

William Boucher, 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 includes failure analysis of collapsed structures (concrete, steel, wood, masonry), and various building components (roofing, exterior and interior cladding) as well as damage assessment of building structures after a fire and after vehicle impact, snow overload, tornado, and hurricane.

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 and humidity and condensation related losses.

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 and expert witness testimony related to the aforementioned items.

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

- Professional Building Consulting, IIBEC, 2019
- Exterior Walls Technology and Science, IIBEC, 2019
- Certified Roof Inspector – Residential, HAAG Engineering, 2012-2014
- Certified Roof Inspector – Commercial, HAAG Engineering, 2012-2014
- Engineering Investigations of Hurricane Damage: Wind versus Water, American Society of Civil Engineers, February 2016
- EIFS Inspector, Moisture Analyst and Quality Control – Online Certification Training Program, Exterior Design Institute, February 2015
- Water Entry Prevention and Moisture Control in Buildings-Roofing Systems, Exterior Walls, Plaza Decks, Below-Grade Waterproofing, University of Wisconsin – Madison, October 2013
- Advanced Topics in Wood Construction Engineering, WoodWorks, March 2013
- Roofing 101 – Module 2: Roof System Basics, National Roofing Contractors Association, August 2012
- Roofing 101 – Module 3: Low-slope Roof Systems, National Roofing Contractors Association, May 2012
- Roofing 101 – Module 4: Steep-slope Roof Systems, National Roofing Contractors Association, May 2012

- Roofing 101 – Module 5: Roof Flashing Systems and Accessories, National Roofing Contractors Association, May 2012
- Roofing 101 – Module 1: The Basics, National Roofing Contractors Association, April 2012
- Code issues in Existing Building Structures: Archaic and Obsolete Structures, presented by Donald Friedman, PE, 2012
- Surface Preparation of Metals including Galvanizing by Troy Freebel, 2012
- The Future of Structural Testing and Special Inspections in Indiana by Donald Corson, PE, 2012
- An Overview of Cold-Formed Steel Structures by Helen Chen, PhD, PE, 2012 Evaluation and Repair of Concrete Structures by John C. Huang, PhD, PE, 2012

Education

Master of Science Degree in Civil Engineering – Structural Engineering
Purdue University, West Lafayette, IN
May 1996

Bachelor of Science in Civil Engineering
Rose-Hulman Institute of Technology, Terre Haute, IN
May 1994

Licenses & Certifications

PE - Professional Engineer

Licensed by the State of Indiana – Number PE10001170
Licensed by the State of Kentucky – Number 24880
Licensed by the State of Michigan – Number 6201063859
Licensed by the State of Minnesota – Number 45433
Licensed by the State of Ohio – Number 65972

Employment History

Senior Forensic Engineer
Nederveld, Inc.
2012 – Present

Duties include forensic analysis relating to building pathology issues, fire loss damage, structural damage from vehicle impacts, storm damage (wind, snow, hail), seismic, and water loss events. Team Leader, structural services, manages direct reports (building services team.)

Structural Project Manager
Enginuity Management & Consulting Corp., Indianapolis, IN
February 2009 – 2012

Responsible for all aspects of structural projects from the complete engineering design to project management including proposal creation, client meetings and budget maintenance. Responsible for overseeing the drafting effort with outside consultants and in-house staff on all structural projects. Responsible for all structural engineering for Enginuity including concrete, structural steel, masonry, wood, and structural condition assessments.

Project Manager
Professional Engineers' Group, Inc., Noblesville, IN
March 2006 – February 2009

Responsible for all facets of building design including foundations, building infrastructure, gravity and lateral systems, and construction details. Responsible for financial aspects of projects from creation of the proposal to maintaining the budget. Responsible for attending client meetings and maintaining client relationships. PE Group's engineering staff consisted of the owner and me.

Project Manager

American Consulting, Inc., Indianapolis, IN

September 2000 – March 2006

Responsibilities included complete engineering design from preliminary phase to design completion, writing proposals, maintaining project budgets, client meetings, client management, coordination with other disciplines, and project coordination.

Structural Engineer

Ter Horst, Lamson and Fisk, Inc., Indianapolis, IN

May 1996 – September 2000

Served as Project Manager for small/mid-scale projects. Served as Project Engineer for large-scale projects. Provided design of structural systems including reinforced concrete, structural steel, masonry, and timber. Responsibility level increased from Staff Engineer to Project Engineer/Manager. Worked extensively with owners, clients, contractors, and outside project consultants.

Teaching Assistant

Structural Engineering Department, Purdue University

August 1994 – May 1996

Awarded teaching assistantship through undergraduate academic merit. Taught undergraduate labs, kept office hours, graded exams.

**Professional
Affiliations**

Member, Past Member of Board of Directors - Secretary – Indiana Structural Engineers Association

Member – Exterior Design Institute

Member – International Institute of Building Enclosure Consultants (IIBEC)

**Expert Witness
Experience****Courtroom Testimony**

October 2014

Tabbatha Scott, et al. vs Grange Mutual Casualty Company

Jim Schuller, Schuller Law Office representing Grange Insurance vs Michael Portnoy of

Michael Portnoy Law Office representing Tabbatha Scott

Putnam County Courthouse Ottawa, OH

Putnam County Court of Common Pleas Case No. 13 CV 44

Depositions

March 2019

Jonathon Gibson, et al. vs E&B Paving, Inc. et al.

State of Indiana

County of Monroe Circuit Court #53C01-1707-PL-001591

May 2016

Josephine Wade Smith and Rupert Smith (Plaintiffs) vs CSX Transportation, Inc. (Defendant)

United States Circuit Court for the Northern District of Illinois Eastern Division #14 CV 5704

December 2015

Kimberly Snyder vs Illinois Farmers Insurance Company

St. Joseph County Superior Court #71D06-1501-CC-000007

August 2014

Lanaye Jewson, et al vs Erie Insurance Exchange, et al
Oconto County Case No: 13 CV 211

February 2014

Tabbatha Scott, et al. vs Grange Mutual Casualty Company
Jim Schuller, Schuller Law Office representing Grange Insurance vs Michael Portnoy of
Michael Portnoy Law Office representing Tabbatha Scott
Putnam County Courthouse Ottawa, OH
Putnam County Court of Common Pleas Case No. 13 CV 44

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