design Verification Testing
ICC ADA Standards for Accessible Design
ICC Mechanical & Physical Properties & Structural Design of Wood
GWPA Design & Construction of Stormwater Controls
RCI Building Moisture Intrusion Evaluation training

National Fire Prevention Association Sprinkler Systems Hydraulic Design
Georgia Water Professionals Association Erosion & Sediment Control Plan design certification course
American Concrete Institute flat slab and vertical wall crack investigation training
American Concrete Institute concrete joints in slabs, pavements and flatwork training
American Concrete Institute rehabilitation of concrete structures training
American Concrete Institute precast and prestressed concrete elements training
Concrete Specification Institute tilt-up wall requirements
Concrete Material Suppliers foundations repair and pressure grouting training
Portland Cement Association design of stucco, EIFS and other cementitious finishes
American Society of Testing and Materials, concrete crack causes and cures training
Concrete Reinforcing Steel Institute reinforcing placement training
National Concrete Masonry Association structural masonry installation training
Portland Cement Association cement-lime plaster installation training
Southern Pine Wood Products Council commercial wood building design training
National Roofing Contractors Association, roof installation and repair
Building Science Institute, Building Systems Evaluation
American Society of Civil Engineers, Design, Construction, & Renovation of Masonry Structures
American Society of Civil Engineers, Wind loads for Buildings
American Society of Civil Engineers, Structural Design of Residential Buildings
American Society of Civil Engineers, Structural Renovation of Buildings
American Society of Civil Engineers, Design and Renovation of Wood Structures
American Society of Civil Engineers, Structural Condition Assessment
American Society of Civil Engineers Design of Cold Formed Steel Structures
American Society of Civil Engineers storm water monitoring and compliance training
American Society of Civil Engineers underground tank installation and removal training
American Society of Civil Engineers brown fields restoration training
American Board of Industrial Hygiene mold removal protocol training
American Institute of Industrial Hygiene mold evaluation and identification training
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.
ASHTO Design of Pavement structures
American Society of Mechanical Engineers risk assessment & analysis of human error in industrial operations environment training.
American Society of Mechanical Engineers product safety & risk in life cycle analysis
National Corrugated Steel Pipe Association storm water detention design training
OSHA 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
OSHA safety hoisting and crane & other lifting equipment training
Mine Safety & Health Admin "Mine Academy" Mine Construction, Management & Repair
American Society of Heating, Refrigeration and Air-Conditioning Engineers basic HVAC sizing for cooling and heating load calculations training
National Association of Environmental Managers risk management training
National Association of Environmental Managers environmental management systems training
English Slip resistance measurement device training
Six Sigma Institute six sigma training - 6 weeks
Deming Institute total quality management and lean manufacturing training - 2 weeks



Air and Waste Management hazardous waste, Title V and HAPs training - 1 week
Law Engineering HAZWOPPER certification training – 1 week
Quality Institute of America ISO 9000/14001 certification training – 2 weeks
National Safety Council accident investigation and root cause analysis training

Professional Affiliations

American Society of Civil Engineers (ASCE)

Life Member

American Institute of Steel Construction (AISC)

Member

Georgia Society of Professional Engineers (GSPE)

Member

American Society of Testing and Materials (ASTM)

Member

American Academy of Environmental Engineers (AAEE)

Member

National Association of Fire Investigators (NAFI)

Member

National Association of Environmental Managers (NAEM)

Member

American Society of Safety Engineers (ASSE)

Member

Roofing Consultants Institute (RCI)

Committee Chair

Water Environment Federation (WEF)

Member

Georgia Water Professionals Association (GWPA)

Life Member

American Water Works Association (AWWA)

Member



Air and Waste Management Association (AWMA)

Member

Positions Held

Engineering Systems Inc., Norcross, 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

2005 - 2009

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

“So What Codes Apply Here?” Bob Kenney, Georgia Defense Lawyer Association magazine, Volume XI, Issue III, Winter 2014, pages 7 – 9.

“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.

“Find Out Who Really Runs the Show” Robert Kenney and Richard MacClean, Environmental Magazine, March 2001, pages 6 – 8.

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