430 Technology Parkway, NW
Norcross, GA 30092

DOUGLAS M. LOCKER, P.E., CFEI, CVFI
SENIOR MANAGING CONSULTANT

dmlocker@engsys.com

Mr. Doug Locker is a Senior Managing Consultant for ESi. He is a registered Professional Engineer (P.E.) in Georgia, Tennessee, Florida, North Carolina, Alabama, and South Carolina and obtained his first license in Georgia in 1986. Mr. Locker's expertise includes both mechanical and civil engineering disciplines. His mechanical expertise includes product, system, and component analysis due to malfunctions caused by mechanical failure and/or improper design, manufacturing, construction, or maintenance. He has expertise in fire causation due to mechanical failure in structures and vehicles. Mr. Locker's civil experience includes residential/light commercial construction, structural design and analysis with comprehensive expertise in construction defects, failure analysis, code compliance, and reparability assessments. He has conducted over 1,000 failure investigations and has testified by deposition and at trial in state and federal court.

Prior to entering the forensic consulting field, Mr. Locker spent 13 years as founder and president of a construction firm with an emphasis on design, renovation, and restoration of residential and light commercial structures. Mr. Locker began his professional career as an engineer with the IBM Corporation.

Areas of Specialization

Fuel gas systems and appliances
Plumbing systems
HVAC systems and controls
Fireplace systems
Water loss causation evaluation
Vehicle system analysis
Fire and explosion investigations due to mechanical failure
Building construction defect analysis
Codes and standards compliance analysis
Storm damage assessments
Building envelope analysis
Structural analysis
Fire damage structural assessment

Education

Georgia Institute of Technology, Atlanta, Georgia
Bachelor of Mechanical Engineering, 1981
Cooperative Plan w/ Honors

November 2022

Licensed Professional Engineer (P.E.)

State of Georgia ..... License No. 15940
State of Tennessee ..... License No. 111718
State of North Carolina ..... License No. 037134
State of South Carolina..... License No. 29353
State of Florida ..... License No. 75112
State of Alabama .....License No. 33388

Other Licenses & Registrations

National Council of Examiners for Engineering and Surveying (NCEES) Record No. 38914
National Association of Fire Investigators (NAFI), Certified Fire and Explosion Investigator (CFEI)
National Association of Fire Investigators (NAFI), Certified Vehicle Fire Investigator (CVFI)
Georgia – Licensed Residential and Light Commercial Contractor, License No. RLQA001807

Professional Affiliations

American Society of Mechanical Engineers (ASME)
American Society of Civil Engineers (ASCE)
American Society of Plumbing Engineers (ASPE)
International Code Council (ICC)
National Association of Fire Investigators (NAFI)
Greater Atlanta Home Builders Association (HBA)
National Association of the Remodeling Industry (NARI)

Positions Held

Engineering Systems Inc., Atlanta, Georgia

Senior Managing Consultant, 2017 – Present
Senior Consultant, 2010 – 2016

Unified Investigations and Sciences, Inc., Atlanta, Georgia

Forensic Engineering Consultant, 2007 – 2010

Artisans of Atlanta, Inc., Atlanta, Georgia

Partner, 2007 – Present
President, 1993 – 2006

International Business Machines, Inc., Atlanta, Georgia

Chief Information Officer, 1991 – 1993
Systems Engineering Manager, 1987 – 1991
Large Systems Software Specialist, 1985 – 1986
Systems Engineer, 1981 – 1985

Scientific Atlanta, Atlanta, Georgia

Mechanical Engineer, 1979 – 1981

Hartramp/Powell Consulting Engineers, Atlanta, Georgia

HVAC Designer/Draftsman, 1978 – 1979

US Army Corp of Engineers, Annapolis, Maryland

Test Engineer, 1977 – 1978

Continuing Education

Mycometer Surface Fungi Sampling & Analysis Proficiency: Certification # MSF-2577-US October 26, 2022, 4 hour CEU, Tested.

Professional Standard of Care: "Discussion of common law definition of Engineering S of C" August 15, 2022, 1 hour CEU.

International Existing Building Code: "Overview and Application to CSE Discipline" January 12, 2022, 1 hour, not tested.

International Existing Building Code: "Floor Level Surveys," January 12, 2022, 1 hour, not tested

International Association of Arson Investigators, Inc., "Residential Electrical Systems," September 20, 2021, 4 hours, Tested

International Association of Arson Investigators, Inc., "Investigating Natural Gas Systems," September 20, 2021, 3 hours, Tested

International Association of Arson Investigators, Inc., "Electric and Hybrid Vehicle Fires," September 20, 2021, 3 hours, Tested

GFIA, "Georgia POST NBA04G & Georgia FFSTC 1996-2102-01," September 6, 2021, 28 hours, Tested

PDH Academy, "2010 ADA Standards for Accessible Design Part 1 & Part 2," 14 hours, December 31, 2020, Tested

PDH Academy, "Florida Building Code 7th Edition: Advanced Course," 2 hours, December 31, 2020, Tested

