

ZOHAIB A. ALVI, PE

SUMMARY

Mr. Alvi is an experienced structural engineer. His areas of specialties include extensive experience in evaluation, repair, and rehabilitation of existing structures and historic buildings and he has worked on projects for structural designs of new commercial and residential buildings.

Mr. Alvi areas of expertise also covers a wide array of subjects, including, but not limited to forensic investigations to determine the cause and origin of structural deficiencies, damage following accidents, weather-related damage, and other concerns. He also handles matters involving verifying construction compliance with applicable building codes and contract specifications, evaluating impact of construction errors, change orders, and damages during construction, along with evaluating job site safety concerns.

EDUCATION

Master of Engineering in Industrial Engineering – State University of New York, University at Buffalo; In Progress

Dual Bachelor of Science in Architectural Technology and Construction Management Engineering Technology – State University of New York, Farmingdale State College; May 2008

REGISTRATIONS & CERTIFICATIONS

Registered Professional Engineer:

- Connecticut (#0032725)
- New Jersey (#24GE054551000)
- New York (#096497)
- Pennsylvania (#PE087161)
- Texas (#128419)

PROFESSIONAL ASSOCIATIONS

- American Society of Civil Engineers (ASCE): Member
 - Specialty Membership in Architectural Engineering Institute (AEI)
 - Structural Engineering Institute (SEI)
- National Society of Professional Engineers (NSPE): Member
 - NSPE Diversity, Equity and Inclusion Committee Member (October 2019 to June 2021)
 - NSPE Emerging Leaders Program Task Force (September 2020 to June 2021)
 - NSPE New York Long Island Branch, Currently on the Board of Directors as Secretary (June 2019 to June 2022)
- Structural Engineers Association of New York (SEAoNY): Member
 - SEAoNY Small Practice Engineering Committee Member (2018 to Present)
- International Code Council (ICC): Certified Member
- National Academy of Forensic Engineers (NAFE): Associate Member
- ASTM International (ASTM): Participating Member
 - Specialty Membership in E58 Committee on Forensic Engineering
- American Concrete Institute (ACI): Member
- American Institute of Steel Construction (AISC): Member
- International Association for Bridge and Structural Engineers (IABSE): Member
- National Academy of Building Inspection Engineers (NABIE): Member
- National Council of Examiners for Engineering and Surveying (NCEES): Active

CONTINUING EDUCATION

Additional courses and certifications completed in the following:

- ASTM International – Property Condition Assessments Certificate; June 2020
- National Society of Professional Engineers (NSPE) – Emerging Leaders Certificate Program; July 2019
- Cornell University – Engineering Leadership Certificate; December 2018
- The Snell Group – Certificate of Achievement, Infrared for Weatherization and Energy Audits; April 2018
- Excel Tribometers LLC – Certified XL Tribometrist (CXL); November 2017
- New York City Department of Buildings – Supported and Suspended Scaffold User Licenses; January 2017
- Occupational Safety and Health Administration (OSHA) – 30 Hour Construction Safety; August 2015
- Engineers Without Borders – Professional Mentor, Stony Brook Chapter; 2013 to 2014
- International Code Council (ICC) – Certified Structural Steel Inspector, S1 and S2; 2012

CAREER HISTORY

FORCON International – Structural Engineer

Conducting forensic investigations and providing expert witness services as it relates to his areas of expertise.

ZA Consulting Engineering Services PLLC d/b/a za/engineering – Principal Engineer & Owner

Providing forensic investigation services related to structural and non-structural failures and deficiencies in structures to determine cause, nature, effect, required remedial actions, and to apply structural analysis techniques to failed components and systems.

LGI Forensic Engineering PC – Senior Structural Engineer

Part-time structural engineering consultant, responsibilities included forensic investigation related to structural engineering and building science matters, and he was responsible for writing detailed technical reports related to failures and deficiencies, and to provide technical expert court testimony as required.

