U.S.Forensic
Engineering • Inspection • Failure Analysis

JOEL C. HOWARD, P.E.

Mr. Howard obtained his bachelor's degree and master's degree in civil engineering from North Carolina State University. Mr. Howard's forensic engineering experience includes structural failure evaluations, storm damage assessments, roof damage assessments, construction defects, moisture damage assessments, flood damage evaluations, and hazard materials. Mr. Howard provides technical reviews for other engineers. Mr. Howard also has experience with depositions and court testimony.

Mr. Howard's professional experience as a structural engineer includes designing residential, multi-family, commercial and light-industrial buildings, warehouses, office buildings, shopping centers, data centers, and retirement centers. Mr. Howard's consulting experience includes design of steel, concrete, tilt-up walls, brick masonry, concrete masonry, wood, engineered wood, prefabricated steel items, and multi-story structures. Mr. Howard has performed condition assessments and load rating of existing structures and has completed EIFS remediation investigations. Mr. Howard also has experience in stress analysis of telecommunication and electrical towers and foundations. Mr. Howard was also an instructor for the Materials of Construction Lab at North Carolina State University.

Mr. Howard is experienced in the engineering, analysis, and capacity ratings of rigging equipment for heavy rigging, heavy haul transportation, and cranes. As project manager for a large hauling and rigging company, Mr. Howard oversaw operations associated with nuclear and gas plants. His experience also includes lift plan drawings, rail site, heavy haul, gantry operations, and crane operations. In addition, Mr. Howard coordinated construction, and prepared proposals and cost estimates for various projects.

EDUCATION:

M.Ce. in Civil Engineering – North Carolina State University, 2002

B.S. in Civil Engineering – North Carolina State University,

2021 Haag Certified Inspector – Residential Roofs

Certified Residential Mold Inspector – Professional Mold Inspection Institute

Asbestos Inspector Initial 24-hour Course

MEMBER:

American Society of Civil Engineers

NAMRI.

LICENSES & CERTIFICATIONS:

Registered Professional Engineer:

Arkansas, License #22490
Florida, License #73224
Georgia, License #PE034781
Louisiana, License #PE 0046097
Maryland, License #45355
Nebraska, License #E-14244
North Carolina, License #30872
Pennsylvania, License #PE080937
South Carolina, License #27888,
Tennessee, License #116192
Texas, License #117374
Virginia, License #402046017
Registered Structural Engineer: Georgia, #SE000614. HAAG Residential.
Registered General Contractor: North Carolina

WORK EXPERIENCE

U. S. Forensic, LLC 2014 - Present
Professional Engineer, Regional Manager and Principal Engineer.

- Analyze failures in civil/structural engineering disciplines relating to residential, commercial, municipal, and industrial buildings.
- Evaluate construction defects, structural failures, foundation failures, roof failures, hail damage to roofing, water source identification.

TRIAD DESIGN GROUP 2010 - 2014
Professional Engineer

- Designed prototype structures for state of the art data centers, modular, transportation and rigging.
- Provided services primarily within the design-build industry, with majority of structures including industrial and commercial buildings; warehouses, office buildings, shopping centers, data centers, and retirement centers.
- Designed with steel, reinforced concrete, tilt-up walls, precast concrete walls, wood, and masonry.

GUY M. TURNER 2008 - 2010
Professional Engineer

- Performed engineering, analysis, and capacity ratings of rigging equipment for heavy rigging, heavy haul transportation, and cranes.
- Prepared lift plan drawings for rail sites, heavy haul, gantry operations, and crane operations.

- Managed projects, including construction coordination, proposal writing, and cost estimates.

SUTTON-KENNERLY AND ASSOCIATES 2003 - 2008
Engineering Intern/Professional Engineer

- Designed steel, concrete, brick masonry, concrete masonry, wood, engineered wood, prefabricated steel items, and multi-story structures.
- Prepared preliminary design and detailing to development of construction documents, job specifications, special inspections, and construction administration.
- Performed forensic failure analysis and investigation.
- Performed blast damage investigations, extensive EIFS remediation investigations, and construction administration.
- Performed condition assessment and load rating of existing structures

NORTH CAROLINA STATE UNIVERSITY 2001 - 2002
Teaching Assistant/Graduate Student

- Instructed Materials of Construction Lab for 3 semesters, teaching theory and laboratory experiments necessary for studying aggregates, concrete, asphalt, and wood

ARCADIS G&M 2000 - 2001
Engineering Intern

- Stress analysis of telecommunication, electrical towers, and foundations.
- Used various modeling software to analyze towers.
- Used TIA/EIA, ASCE 7, ACI, and AISC codes.
- Performed retrofit of existing towers.