PDH Academy, "Laws and Rules for Florida PEs," December 31, 2020, 1 hour, Tested

PDH Academy, "Ethics for Florida PEs," December 31, 2020, 1 hour, Tested

Structural Technologies, "Strengthening Techniques – FRP Part I," "Strengthening Techniques – FRP Part II," and "Repurposing Existing Buildings," April 2020, 4.5 hours

ASCE, "Engineering Investigations of Hurricane Damage: Wind versus Water", July 11, 2019, 1.5 hours

ASCE, "Avoiding Failures of Retaining Walls", June 3, 2019, 1.5 hours, Tested

Simpson Strong-Tie, “Introduction to Composite Strengthening Systems”, March 13, 2019, 1 hour

Simpson Strong-Tie, “Simpson Strong-Tie Anchor Systems Overview”, March 13, 2019, 1 hour PDH

Academy, “Laws and Rules for Florida PE’s”, January 20, 2019, 1 hour, Tested

PDH Academy, “Florida Building Code 6th Edition: Advanced Course”, January 20, 2019, 2 hours, Tested

PDH Academy, “Ethics for Florida PS’s”, January 20, 2019, 1 hour, Tested

ASCE, "Forensic Engineering 8th Congress," November 2018, 20.5 hours

ASCE, “Designing for Flood Loads Using ASCE 7 and ASCE 24”, August 2018, 2 hours, Tested

Liberty Mutual, “Fire Investigator Advanced Training,” May 2017, 4 hours, Presentation Author

NAFI, “NFPA 921 & NFPA 1033: Putting it Together,” July 2016, 32 hours

PDH Academy, “Florida Building Code, 5th Edition 2014: Highlights and Changes Advanced Course,” June 2016, 2 hours, Tested

PDH Academy, “Florida Laws & Rules,” June 2016, 1 hour, Tested

PDH Academy, “Florida Ethics,” June 2016, 1 hour, Tested

“Florida Laws and Rules,” Biennium Cycle 2013-2015, February 2015, 4 hours, Tested

AISC, “Classical Methods of Structural Analysis,” June-August 2014, 12 hours

ASCE, “Significant Changes to the Wind Load Provisions of ASCE 7-10 and Coordination with the 2012 IBC and 2012 IRC,” May 2014, 1 hour

GFIA, “20 lb. Propane Cylinder Connections,” March 2014, 1.5 hours, Demonstration Author

GFIA, “Gas Concentration Modeling Using Fire Dynamic Simulator (FDS),” March 2014, 1.5 hours Demonstration, Author

2014 Windstorm Conference, “Separating Wind and Water Damage, Emerging Trends in Building Products, What is Damage?” January 2014, 6 hours

ASCE, “Structural Renovation of Buildings – Updated for 2012 IBC and IEBC,” November 2013, 14 hours, Tested

NASP, “An Expert’s Role in Product Liability Cases,” November 2013, 1 hour, Presentation Author

NFPA, “Life Safety Code Changes,” October 2013, 2 hours

NFPA, “Current Code Requirements for Interior Wall and Ceiling Finishes,” September 2013, 2 hours

GTRI, “Occupational Safety and Health Standards for Construction Industry,” October 2012, 26 hours, Tested

NAFI, “2011 Advanced National Fire, Arson & Explosion Investigation Training Program,” August 2011, 24 hours, Tested

GFIA, “Mechanical and Practical Aspects of Fireplace and Chimney Fires,” August 2011, 1 hour, Presentation Author

ASCE, “Investigation and Repair of Fire-Damaged Framing,” February 2011, 1.5 hour

CFI Trainer, “Effective Investigation and Testimony,” April 2010, 3 hours, Tested

CFI Trainer, “Arc Mapping Basics,” April 2010, 4 hours, Tested

ASCE, “5th Congress on Forensic Engineering,” November 2009, 16.5 hours

Haag Engineering, “Commercial Roofs Damage Assessment,” September 2009, 8 hours

Haag Engineering, “Composition Wood and Metal Roof Damage Assessment,” September 2009, 8 hours

NAFI, “Vehicle Fire, Arson & Explosion Investigation Science and Technology Seminar,” September 2009, 32 hours

Fire Findings, “Investigation of Appliance Fires,” November 2008, 30 hours, Tested

ASCE, “Structural Condition Assessment of Existing Structures,” October 2008, 16 hours

CFI Trainer, “The Scientific Method for Fire and Explosion Investigation,” June 2008, 4 hours, Tested

CFI Trainer, “Investigating Motor Vehicle Fires,” January 2008, 8 hours, Tested

Unified Investigations & Sciences, “Investigative Procedures,” October 2007, Dallas, TX, 40 hours

NAHB, “2006 International Residential Code Update,” August 2007, Atlanta, GA, 16 hours

Auburn Engineering Extension, “Slab on Grade Concrete Construction,” June 2007, 8 hours

Auburn Engineering Extension, “Designing with Wood,” July 2006, 8 hours

Auburn Engineering Extension, “Allowable Stress Design for Wood Construction,” July 2006, 8 hours

Auburn Engineering Extension, “Construction Surveying,” June 2005, 8 hours

Auburn Engineering Extension, “Establishing Your Engineering Practice,” May 2004, 8 hours

NAHB, “Warranty Workshop,” Atlanta, GA, May 2002, 8 hours