



Curriculum Vitae

CHARLES E. GASSER, PE, SE

EDUCATION:

Bachelor of Science in Architectural Engineering
University of Wyoming, 1994

PROFESSIONAL SUMMARY:

Mr. Gasser is the director and lead forensic consultant for American Structurepoint's Illinois office. He has more than 20 years of experience in structural engineering design and forensic investigations. During his career he has applied his expertise in multiple areas of structural engineering, including moveable bridge and historic building rehabilitation, new building design, construction administration, and forensic investigations.

His building structural experience includes commercial, industrial, educational, municipal, congregational, and residential design, as well as inspection of steel, concrete, masonry, and wood structures.

His forensic experience has included structural condition assessments after explosions, fires, tornadoes, and other disasters. Mr. Gasser has also performed numerous structural-collapse cause investigations, determinations of effective remedial action, structural component failures, and strength deterioration investigations.

Expert witness experience includes cases involving material performance failures, and failures of structural elements.

PROFESSIONAL COMPETENCIES:

Forensic engineering consultant involved in the following types of projects.

- Structural failure investigations
- Structural design of commercial, institutional, religious, educational and residential structures
- Structural performance and design of steel, concrete, masonry, wood and aluminum
- Water damage and microbial growth investigations
- Storm damage (hail, wind) investigations, including residential and commercial roofing systems
- Structural damage investigations – fire, water, storm, vehicular impact, other
- Roof and building condition assessments
- Roof repair and replacement design, including construction administration and construction observation services
- Insurance appraisals and arbitrations in the role of consultant, appraiser, and umpire

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LICENSES, REGISTRATIONS & CERTIFICATIONS:

Licensed Professional Engineer (PE) – Indiana, Wisconsin

Licensed Structural Engineer (SE) – Illinois

EMPLOYMENT HISTORY:

AMERICAN STRUCTUREPOINT, INC.

2011 to Present

Consulting Engineers/Architects, Indianapolis, Indiana

Current Position: Illinois Office Director

LARSON ENGINEERING OF ILLINOIS INC.

1996-2011

Consulting Structural Engineering Firm, Naperville, IL

Project Engineer/Senior Project Manager

STRUCTURAL DESIGN ASSOCIATES

1994-1996

Consulting Structural Engineering Firm, Albuquerque, NM

Staff Engineer

REPRESENTATIVE PROJECTS:

FORENSIC/INVESTIGATIVE

Tornado Damage Inspection, Cassani Residence, Diamond, Illinois

Mr. Gasser inspected the residence to determine the extent of structural damage sustained by an EF2 tornado. A report was prepared outlining the extent of the structural damage and the necessary remedial repairs.

Tornado Damage Inspection, Makiney Residence, Washington, Illinois

Mr. Gasser inspected the residence to determine the extent of structural damage sustained by an EF4 tornado. A report was prepared outlining the extent of the structural damage and the necessary remedial repairs.

Tree Damage Inspection, Wagner Residence, St. John, Indiana

Mr. Gasser inspected structural damage sustained by the residence from the impact of a large tree. A report was prepared stating the extent of damage and outlining necessary remedial repairs.

Structural/Environmental Inspection, Thompson Residence, Lisle, Illinois

Mr. Gasser inspected the residence to determine the cause and origin of several environmental and structural issues including; unusual powder buildup in ductwork, sewer fly infestation, reported mold in attic and potential settlement of the foundation. Mr. Gasser investigated each item and provided a report indicating the causes of the issues and suggested remedial action.

Wind and Hail Damage Inspection, Higgins Residence, Alton, Illinois

Mr. Gasser inspected the residence for hail and wind damage. A report was prepared to document and quantify all storm-related damage to the property, including recommendations regarding the extent of repairs required.

Wind and Hail Damage Inspection, Inserra Residence, Plainfield, Illinois

Mr. Gasser inspected the residence for hail and wind damage. A report was prepared to document and quantify all storm-related damage to the property, including recommendations regarding the extent of repairs required.

Fire Damage Inspection, For Bare Feet Inc., Helmsburg, Indiana

Mr. Gasser inspected the building complex to determine extent of structural damage from a large fire. He provided a report documenting and quantifying the fire damage to the structure. The report also included recommendations for shoring and remedial repairs.

Wind and Hail Damage Inspection, House of Prayer Church, Chicago, Illinois

Mr. Gasser inspected multiple buildings on the church campus for hail and wind damage. He provided a report documenting and quantifying all storm-related damage to the property, including recommendations regarding the extent of repairs required.

