

ERIC BLACK, M.S., PE, CFEI, CVFI



EDUCATION:

B.Sc. Mechanical Engineering, University of Colorado, Boulder, CO, 2015
M.S. Mechanical Engineering, University of Colorado, Denver, CO, 2019

REGISTRATIONS AND CERTIFICATIONS:

Registered Professional Engineer in the states of Colorado and California
Certified Fire and Explosions Investigator (CFEI) & Certified Vehicle Fire Investigator (CVFI)

EXPERIENCE:

Forensic Engineer, Knott Laboratory, LLC, Centennial, CO, January 2015 to Present

ADDITIONAL EXPERIENCE INCLUDES:

Vehicle Fire Progression Research, National Association of Fire Investigators, Lexington, KY, September 2015;
Forensic Wind Damage Research and Publication, University of Colorado, Boulder, CO August 2013 to December 2013 (Research),
July 2015 (Publication)

FORENSIC ENGINEERING:

Mr. Black has investigated the cause of damage to properties damaged by fire, flood, moisture intrusion, inadequate drainage, pipe failure, corrosion, hail, wind, mold, foundation failure, structural member failure, vehicular collisions, construction defects, and mechanical damage.

Mr. Black has experience evaluating failure events of mechanical systems. He has evaluated failures which include: HVAC systems, plumbing components, and fire suppression systems.

Mr. Black has set up and conducted live vehicle burns at the National Association of Fire Investigators (NAFI) biannual certification course to train hundreds of attendees from across the nation on vehicle fire patterns and correct origin analysis. Mr. Black's educational background, involving mechanical, electrical, and thermal systems has given him a unique understanding of system integration and design, enabling him to accurately determine causations of vehicle and structural fires. Mr. Black has also conducted wind tunnel testing of scale model structures and has published this research in the Forensic Engineering subsection of the American Society of Civil Engineers (ASCE).

ENGINEERING AND DESIGN:

At Knott Laboratory, Mr. Black assesses the damages to structures and routinely implements repair plans to restore the damaged structure or mechanical component back to a pre-loss condition. Mr. Black has also designed multiple electromechanical systems including a hail simulator and custom chronograph, steam power generation system, and a device which measured real-time fluid properties for hydraulic fracking operations. In addition, he has evaluated solar panel arrays and systems for planning and capacity. Mr. Black has designed structural repair plans for a wide variety residential and commercial structure failures including roof collapses, foundation movement, and retaining wall failures.

MEMBERSHIPS AND PROFESSIONAL AFFILIATIONS:

Mr. Black is currently a member of the following technical and professional societies:

- NAFI - National Association of Fire Investigators
- IAAI - International Association of Arson Investigators
- CIAAI – Colorado Chapter of the International Association of Arson Investigators

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