

Jason Fetterley, 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. In addition, being a licensed professional engineer, replacement designs are provided upon request. Examples of past work include failure analysis of collapsed structures (concrete, steel, wood, masonry), and various building components (windows, doors, glass, piping, roofing, exterior and interior cladding) as well as damage assessment of building structures after a storm, fire or water loss.

Origin & Cause

Determine the source and responsible party or element related to water entry into a building whether it be through the building envelope or caused within the building interior. Examples of past work include failure of roofing and wall cladding causing moisture entry, humidity and condensation related losses, and groundwater entry.

Building Fenestration/Building Envelope

The building envelope is a building's first line of defense to moisture entry. Identifying the type of system (single versus multiple barrier) and how the various adjoining materials' water and air barriers connect is key to effective moisture management. Examples of past work include residential window installations, exterior cladding specification and installation and roofing materials and installation.

Building Pathology/Construction Defects

The building pathologist relies on an in-depth knowledge of building design, construction, use, and changes as well as assessing the environment of use and the materials and how these interrelate to systematically identify, investigate and diagnose defects in a building. Past work includes design and specification of repairs as an owner's representative.

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. Past work involved offering opinions and repairs related to installation deficiencies and storm-related damages, including for hail and wind.

Qualifications & Training

- Building Science Fundamentals, American Institute of Architects (AIA), February 2023
- Competent Person Scaffold Training, Great Lakes Safety Training Center, September 2022
- Understanding Heat and Related Protections - A Farm Perspective, Michigan Safety Conference, April 2022
- MIOSHA, Fall Protection, and You, Michigan Safety Conference, April 2022
- Active Shooter: Tactical Survival Strategies, Michigan Safety Conference, April 2022
- MUST: Keeping the Construction Industry Safe, Michigan Safety Conference, April 2022
- Employee Involvement - Building a Safety & Health Management Program, Michigan Safety Conference, April 2022

- Webinar - Lessons Learned from Investigating Unique Failures, ASCE, February 2021
- Registered Roof Observer, International Institute of Building Enclosure Consultants (IIBEC), August 2020
- Webinar - Avoiding Ethical Pitfalls in Failure Investigations (8108W2020), ASCE, March 2020
- Webinar - Structural Building Condition Surveys: Looking for Trouble (8123W2020), ASCE, March 2020
- Webinar - Structural Design of Steel Stairs and Rails (8091W2020), ASCE, February 2020
- Webinar - Construction Vibrations (7287W2019), ASCE, May 2019
- Webinar - Renovations of Slabs on Grade (7156W2019), ASCE, April 2019
- Webinar - Introduction to Jet Grouting and Its Applications (7170W2019), ASCE, April 2019
- Webinar - Avoiding Problems in Specifying Metal Roofing (7128W2019), ASCE, March 2019
- Webinar - Frost-Protected Shallow Foundations: Design and Construction (7106W2019), ASCE, February 2019
- Webinar - Significant Changes to Tensile Membrane Structures, ASCE 55-16 New (6248W2018), ASCE, August 2018
- Repair of Concrete, University of Wisconsin, May 2018
- Webinar - Structural Thermal Bridging in the Building Envelope, ASCE, March 2018
- Webinar - Design of Multi-Story Light-Frame Shear Walls (AWI031115), ASCE, March 2018
- Webinar - Building Structures and Sustainability (AWI111511), ASCE, March 2018
- Silica Exposure in Construction, Michigan Safety Conference, April 2017
- Part 10: Cranes in Construction, Michigan Safety Conference, April 2017
- Trench Safety & the Role of the Qualified Person, Michigan Safety Conference, April 2017
- ASCE Intro to 2015 International Existing Building Code - UPDATED (6103W2018), ASCE, February 2017
- Roofing Technology, Maintenance and Inspection, CINDOTT, Inc. Mississauga, Ontario, February 2017
- Webinar - The Newly Revised ASNI Z117.1 2016 Standard, ASSE, February 2017
- Webinar - Confined Spaces in Construction - The All New A10.43 Standard, ASSE, February 2017
- An Introduction to Helical Piers, SEAMI, January 2017
- Geotechnical Construction Applications, MSPE, December 2016
- Webinar - ASCE 7-10 Wind Loads Part I (AWI011211), ASCE, December 2016
- Webinar - ASCE 7-10 Wind Loads Part II (AWI012711), ASCE, December 2016
- Webinar - Role of Engineer (from the wood truss industry perspective) AWI072614, ASCE, December 2016
- Webinar - Designing with AWC's NDS 2015 (8060W2017), ASCE, November 2016
- SEAMI Repair of Construction Defects, October 2016
- Webinar - Advanced Snow Loads (8008W2017), ASCE, October 2016
- Webinar - Sig. Changes to the Wind Load Provisions of ASCE 7-16 (7211W2016), ASCE, May 2016
- Confined Space in Construction - Parts 1 and 2, Michigan Safety Conference, April 2016
- Webinar - Diagnosis, Repair, and Restoration of Building Facades (6139W2015), ASCE, March 2015
- Masonry: How to do it Right, University of Wisconsin, May 2014