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Fire Damage Inspection, Menotti Residence, Arlington Heights, Illinois

Mr. Gasser inspected the residence after a large fire to determine the stability of the remaining structure and determine which portions of the residence were salvageable. He provided a report summarizing all observed structural damage and included recommendations for shoring and remedial repairs.

Bowstring Truss Partial Collapse Inspection and Repair, Ottawa, Illinois

Mr. Gasser inspected the reported partial collapse of a bowstring truss in a local grocery store. He provided a report summarizing the cause of the collapse and suggested remedial repairs. He was retained by the client to design the repairs and provide periodic inspections during implementation of the repairs.

Roof Inspection, Hulseberg Residence, Galena, Illinois

Mr. Gasser inspected organic shingles for hail and wind damage on a Civil War-era residence. He provided a report documenting the deficiencies common to organic shingles and the differences between hail damage and the deleterious conditions present in the shingles.

Roof Inspections, Urena Residence, Galesburg, Illinois

Mr. Gasser inspected the main residence and four additional outbuildings on the property for hail- and wind-related damage. Two manufacturing defects were found in the shingles. Mr. Gasser provided a report documenting and quantifying all storm-related damage to the property, as well as explaining the manufacturing defect present in the shingles.

STRUCTURAL DESIGN

Student Life and Recreation Center - Olivet Nazarine University, Bourbonnais, Illinois

Lead Structural Engineer for \$20 million, student center including two pools, a four-story rock climbing wall, a 72,000 s.f field house with eight lane running track and an additional elevated running track, suspended from the roof and perimeter wall systems.

Benet Academy Addition, Lisle, Illinois

Lead Structural Engineer for a 54,900 s.f. \$15 million, two story steel frame classroom addition, Revit-3D (BIM) project. The addition was located in an existing courtyard and interfaced with three separate buildings. The original buildings were constructed in the late 1800's. Revit-3D (BIM) was used to coordinate the elevations of the new and existing construction as well as the coordination of the structure with mechanical electrical and plumbing systems.

Holy Transfiguration Greek Orthodox Church, Marietta, Georgia

Lead Structural Engineer for the design of this 30,000sf church with a 40 foot tall worship space. Unique features - Two structural steel domes 1- 30' diameter, 1- 15' diameter, and over 20 different roof elevations. The lateral system was a combination of structural steel frames, masonry shear walls, and light gage x-bracing.

Local 150 Apprentice Training Facility, Wilmington Illinois

Lead Structural Engineer for a new 282,200 square foot, "T" shaped training facility, with a 132,360 square foot, two-story classroom and office space and a 25,139 square foot partial basement. To the east is a 54,000 square foot operator's arena with covered equipment parking area and an enclosed asphalt training area. Unique features – Single story 80 ft clear span truss. Multiple bridge crane runway systems.

McDonough Street and Ruby Street Bascule Bridge Rehabilitations, Joliet, Illinois

Facilitated the rehabilitation of the double leaf trunnion style bascule bridge on Ruby street, and the rolling lift bascule bridge on McDonough street. Services included providing calculations and details used to maintain a balanced condition as members are removed and replaced on the movable spans.

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St. Alphonsus Liguori Catholic Community, Prospect Heights, Illinois

A \$3.5 million, 10,400 sft sanctuary with a 3,700 sft Narthex, a 3,350 sft ancillary space, a 4,050 sft meeting room area and a 1,370 sft renovation to existing gymnasium. Design included 40-foot tall curved masonry walls, a 110-foot clear span, and an 80-foot high bell tower. This project was awarded for Excellence in Masonry, 2003 from Illinois Indiana Masonry Council.

USPS Freeport Historic Building Masonry Repairs, Freeport, Illinois

Lead Structural engineer, performed investigations and designed repairs for this historic 3-story US Postal Service building. The purpose of the work was to evaluate the condition of the north, south, and east elevation parapet wall and cornice system of the building, originally constructed in 1931, and provide repair recommendations as necessary. Mr. Gasser visited the site and observed the exterior parapet and cornice conditions from the ground, from an aerial lift, and from the roof level.

