

Kevin P. Departhy

PE, CFEI, CPD
Senior Consultant



Kevin Departhy is a Senior Consultant and Team Leader at Engineering Systems Inc. with over 20 years of combined experience in engineering and construction. His professional background includes HVAC and plumbing design, civil/site design, procedure development, quality control, process improvement, cost estimation, project management, and field work.

Mr. Departhy specializes in the investigation and analysis of failures and losses in the built environment. He has performed root cause analyses, standard of care evaluations, scope of damages assessments, storm damage evaluations, construction defect investigations, building code reviews, and cause-and-origin determinations. His work supports attorneys and insurance professionals by delivering objective, technically sound conclusions that are clearly communicated and defensible.

Mr. Departhy has investigated losses and claims including mechanical system and piping failures, water losses, wind and hail damage, mold and moisture intrusion, fire and explosion events, lightning strikes, and tree impacts. He is experienced in evaluating building envelope issues, including roof, façade, and waterproofing system failures. He performs forensic evaluations related to personal injury, premises liability, and construction-related incidents. His understanding of building systems and construction practices informs his work across both plaintiff and defense matters, including subrogation and coverage evaluations.

Before entering the forensic engineering field, Mr. Departhy worked in the nuclear power industry, where he designed HVAC and power generation piping systems and led a team of design engineers supporting the construction of nuclear facilities. He conducted evaluations of safety-critical failures and authored federally compliant technical reports.

Education

BS, Physics. University of North Carolina at Charlotte. 2020

BS, Mechanical Engineering (Energy Systems, Physics).
University of North Carolina at Charlotte. 2012

AS, Engineering. Community College of Rhode Island. 2005

Contact Information

kpdeparthy@engsys.com
(980) 221-8111

Charlotte

3310 Green Park Circle
Charlotte, NC 28217

Areas of Specialization

- Building Envelope
- Commercial Kitchen Hood Fire Investigation
- Construction Defect
- Construction Project Management
- Design Analysis
- Fire Investigation
- Fuel Gas Systems & Appliances
- HVAC/Refrigeration
- Nuclear Power Plant Engineering Procurement Construction (EPC)
- Pipelines
- Plumbing
- Residential Structures
- Roofing Systems
- Standard of Care
- Steam Systems
- Storm Damage Evaluation
- Underground Directional Boring

Licenses & Certifications

- State of Florida P.E. License 84711
- State of Georgia P.E. License PE042954
- State of Illinois P.E. License 062075159
- State of Indiana P.E. License PE12400137
- State of Maryland P.E. License 58124
- State of New York P.E. License 105392
- State of North Carolina P.E. License 045596
- State of Rhode Island P.E. License 14343
- State of South Carolina P.E. License 35223
- State of Tennessee P.E. License 122411
- State of West Virginia P.E. License 025400
- State of Virginia P.E. License 402059036
- Certified Plumbing Designer – ASPE, 2025
- Certified Fire and Explosion Investigator – 2024
- Certified Gruvlock Installer – 2021
- Residential Roof Inspector – HAAG, 2018
- EPA 608 Certification – Universal, 2018

Positions Held

Engineering Systems Inc., Charlotte, North Carolina

- Senior Consultant, 2020 – Present
- Team Leader, 2023 – Present

U.S. Forensic LLC, Charlotte, North Carolina

- Senior Engineer, 2018–2020

SEA, Ltd., Charlotte, North Carolina

- Project Engineer, 2017–2018

Westinghouse Electric Company (formerly Chicago Bridge & Iron / Shaw Power), Multiple Locations

- Systems Engineer and Cyber Security Assessor, Charlotte, North Carolina, 2016–2017
- Supervisor, Vogtle 3&4 Construction Site, Waynesboro, Georgia, 2014–2016

- Site Engineer and 10CFR21 Coordinator, Vogtle 3&4 Construction Site, Waynesboro, Georgia, 2013–2014
- Engineer Intern, Charlotte, North Carolina, 2012–2013

Scope Services Mechanical Contractor, Cornelius, North Carolina

- Estimator/Junior Project Manager, 2008–2010

Latham-Walters Engineering, Huntersville, North Carolina

- Engineer Technician, 2006–2008

A-1 Plumbing, Pawtucket, Rhode Island

- Plumber's Assistant, 2001–2002

Freddy's Doors, North Attleboro, Massachusetts

- Garage Door Technician, 2000–2001

Continuing Education

- **HVAC Design: Level I – Essentials** – ASHRAE, 2014
- **Investigation of Gas and Electric Appliance Fires** – Fire Findings, 2017
- **HVAC Technician Training** – All American Technician Training Academy, 2018
- **How to Use the Bosch CDR Tool** – Crash Academy, 2018
- **Electrical System Design for the Non-Electrical Engineer** – University of Wisconsin College of Engineering and Engineering and Professional Development, 2019
- **Mold and the Building Enclosure** – EMSL and Wynn L. White Consulting Engineers, 2019
- **30-Yr Outreach Training for the Construction Industry** – OSHA, University of South Florida, 2020
- **Fundamentals of Fire Investigation** – IAAI, 2021
- **Roof Science and Technology** – IBBEC, 2021
- **Commercial Kitchen Hood System Inspection and Fire Investigation** – IAAI, 2023
- **Permit Required and Non-Permit Required Confined Spaces** – 2023
- **Huntersville 101** – Local Government Services and Function Course, 2024

Professional Affiliations/Honors

American Society of Heating, Refrigeration, and Air-Conditioning Engineers

- Member

American Society of Plumbing Engineers

- Member

American Society of Gas Engineers

- Member

National Association of Fire Investigators

- Member

American Society of Civil Engineers

- Member

International Institute of Building Envelope Consultants

- Member

International Mechanical Code Development Committee

- Member, 2024 – Present

Christian Montessori School of Lake Norman

- Board of Trustees Vice Chair, 2024–2025

International Fuel Gas Code Development Committee

- Member, 2021–2024

American Nuclear Society

- Local Chapter Committee Member, 2015

Westinghouse Technical Leader Development Program

- Participant, 2016

Chicago Bridge & Iron Emerging Leaders Program

- Participant, 2015

North American Young Generation in Nuclear, Plant Vogtle Units 3&4

- Chapter President, 2014

Homeowners' Association, The Brownstones, Augusta, Georgia

- Board Member, 2014–2016

Scouts BSA, Scouting America

- Eagle Scout, 2000

Presentations

“HVAC Cools Your House and A Nuclear Power Plant,” **K.P. Departhy**, 2004.

“Residential Plumbing Systems, Drone Technology,” **K.P. Departhy**, Continuing Education for Insurance Adjustors, 2016–2017.

“Residential HVAC Systems – Code Requirements, Installations Practices, Deficiencies, and Failures,” **K.P. Departhy**, Annual Institute for Building Officials, 2021.

“Effects of Lightning on Mechanical Systems, Structures, and Equipment,” **K.P. Departhy**, Georgia Fire Investigators Association, 2022.

“When Wood Building Products Fail,” **K.P. Departhy**, North Carolina Association of Defense Attorneys, 2023.