

Jonathan D. Koller, P.E. | Sr. Principal Engineer – Large/Complex Loss

Detroit, Michigan 48201

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Professional Summary:

Mr. Koller's experience and industry knowledge cover more than 10 years in the areas of design, engineering, procurement, project and construction management, structural analysis and design, scheduling, cost estimating and budget control, industrial operations, construction claims and defects, premises liability, development and implementation of quality and control procedures, contract management, and the forensic investigation, repair, and renovation of property in the residential, commercial, industrial, and heavy infrastructure industries.

He has assisted in the response to multiple hurricanes, tornados, floods, and major structural fires and conducted more than 500 forensic investigations of damaged structures, worksite injuries, construction defects, and premises liability claims.

Mr. Koller also held a general contractor's license while organizing the renovation of a 20-unit, 100-year-old townhouse complex in Detroit, Michigan. As the managing director of that non-profit effort, he was responsible for the evaluation, design, budgeting, permitting, contract management, supervision, quality assurance, and financing of the project.

Licenses and Certifications:

Professional Engineer, Michigan, License #6201061366

Professional Engineer, Ohio, License #84667

Professional Engineer, Indiana, License #PE11900040

Professional Engineer, Florida, License #PE86278

Professional Engineer, Louisiana, License #PE.0044909

Professional Engineer, North Carolina, License #047727

Professional Engineer, Texas, License #132323

Professional Engineer, Oklahoma, License #31848

Project Experience:

Forensic and Failure Investigations

- High Load Hit on Interstate Highway Bridge – Detroit, Michigan

Evaluated the damage to a steel-framed highway bridge to differentiate damage caused by known high-load impact from previous, undiscovered damage. Further assessed the proposed repairs, contractual irregularities, and the cost attributed to the known party.

- Sports Complex Tornado Damage Assessment – Dayton, Ohio
Assessed the damage to a large sports complex following a major tornado impact. Damaged structures included a pre-engineered metal building, light poles, scoreboards, and fencing.
- Column Subsidence at an Industrial Facility – South Lyon, Michigan
Investigated the rapid subsidence of a column group at a 100-year-old factory constructed on filled wetlands. Used underground plumbing elevation data and analysis of various process water at the facility to determine the cause of the failure.
- Ice Rink Heaving Evaluation – Ann Arbor, Michigan
Investigated the extent of the damage to an ice rink and surrounding structure that had heaved due to an improperly maintained under ice heating system.
- Church Basement Ceiling Failure – Detroit, Michigan
Analyzed the debris field of a ceiling collapse that occurred 11 months after a pipe break in the overlying space to determine if the two events were related.
- Roof Products Factory Fire Damage Evaluation – Detroit, Michigan
Investigated the extent of damage at an industrial facility and provided conceptual repair recommendations to restore the damaged portions of the building.
- Residential Property Moisture Evaluation – Sterling Heights, Michigan
Differentiated moisture infiltration through manufactured openings in the roof covering with overflow from a sump pit caused by build-up of iron-reducing bacteria.

Construction Defect and Standard of Care Investigations

- Luxury House Siding Installation Defect – Milwaukee, Wisconsin
Poly-ash siding on a large home was specified to be installed by the owner and designer in a manner not approved by the siding manufacturer. Investigated the workmanship of a siding subcontractor due to quality objections by the owner and differentiated areas of poor workmanship from areas where the off-label installation resulted in excessive thermal movement of the siding.
- Residential Foundation Failure During Backfilling – Detroit, Michigan
Investigated a partial foundation collapse during backfilling operations of a residential property. An inspection after the damage had been repaired revealed a small area of under-strength concrete, which was recommended for further analysis to determine the cause.
- Adhered Concrete Masonry Failure – Lake, Michigan
Investigated the failure of adhered concrete masonry installed on structural insulated panels at a multi-million-dollar home. Defects in the installation of the masonry were documented and remedial procedures were proposed.
- Construction Vibration Damage Evaluation – Holly, Michigan

Investigated claims of damage to the foundation and interior finishes arising from nearby heavy equipment traffic. Detailed inspection and analysis allowed for differentiation between pre-existing damage and new damage caused by consolidating soils and structural shaking.

Worksite Accident Investigations

- Wood Truss Lifting Failure – Tipton, Michigan
Investigated the failure of a large wood truss that failed during lifting and injured a carpenter. The retained failed truss was inspected and the cause of the failure was determined.
- Restaurant Floor Slip Resistance – Novi, Michigan
Investigated a rash of slip and fall injury claims at a local restaurant chain. The investigation involved slip testing in multiple locations, a review of the floor cleaning procedure, and observation of floor contaminant distribution during operating hours. Multiple procedures were recommended to reduce the potential for further slips.
- Balloon Framed Wall Lifting Failure – Lake Orion, Michigan
Investigated the failed lifting attempt of a gable-end wall that resulted in multiple injuries. The lift used manpower from multiple employers and no equipment. Analysis of contracts, deposition testimony, limited photography, contracts, and correspondence enabled the determination of the cause of the failure and the responsible party, based on the OSHA Multi-Employer Worksite framework.

Court Qualifications/ Depositions:

Litigation CV available upon request

Professional Experience:

EFI Global, Senior Principal Consultant, Dec. 2023 – Present
Rimkus, Principal Consultant, Oct. 2022 – Nov. 2023
Practice Leader, Oct. 2021 – Sept. 2022
Senior Consultant, Jan. 2019 – Sept. 2021
Consultant, July 2018 – Dec. 2018
Independent Consulting Engineer, Principal, July 2014 – July 2018
Beard Balm, Chief Engineer, January 2013 – December 2018
Shymanski and Associates, Design Engineer, October 2011 – December 2013
Friends of Spaulding Court, Managing Director, July 2009 – October 2011

Education:

Master of Science and Engineering, Civil and Environmental Engineering, University of Michigan, Ann Arbor, MI, 2008

Bachelor of Science and Engineering, Civil and Environmental Engineering, University of Michigan, Ann Arbor, MI, 2007

Affiliations:

American Society of Civil Engineers (ASCE) – Member