- Connection Solutions for Wood Framed Structures (8115W2014), ASCE, February 2014
- Investigation and Repair of Fire-Damaged Framing (8101W2014), ASCE, February 2014
- Water Entry Prevention and Moisture Control in Buildings - Roofing Systems, Exterior Walls, Plaza Decks, Below-Grade Waterproofing, University of Wisconsin, March 2013
- MIOSHA Safety Training, Schoolcraft College, March 2012
- Low Slope Roofing Systems, University of Wisconsin, December 2011

Education

Bachelor of Science in Civil Engineering
Michigan State University, East Lansing, MI
May 1998

Licenses & Certifications

PE – Professional Engineer
Licensed by the State of Michigan – Number 6201053604
Licensed by the State of Wyoming – Number 21288
RRO – Registered Roof Observer
Certified by IIBEC, Inc. – Registration Number 2179
COSS – Certified Occupational Safety Specialist – Certification No. 373634411
Certified by Alliance Safety Council
NAFE – Board Certified Diplomate in Forensic Engineering by the National Academy of Forensic Engineers

Employment History

Forensic Engineer
Nederveld, Inc.
2009 – Present
Perform forensic analysis relating to building pathology issues, fire loss damage, storm damage (wind, snow, hail, seismic) and water loss events.

Regional Sales Manager, Technical Sales Representative
Michigan Timber and Truss, Inc., Burton, MI
2004 – 2009
Managed efforts of several salespersons throughout Northern and Western Michigan. Grew existing market (Lansing) and open new market (Western Michigan). Maintained sales volumes and preferred vendor status in a turbulent market. Performed metal plate connected roof/floor truss layout and design. Increased sales of engineered wood products. Performed field inspections as required. Worked closely with builders and architects to ensure specification and code compliance.

Staff Structural Engineer
Northern Structural, Inc., Caledonia, MI
2002 – 2004
Performed structural analysis and design on numerous commercial, industrial, and residential projects, including structural steel and reinforced concrete buildings, masonry, and timber structures, floor and roof capacity calculations, building and equipment foundations, equipment platforms and walkways, earth retaining structures, and pipe and utility bridges.

Structural Project Engineer

Siemens Dematic, Grand Rapids, MI
2001 – 2002

Performed design and preparation of plans, involving various steel and reinforced concrete structures within the material handling industry. Accompanied design team to client sites, defined client's needs and worked within the design team to accommodate those needs efficiently and effectively.

Structural Project Engineer

Earth Tech, Inc., Grand Rapids, MI
1998 – 2001

Performed design and was involved during construction on numerous projects, including chemical and pharmaceutical plant additions, containment structures and liners, foundations, retaining walls, pipe bridges, elevated platforms and mezzanines, elevated storage tanks, heavy equipment supports, pipe and conduit supports, municipal and industrial waste treatment plants, wood treating plants, and various other types of industrial and institutional buildings. Performed on-site inspections of steel walled tanks and delivered written reports detailing findings.

