

Matt Thompson, PE

Forensic Engineering Expertise

Structural Analysis/Design

Review appropriate documents including project plans and specifications as it relates to the building structure for purposes of failure analysis and extent of resulting damages.

Inspection and Evaluation of Roofing Systems

This includes steep and low-slope roofs as well as various types of roofing materials including both common and unique roofing applications.

Origin & Cause

Determine the source and responsible party or element related to the failure of a structural or architectural element, or water damage in a building. Examples of past work include failure of roofing and wall cladding causing moisture entry, humidity and condensation related losses, and groundwater entry including expert witness testimony related to the aforementioned items.

Qualifications & Training

- Low Slope Roofing Systems – Interdisciplinary Professional Programs – UW-Madison, November 2023
- Metal Roofing Systems – Interdisciplinary Professional Programs – UW-Madison, November 2023
- Insulation: Material Properties and Considerations – IBEEC, September 2023

Education

Master of Science, Engineering – Civil Engineering
Michigan Technological University, Houghton, MI
May 2024 – Expected Graduation Date

Bachelor of Science, Engineering – Mechanical Engineering
Michigan Technological University, Houghton, MI
December 2018

Licenses & Certifications

PE - Professional Engineer
Licensed by the State of Michigan – Number 6201312030
Individual Builder License
Licensed by the State of Michigan – Number 242400218

Employment History

Forensic Engineer
Nederveld, Grand Rapids, MI
July 2021 - Present
Duties include forensic engineering analysis relating to building pathology, structural damage due to fire, structural damage from vehicle impacts, storm damage (wind, snow, hail), seismic and water loss events, calculations, and plan of repair design.

Structural Engineer

Dematic – North America, Grand Rapids, MI

January 2019 – July 2021

Duties included designing header steel systems to support hanging conveyors at customer locations. Optimized structural members using ASD methodology to minimize project costs. Collaborated across multiple teams in order to meet project deadlines and requirements. Created drawing packages for installation, building analysis, and acquiring permits. Traveled to support installation teams on-site and provided input on structural items. Passed the Civil FE exam to begin steps for Professional Engineer licensure.

Product Engineering Intern

Yanfeng Global Automotive Interiors – Southview Plant, Holland, MI

May 2018 – August 2018

Duties included implementing a single tote movement system based off a future value stream map. Utilized lean practices to identify waste in current material movement and storage. Created and documented a visual inventory management system to assist production. Increased available floor space by decreasing WIP material storage needed at presses.

Product Engineering Intern

Yanfeng Global Automotive Interiors – Technical Campus, Holland, MI

May 2017 – August 2017

Duties included completing a variety of projects across different teams at the company. Developed a design sheet and accompanying template that allowed exit of Phase 0 project. Identified and fixed issues with analytical templates used in CAE engineering group.

Expert Witness Experience

Deposition

March 2024

North Kent Sewer Authority v U.S. Specialty Insurance Company

Expert witness for U.S. Specialty Insurance Company

United States District Court Western District Of Michigan Southern Division, Case No. 1:23-cv-317