
PROFILE

A Managing Member and Principal Engineer with 20 years of combined experience in the structural design and forensic engineering fields. His forensic engineering experience includes 11 years of investigating structural failures and collapses, building envelope failures, and construction and design defects. He has led and performed numerous investigations to determine the origin and cause of structural failures and to determine the extent of structural damage related to fires, vehicle impacts, collisions, earthquakes, construction vibrations, and storm-induced forces associated with residential, commercial, industrial, and marine structures. He has also performed numerous investigations to determine the extent of damage to interior finishes, exterior wall cladding systems, and roofing systems caused by flooding, lightning, snow/ice, hail, and wind, including assessments following tornadoes and hurricanes. He has investigated, and is familiar with, all commonly used low-slope and steep-slope roofing systems.

Mr. Johnston's design engineering experience includes structural systems comprised of structural steel, cold-formed steel, aluminum, wood/timber, brick and concrete masonry, conventionally reinforced concrete, precast/prestressed concrete, post-tensioned concrete, tilt-up concrete, and metal building systems. He has designed structural systems for aviation, educational, healthcare, heavy industrial, manufacturing, military, office, parking, and water/wastewater treatment facilities. Key strengths include, but are not limited to:

- Gravity, Wind, and Seismic Load Analysis
- Construction and Design Deficiencies
- Wood and Timber Construction
- Structural Steel Construction
- Concrete Construction
- Masonry Construction
- Building Code Evaluation
- Retaining Wall Evaluation
- Vehicle/Vessel-Impact Damage Evaluation
- Fire Damage Evaluation
- Wind Damage Evaluation
- Hail Damage Evaluation
- Earthquake Damage Evaluation
- Construction Vibration Evaluation
- Structural Collapse Evaluation
- Building Enclosure Evaluation
- Historic Structure Evaluation
- Water/Moisture Infiltration Evaluation

EDUCATION

Master of Science, Civil Engineering, 2024 (Emphasis on Structural Engineering and Mechanics)
Missouri University of Science and Technology, Rolla, Missouri

Bachelor of Science, Civil Engineering, 2004 (Emphasis on Structural Engineering)
Louisiana Tech University, Ruston, Louisiana

PROFESSIONAL BACKGROUND

Scout Forensics (New Orleans, Louisiana)
Managing Member and Principal Engineer – June 2022 to Present

EFI Global (New Orleans, Louisiana)
Senior Principal Forensic Structural Engineer, Large/Complex Loss – April 2020 to June 2022

Envista Forensics (New Orleans, Louisiana)
Technical Lead, Steel Structures – August 2019 to March 2020
Senior Project Engineer – July 2016 to August 2019
Project Engineer – July 2013 to July 2016

FSE Energy (Covington, Louisiana)
Structural Engineering Manager – April 2012 to July 2013

Garver (North Little Rock, Arkansas)
Project Manager and Structural Engineer – January 2009 to April 2012
Structural Design Engineer – June 2004 to December 2008

LICENSURE

Professional Engineer (PE) – Alabama, Arkansas, Colorado, Florida, Georgia, Idaho, Illinois, Indiana, Iowa, Kansas, Kentucky, Louisiana, Michigan, Minnesota, Mississippi, Missouri, Montana, New Mexico, North Carolina, North Dakota, Ohio, Oklahoma, Oregon, South Carolina, South Dakota, Tennessee, Texas, Washington, Wisconsin, and Wyoming

Professional Structural Engineer (SE) – Arizona, Georgia, Hawaii, Illinois, Nebraska, Nevada, Oklahoma, and Utah

DESIGNATIONS/CERTIFICATIONS

Model Law Structural Engineer (MLSE) – National Council of Examiners for Engineering and Surveying

Model Law Engineer (MLE) – National Council of Examiners for Engineering and Surveying

Remote Pilot in Command, Commercial Operator (Part 107) – Federal Aviation Administration

Haag Certified Inspector – Commercial, Haag Education Co.

Haag Certified Inspector – Residential, Haag Education Co.

Transportation Worker Identification Credential (TWIC) – Transportation Security Administration (TSA)

PROFESSIONAL AFFILIATIONS

American Institute of Steel Construction (AISC)

American Society of Civil Engineers (ASCE)

American Welding Society (AWS)

Association for Materials Protection and Performance (AMPP)

International Institute of Building Enclosure Consultants (IIBEC)

PUBLICATION

Altschule, Howard and Johnston, Jason C. "Weathering Hurricane Ida." The Claims and Litigation Management (CLM) Alliance Magazine, October 2021, pp. 22-25.

REPRESENTATIVE FORENSIC EXPERIENCE

Commercial Building Collapse Assessment*New Orleans, Louisiana*

Investigation to determine the cause of a partial collapse during the construction of an 18-story hotel comprised of 10 levels of structural steel framing erected over an 8-story concrete podium structure with post-tensioned elevated floor slabs.