Professional Affiliations

Member: ANSI/TP1-2022 Project Committee Member
Member: American Society of Civil Engineers (ASCE)
Member: American Society of Safety Professionals (ASSP)
Member: National Society of Professional Engineers (NSPE)

Expert Witness Experience

Trials

January 2017
Dan and Colleen Hoffer vs Home-Owners Insurance Company
Expert Witness for Home-Owners Insurance Company on behalf of Bosch Killman VanderWal PC
Muskegon County Circuit Court Case No. 15-50053-ND

August 2016
Robert G Berg and Cynthia A Berg vs Secura Insurance
Expert Witness for Secura Insurance on behalf of Smith Bovill PC
Bay County Circuit Court File No. 14-3672-CK (HG)

October 2015
Marie Grissom and Herbert Grissom vs Foremost Insurance Company
Expert Witness for Foremost Insurance on behalf of Cory, Knight & Bennett
Muskegon County District Court Case No. 15-130965GC

Arbitrations

November 2022
Hammer Building & Restoration, Inc. vs Ayers Foundation Support Works, LLC and Ayers Basement Systems LLC
Expert Witness for Ayers Basement Systems LLC on behalf of Bachelder Law

March 2011
Gaglio vs State Farm Insurance
Expert Witness for State Farm Insurance on behalf of Sudekum Cassidy & Shulruff

Depositions

May 2025

Dawn Alvey vs Driggs Housing, LLC, an Idaho Limited Liability Company; Grand Targhee Resort, LLC, a Delaware Limited Liability Company; ARCO Electric Idaho, Inc., an Idaho Corporation; Avail Valley Construction-ID, LLC, an Idaho Limited Liability Company; and DOE Corporations II-X.

Expert Witness for Arco Electric on behalf of Benoit Law

District Court, Seventh Judicial District, State of Idaho County of Teton

Case No.: CV41-23-0203

March 2025

J. Johnson, LLC vs Auto-Owners Insurance Company

Expert Witness for Auto-Owners Insurance Company on behalf of Erica Neff

Monroe County Circuit Court, Case No. 24-147377-CK

April 2023

Debora Spangler-Holcomb vs Rachee Lodging, Inc.

Expert Witness for Rachee Lodging on behalf of Preel, P.C.

Alpena County Circuit Court, 21-1287-NO

November 2021

Vulaj, et al. vs Foremost

Expert Witness for Foremost on behalf of Dinsmore & Shohl LLP

Oakland County Circuit Court, 2020-180676-CK

February 2017

Community Garage, Inc. vs Auto-Owners Insurance Company

Expert Witness for Auto-Owners Insurance Company on behalf of Willingham & Cote PC

Ottawa County Circuit Court, Case No. 16-4734-CB

June 2016

Dan and Colleen Hoffer vs Home-Owners Insurance Company

Expert Witness for Home-Owners Insurance Company on behalf of Bosch Killman VanderWal PC

Muskegon County Circuit Court, Case No. 15-50053-ND

November 2015

Robert G. Berg and Cynthia A. Berg vs Secura Insurance

Expert Witness for Robert A. Jarema on behalf of Smith Bovill PC

Bay County Circuit Court Case No. 14-3672-CK (HG)

February 2015

Bowlers' Alley, Inc. dba Eastland Bowling Center vs The Cincinnati Insurance Company

Expert Witness for Alan Gregory on behalf of Gregory and Meyer PC

United States District Court, Case No. 2:13-cv-13804-PDB-MJH

August 2014

Jason and Amy Majewski vs Deitz House Moving Engineers, Inc. and Thomas Cizauskas

Expert Witness for Robert Johnson on behalf of Hackney, Grover, Hoover, and Bean, PLC and Mark van der Laan on behalf of Dykema Gossett PLLC

Kent County Circuit Court, Case #13-10582-CK

October 2013

Gary Groulx and Denise Groulx vs Allstate Insurance Company

Expert Witness for Phillip Yeager on behalf of Yeager, Davison & Day, PC

Wayne County Circuit Court, Case # 13-004357-CK

FOR REFERENCE ONLY NOT RETAINED