Rimkus Consulting Group, Inc. – Consultant (Structural, Construction, and Property)

Responsible for investigating, evaluating, and preparing reports on commercial and residential structures to determine the cause and origin of structural deficiencies, damage, or abnormalities within structures, due to vehicle accidents, construction accidents, improper construction, wear and tear, and weather-related disasters such as hurricanes, snowstorms, and floods. He also conducted building codes and standards research, contract and specification review, analysis of manufacturers data, and performed structural calculations, as required per project. In addition to the above, he was also responsible for surveying existing job site conditions and providing necessary data to estimating teams and/or drafting teams for production of cost estimates and/or construction drawings, and for overall project management.

H2M Architects + Engineers – Project Engineer (Forensics)

Responsible for building investigations and production of engineering reports for various public and private agencies, for both residential and commercial structures, for reporting on the cause and origin of damage, conducting research and analysis, and performing structural calculations. In addition, some assignments included assessment of damage to determine scope of work required for repairs, with estimation of cost using Xactimate when required.

Schmitt Engineering PLLC – Associate Engineer

Designed, analyzed, and produced drawings for structures and various associated components. He also managed construction projects from inception to completion, including field inspections and special inspections. He performed structural calculations and analysis as per publications by ASCE, IBC, AISC, ACI, and local building codes for commercial and residential buildings including new structures, and modification or rehabilitation of existing structures. He surveyed existing buildings in order to determine structural capacities for reuse, conducted on-site engineering inspections for new construction projects, including special inspections and compliance to contract drawings. He was also involved in forensic reporting and assessment of damage to structures in order to determine safety and stability and required repairs.

FORCON INTERNATIONAL

Ahern Contractors Inc. – Project Manager (Steel Division)

Managed projects relating to rehabilitation and repair of major infrastructure, including airports, interstate bridges, tunnels, highways, and related structures. His responsibilities included verifying contract drawings and preparing shop drawings, reviewing structural rehabilitation proposals and contracts, estimating costs and material quantities, managing supplier relations, scheduling and execution of projects, and inspection of work after completion and before final inspection by client.

PRESENTATIONS AND SPEAKING ENGAGEMENTS

Structural Consideration When Installing Rooftop Solar Panels; Engineer's Joint Committee of Long Island (EJCLI) E-Week Seminar – Long Island, NY (February 2021).

An Introduction to Forensic Engineering; A Joint Presentation by the Long Island Branches of the ASCE and NSPE – Long Island, NY (February 2021).

Building Personal Resilience; New York Build Expo, Manhattan, NY (March 2020).

What if Forensic Engineering? New York State Society of Professional Engineers – Long Island Branch, Long Island, NY (January 2020).

PE Day Advocacy for Professional Engineering Licensure; Office of Congressman Pete King, and Office of Senator Kristin Gillibrand, Long Island, NY (August 2019).

Structural Consideration When Installing Rooftop Solar Panels; New York Build Expo, Manhattan, NY (March 2019).

Moisture Intrusion and Mold Growth; Chartwell Law Offices, Manhattan, NY (June 2018).

Effects of Moisture Intrusion; New York Build Expo, Manhattan, NY (March 2018).

PUBLICATIONS

Don't Let an 'Imposter' Derail Your Career; *PE Magazine: The Magazine for Professional Engineers* – Spring 2021 Issue.

The Importance of Learning About History (For Engineers Who Never Liked History); *PE Magazine: The Magazine for Professional Engineers* – Fall 2020 Issue.

Why Should I Care About Diversity in Engineering? (Contributing Author); *PE Magazine: The Magazine for Professional Engineers* – July/August 2020 Issue.

ACADEMICS

State University of New York – Farmingdale State College; Adjunct Professor (January 2020 to Present)

Adjunct professor currently teaching CON207, Elements of Strength of Materials, within the Department of Architecture and Construction Management.