Industrial Collapse Assessment*Clarendon, Jamaica*

Investigation to determine the cause of the partial collapse of a 145-foot-tall self-supporting steel stack and to determine the extent of structural damage to the adjacent steel-framed boiler building damaged as a result of the stack collapse.

Bridge Collapse Assessment*Gretna, Louisiana*

Investigation to determine the cause of the collapse of the transition span for a vehicle bridge at a ferry terminal facility located on the Mississippi River. The vehicle bridge was comprised of structural steel plate girders.

Historic Building Collapse Assessment*Shreveport, Louisiana*

Investigation to determine the origin and cause of the partial collapse of a 5-story building constructed circa 1902 that was undergoing structural repairs and a change of occupancy. The historic mill building was comprised of timber framing in conjunction with multi-wythe load-bearing brick masonry perimeter walls. The scope of work included the review of repair design drawings and photographs taken prior to and during construction, as well as the contractual agreements between the owner and contractor, the owner and architect, and the architect and structural engineering consultant, to determine if installation and/or design deficiencies contributed to the partial collapse.

Storm Damage Evaluation*Lake Charles, Louisiana*

Investigation of a 21-story office building comprised primarily of structural steel framing components to determine the extent of structural damage following Hurricane Laura (2020).

Storm Damage Evaluation*Panama City, Florida*

Investigation of over 60 buildings/structures at an industrial facility that were primarily comprised of structural steel framing, cold-formed steel framing, and metal building systems to determine the extent of structural damage following Hurricane Michael (2018). The investigation included the evaluation of numerous 1-story warehouse structures, multiple conveyer transfer towers and production buildings, and multiple boiler buildings up to 12 stories and 170 feet in height.

Fire Damage Evaluation*Rosedale, Mississippi*

Investigation to determine the extent of structural damage to a grease manufacturing facility sustained as a result of a fire. The structure was comprised of a metal building system with a structural steel-framed mezzanine that provided access to multiple grease kettles.

Marine Structure Damage Evaluation*Pascagoula, Mississippi*

Investigation to determine the cause of distress and displacement of a bulkhead at a marine facility, which was comprised of steel Z-shape sheet piles with a concrete cap, steel HP-shape walers, and steel bar tie rods.

Vessel-Induced Damage Evaluation*Helena, Arkansas*

Investigation to determine the extent of structural damage to a dock on the Mississippi River that was caused by allisions involving multiple barges that were docked at, and subsequently displaced from, a facility located upriver. The dock was comprised of multiple platforms, dolphins, and walkways that were typically framed with structural steel components, as well as one dolphin comprised of a steel flat sheet pile, circular cell.

REPRESENTATIVE DESIGN EXPERIENCE

Industrial Boiler and Fuel Handling Support Structures*Bogotá, Colombia, South America*

Designed a 147-foot-tall structure utilizing 575 tons of structural steel to support 1,500 tons of boiler equipment. Designed a 120-foot-tall structure utilizing 110 tons of structural steel to support 175 tons of fuel handling equipment. This project is in a moderate seismic zone, and seismic forces were resisted with a combination of special steel moment frames and special steel concentrically braced frames.

Industrial Conveyor, Silo, and Mixer/Unloader Support Structures*Hugoton, Kansas*

Designed steel bents of varying heights to support an inclined ash conveyor, a 110-foot-tall steel structure to support an ash storage silo and ash mixer/unloader, and a steel structure to support a railcar load-out ash conveyor. Designed the mat foundations to support the steel structures for the ash handling system. Coordinated the bidding, detailing, fabrication, and construction of the structural steel for the ash handling system.

Traveling Bulkhead Structure for Concrete Dam*Norfolk Lake, Baxter County, Arkansas*

Designed a 65-ton steel-framed bulkhead that travels along a 667-foot-long steel monorail beam attached to Norfolk Dam. The bulkhead is used to seal and dewater each of the dam's 12 spillways so maintenance can be performed on the Tainter gates. Designed the structural steel supports and operation platforms for a multi-level intake siphon system that provides appropriate water levels and temperatures for the fish hatchery on the downstream side of the dam.

Aviation Buildings*Little Rock, Arkansas*

Designed a 28,000 SF, 2-story building to house floor-supported luggage handling equipment for TSA on the first floor and provide additional office space on the second floor. Designed a 21,000 SF, 1-story building to house a roof-supported conveyor system that distributes luggage to the individual airlines after being processed by TSA. This project is in a moderate seismic zone (Seismic Design Category D), and seismic forces were resisted with a combination of special steel moment frames and special steel concentrically braced frames. Designed multiple steel-framed canopies that cantilever from 9 to 25 feet.