

Daniel R. Bodde, 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 and structural engineer, replacement designs are provided upon request.

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.

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.

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.

Building Fenestration/Building Envelope

The building envelope is a building's first line of defense against 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 storefront window exams, residential window installations, exterior cladding specification and installation, and roofing materials and installation.

Qualifications & Training

- Metal Roofing Systems, University of Wisconsin-Madison, December 2024
- Low Slope Roofing Systems, University of Wisconsin-Madison, December 2024
- Principle-Based Ethics: Character-Builder or Career-Enders, American Society of Civil Engineers, February 2024
- Architectural Concrete: Design and Construction Strategies to Maintain Appearance & Limit Water Intrusion, American Society of Civil Engineers, December 2022
- Building Enclosure Commissioning (BECx): What You Need to Know, American Society of Civil Engineers, December 2022
- Connection Solutions for Wood Framed Structures, American Society of Civil Engineers, December 2022
- Joints in Buildings, American Society of Civil Engineers, December 2022
- Mine Subsidence Cause Effect and Mitigation, American Society of Civil Engineers, December 2022
- Practical Application of Fiber Reinforced Polymer (FRP) in Strengthening Existing Concrete and Masonry Structures, American Society of Civil Engineers, December 2022

- Snow and Rain Loads in ASCE 7-16: What's New and Different, American Society of Civil Engineers, December 2022
- The Value of Structural Detailing, American Society of Civil Engineers, December 2022
- Residential Provisions of the Pennsylvania Uniform Construction Code, HalfMoon Education Inc., December 2022
- Fire and Structural Analysis for Mass Timber Buildings, WoodWorks, November 2022
- Shoring and Load Transfer in Renovations of Existing Buildings, National Council of Structural Engineers Associations, November 2022
- Hollow Core Walls and Floors, Precast/Prestressed Concrete Institute, April 2022
- Energy (Fenestration), Precast/Prestressed Concrete Institute, April 2022
- Advanced Snow Loads Using ASCE 7-16, American Society of Civil Engineers, April 2022
- Introduction to 2015 International Existing Building Code, American Society of Civil Engineers, April 2022
- A Master Class on Wood Lateral-Resisting Systems: In-Depth Diaphragm Layout and Analysis, WoodWorks, December 2020
- Deposition and Court Testimony, National Academy of Forensic Engineers, August 2020
- Introduction to Forensic Engineering, National Academy of Forensic Engineers, August 2020
- Avoiding Ethical Pitfalls in Failure Investigations, American Society of Civil Engineers, March 2020
- Structural Building Condition Surveys: Looking for Trouble, American Society of Civil Engineers, March 2020
- Structural Design of Steel Stairs and Rails, American Society of Civil Engineers, February 2020
- Shear Exhilaration, APA (American Plywood Association), December 2019
- Introduction to Structural Design of Wood Buildings per the 2018 NDS, Virginia Polytechnic Institute and State University, May 2019
- Construction Vibrations, American Society of Civil Engineers, May 2019
- Introduction to the Forensic Engineering Process, HalfMoon Education Inc., March 2019
- Forensic Examination of Structures and Use in Litigation, HalfMoon Education Inc., March 2019
- Cause of Failures and the Forensic Engineering Report, HalfMoon Education Inc., March 2019
- Handling Ethical Issues in Professional Engineering Practice, HalfMoon Education Inc., March 2019
- Best Practices in Anchor Design, Simpson Strong-Tie Webinar, August 2018
- Galvanize It, American Galvanizers Association, June 2018
- PCI Design Handbook 8th Ed. Content and Updates, Precast/Prestressed Concrete Institute Webinar, February 2014

Education

Bachelor of Architectural Engineering – Structural Option
The Pennsylvania State University, University Park, PA
2013

Licenses & Certifications

PE - Professional Engineer
Licensed by the State of Pennsylvania - Number PE086976
Licensed by the State of Maryland - Number 52325

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Last Modified: 7/23/2025

This CV is not a solicitation for services and is provided as information only. Retention of this expert can only be obtained through a mutually agreed upon Letter of Engagement.

Licensed by the State of New Jersey - Number 24GE05444800
Licensed by the State of New York - Number 099710
Licensed by the State of Virginia - Number 59182
Licensed by the State of West Virginia - Number 22939

Employment History

Forensic Engineer
Nederveld, Inc.

October 2018 - Present

Duties include forensic analysis relating to building fire loss damage, structural damage from vehicle impacts, storm damage (wind, snow, hail), construction defects, and water loss events, calculations, and plan of repair design. Duties also include inspection and evaluation of roofing systems.

Chief Engineer

Nitterhouse Concrete Products, Inc

March 2018 - October 2018

Responsible for all engineering functions and structural design on all projects. Managed Project Engineers and Engineering Interns, as well as mentoring and providing professional and design growth. Participated in monthly Operation Management meetings to review overall production operation and recent performance in relation to budgets for total volume of concrete, performance by department, and gross profit margin by project and product. Participated in monthly Total Quality Management meetings to discuss and implement ways to improve company communication and production. Acted as a liaison between subcontracted designers and the plant production personnel.

Project Engineer

Nitterhouse Concrete Products, Inc

June 2013 - March 2018

Provided design and details of precast concrete components on numerous projects of varying size from precast floor systems to a multi-story total precast school to total design of multi-story parking structures. Worked with project coordinators and drafters on each project to create precast shop drawings and piece details to submit to the clients, engineers of record, and architects for review and approval as well as for the erectors and production personnel. Gained extensive knowledge of the precast manufacturing process and its limitations to be able to provide a cost-effective product to the customer. Designed and coordinated remedial connections and rework procedures with in-house personnel, other contractors, and erection crews.

Project Intern

Massaro Construction Management Services

May 2011 - May 2013

Assisted in the documentation & organization of ASIs, RFIs, and submittals. Maintained/updated all paper drawings and electronic drawings. Studied and reviewed shop drawings for conformance in the field. Assisted in the review and documentation of QA/QC reports. Assisted Project Engineer in resolving issues found in the field per discussions with design engineers.