

DAMIAN MOSER, P.E.

Vice President



Summary

Damian Moser joined Thornton Tomasetti in 2008 and has experience in structural and building envelope forensic investigation, construction and demolition support, design and renovation. Since 2016, he has been the project lead in Philadelphia's Forensics practice, conducting numerous forensic investigations, including the causation analysis of structural and building envelope failures, wind, flood, and settlement damage assessments, stability analysis and the design of make-safe remediations of damaged buildings, and the evaluation and remediation of construction defects. His experience encompasses diverse structural systems and building types, including pre-engineered metal buildings, historic masonry bearing-wall structures, institutional buildings, and mid-rise and high-rise office towers. Damian has acted as expert witness, providing opinion reports and depositions for attorneys.

Areas of Technical Expertise

- Emergency Response
- Structural Analysis and Investigations
- Forensic Engineering
- Multi-hazard Risk Assessment and Probabilistic Analysis

Education

- M.S., Structural Engineering, 2008, Columbia University
- B.A., Physics, 2002, Brown University, Providence

Registrations

- Licensed Professional Engineer in CT, DE, LA, NJ, PA and TN

Select Project Experience

Emergency Response

160 2nd Avenue North, Nashville, TN. Structural condition assessment and design of "make-safe" stabilization following December 25, 2020 bombing. Conducted the initial site inspection, designed shoring for damaged brick masonry piers and facade, and liaised with Metropolitan Code Authority to secure approval.

R.M. Palmer Factory, Reading, PA. Response and investigation services following explosion that destroyed a factory building. Tasks included emergency structural condition assessment, and design and oversight of make-safe demolition and stabilization measures.

Forensic Investigation/Structural Analysis

Bardstown Warehouse, Bardstown, KY. Involves deficiencies in the design and construction of a 1-story 175,000 square foot pre-engineering metal building. Includes field assessments engineering analysis, such as wind load code review and calculation of wind pressures, and foundation analysis under wind uplift.

Archbald Logistics Center, Jessup, PA. Investigation involving damage sustained by roof joists at a logistics warehouse following a heavy snow event. Determined the relative contributions of designer error, construction defects, and design load exceedance to documented joist damage. Scope included site investigations, structuring and directing engineering analyses, and authoring the report of findings.

Hospitality Cover Plus, Wilmington, DE. Cause and origin investigation of reported flooding and roof damage at referenced property. Causation was determined indirectly by interpolating local wind data to bound site-specific wind speeds, and by combining rain accumulation data with local topographical and hydrological features to identify sources of water ingress.

*Denotes work performed with previous employer.

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4701 League Island Boulevard, Philadelphia, PA. Investigation into differential settlement induced structural distress at the referenced property. Used findings of academic research on rotational ductility of welded angle connections to establish the analytic approach for determining permissible future settlement at the referenced property, beyond which structural reinforcement would be required.

Renovation/Repair

McFarland Retaining Wall Collapse, Harrisburg, PA. Design of site stabilization and remediation measures following the collapse of a 20-foot retaining wall. Included designing foundation and bearing wall stabilization of an adjacent building, coordinating the means and methods of site clean-up and excavation, designing the replacement retaining wall, and document production/administration through award of contract.

David L. Lawrence Convention Center, Pittsburgh, PA. Multiple repair and modification projects. Projects include parking lot deck repairs and expansion joint replacement, new mechanical room platforms, new catwalks on suspension cables supporting building structure, and miscellaneous minor repairs.

Design

Gateway Academic Center, New York, NY. Structural design for a 2-building mixed-use facility, connected with an enclosed bridge structure. Included managing structural project team as well as coordinating with project design team, contractor, owner and local buildings department through design and construction phases.

Sworn Testimony

Trial Testimony, Armed Serv. Bd. of Cont. Appeals No. 63145, Appeal of Healthon, Inc., Under Contract No. W912P8-15-C-0024, regarding delays and cost overruns on construction of the Harvey Sector Gate Pump Station. Provided opinion on the interpretation and application of Enclosure Classifications under ASCE 7, and on Standards of Practice in design and erection of Metal Building Systems. New Orleans, Louisiana. May 1, 2023.

Deposition, Twin Spans Bus. Park, LLC and HDC, Inc. v. Cincinnati Ins., regarding insurance dispute involving alleged snow and ice damage to the roofs of multiple buildings. Provided opinion on the pre-event roof conditions and the potential effects of a discrete winter storm event on the health of the roofs. In the U.S. District Court for the District of Delaware. November 18, 2020.

Deposition, Hutch Enter. v. Cincinnati Ins., regarding alleged snow and ice damage to the roofs of multiple buildings. Provided opinion on the pre-event roof conditions and the potential effects of a discrete winter storm event on the health of the roofs. In the U.S. Court Western District of New York, Buffalo. September 28, 2018.

Litigation

LTC Retail v. Feinberg, regarding alleged design and construction deficiencies in a parking garage structure. Reviewed project documents and provided opinion on alleged design omissions and construction errors in light of design team and contractor standards of care.

Lauchnor v Clemens, regarding causation of pre-cast floor plank failure and contractor Standard of Care. Provided report on causation of partial collapse of a pre-cast concrete plank floor structure, and on the industry Standard of the Care for the contractors, manufacturers, and design professionals in Design-Bid-Build projects entailing delegated design of pre-cast floor plank.

Say-core v. Wohlsen, regarding delegated design of pre-cast floor plank in Philadelphia, PA. Provided report with opinions on the structural design and administration of construction of the building at the center of the dispute, in light of the standard of care owed each by the general contractor and pre-cast concrete sub-contractor.

CONTACT

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