CONTINUING EDUCATION & TRAINING:

- 2018 *Roofing Penetrations & Waterproofing Design Challenges* – RoofTop Solutions, LLC / GAF
- 2018 *Requirements for Roof Coverings: Asphalt Shingles – Underlayment & Drip Edge* – Douglas Brown, PE, RRC, American Structurepoint, Inc.
- 2018 *Hurricane Harvey: Texas FEMA Review* – Jess Pounds, PE, American Structurepoint, Inc.
- 2018 *Residential Foundation Walls: Cracking & Reuse* – Luke Showalter, PE, Charlie Prigge, PE, American Structurepoint, Inc.
- 2018 *Property Condition Assessment (PCA) Overview* – Dan Weekes, AIA, NCARB, BECxP, CSI, American Structurepoint, Inc.
- 2018 *Vacation Resorts: Assessments & Repair Design* – Jason Williams, PE, MSCE, CDT
- 2018 *Single Ply (R)evolution* – Jim Tierney, Doug Ruffner, Architectural Construction Products (ACP)
- 2017 *Fire Investigation & Red Flags for Arson* - W. Dale Nicholson, PE, CFI, CFEI, American Structurepoint, Inc.
- 2017 *Investigative Group Annual Meeting* - Douglas E. Brown, PE, RRC, American Structurepoint, Inc.
- 2016 *Case Study: Glass Window Damage Investigation / Seismographs* - Luke Johnson, PE, American Structurepoint, Inc.
- 2016 *Mine Subsidence* - Tom P. Leahy, PE, SE, American Structurepoint, Inc.
- 2016 *Property Condition Assessments* - Mike M. Jones, RA, American Structurepoint, Inc.
- 2016 *Façade Assessments & Water Testing* – Beth A. Pedota, EI, American Structurepoint, Inc.
- 2016 *Residential Foundations & Expansive Soils* - -Will J. Parks, PE, American Structurepoint, Inc.
- 2016 *Parking Structure Assessments* – Stephen A. Manner, American Structurepoint, Inc.
- 2016 *Blue Beam/One Note* - Jess M. Pounds, PE, American Structurepoint, Inc.
- 2016 *Structural Inspection of Chimneys* - Charles E. Gasser, PE, SE, American Structurepoint, Inc.
- 2016 *Parking Structure Assessment Standards* - Annemarie Riecken, EI, American Structurepoint, Inc.
- 2016 *Inspecting Structural Failures* - Charles E. Gasser, PE, SE, American Structurepoint, Inc.
- 2015 *Self Directed Learning Study, DES310 Connection* - Michelle Kam-Biron, Director of Education AWC, American Wood Council
- 2015 *Tornadoes and Structural Inspections of Tornado Damaged Structures* - Charles Gasser, PE, SE, American Structurepoint, Inc.
- 2015 *Case Study: Explosion Damage* - Luke A. Showalter, PE, American Structurepoint, Inc.
- 2015 *Wind and Water Damage: Lessons Learned from Katrina* - Bob Wieber, PE, American Structurepoint, Inc.
- 2015 *Producing Defensible Engineering Reports* - Thomas P. Leahy, SE, American Structurepoint, Inc.

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- 2015 *Common (and not so common) Commercial Roof Systems* - Michael M. Jones, RA, American Structurepoint, Inc.
- 2015 *Load Transfer Through Shear Walls* - Terry Malone, PE, SE, Woodworks, SE Solutions, SE University
- 2015 *ISEA 2015 Spring Conference* – various, ISEA
- 2015 *Structural Building Condition Surveys: Looking for Trouble*, ASCE
- 2015 *Structural Engineering of World's Tallest Building Burj Khalifa (Dubai)* – various, PDHEngineer.com
- 2015 *Seismic Design - Evaluation and Retrofit of Existing Buildings* - Edward Brunet, PDHEngineer.com
- 2014 *Designing for ASCE 7 Wind Loads - Main Wind Force Resisting System* - Don Scot, SE of PCS Structural Solutions, SE Solutions, SE University
- 2014 *Structural Forensic Engineering* - Vincent F. Fratinardo, Gregory H. Pestine, Carl J. Schoenberger, Halfmoon Education
- 2014 *Designing for ASCE 7 Wind Loads - Components & Cladding* - Don Scott, SE of PCS Structural Solutions, SE Solutions, SE University
- 2014 *Professional Engineering Ethics* - Richard McKissock, www.mckissock.com
- 2012 *Project Management Bootcamp* - Alan Bollinger, PSMJ Resources, Inc.
- 2012 *Inspection of Residential Roof Systems* – HAAG
- 2012 *Inspection of Commercial Roof Systems* – HAAG

PROFESSIONAL ASSOCIATIONS:

American Institute of Steel Construction, *Member*

American Society of Civil Engineers, *Member*

PUBLICATIONS AND PRESENTATIONS:

- 2016 Understanding Structural Damage, Using Engineers to Control Cost on Large Losses – Central Claim Executives Association Fall Meeting
- 2016: Structural Inspection of Chimneys. Internal Continuing Education Course. American Structurepoint, Inc.
- 2015 Tornadoes and Structural Inspections of Tornado Damaged Structures. Internal Continuing Education Course. American Structurepoint, Inc.