

EDUCATION

2005 **Bachelor of Science, Civil Engineering with Emphasis in Structures**
Colorado State University, Fort Collins, CO

EXPERIENCE

April 2026
to Present **Engineering Design & Testing Corporation**
Denver, CO

Consulting Engineer

For residential, commercial and industrial structures: assessment of hail and/or wind damage to roof coverings, including single-ply membrane systems; scope of structural damage due to wind, tornado, fire, snow, blasting, explosions, vibrations, vehicle impacts and tree impacts; cause of moisture intrusion through roof coverings, exterior veneers, windows, building envelopes and foundations; scope of foundation damage due to involuntary discharges of water, soil pressure, settlement and ground movement; surface water and drainage investigations; evaluation of construction defects and building code compliance (IBC, IEBC, ACI, AISC, ASCE); failure analysis involving concrete, masonry, steel and wood structures, including foundations, driveways, sidewalks and retaining walls; depositions, trial testimony and subrogation support; value of loss; laboratory and field testing of construction materials; nondestructive testing; damage segregation; infrared thermography; and unmanned aircraft system (UAS) field documentation under FAA Part 107.

December 2023
to March 2026 **Envista Forensics**
Denver, CO

Senior Project Engineer

Conduct senior-level civil and structural forensic investigations across diverse property types including residential, multifamily, commercial, industrial, infrastructure, and historic structures. Serve as Engineer-In-Charge managing complete investigation lifecycle from client engagement through deliverable submission. Complete 80+ forensic investigations annually with comprehensive technical reports.

- Perform comprehensive structural failure analysis involving foundations (shallow, deep, post-tensioned slabs), slabs-on-grade, framing systems, building envelopes, retaining walls and earth retention systems, roofing systems, and specialty structures
- Investigate masonry structures including CMU, brick, stone veneer, and structural masonry for cracking, settlement, moisture damage, and structural deficiencies
- Evaluate historic structures with emphasis on legacy materials, unreinforced masonry, and historic foundation systems including cobblestone and timber foundations
- Assess post-tensioned concrete slabs for tendon corrosion, anchorage failures, stress-related cracking, and installation defects; evaluate deep foundation systems including drilled piers, driven piles, and caissons

- Manage case budgets ranging from \$7,500 to \$50,000+ while maintaining project scope, cost control, and client expectations; maintain 85%+ billable utilization across multiple concurrent assignments
- Evaluate wind damage to roof systems, siding, and structural framing using ASCE 7 analysis; assess hail impact on asphalt shingle, TPO, PVC, SPF, and metal roofing; investigate snow load failures and ice dam damage
- Assess fenestration systems (windows, doors, storefronts, curtain walls) and building envelope failures (EIFS, stucco, siding, roofing membranes, waterproofing); diagnose moisture intrusion pathways
- Collect construction material samples (concrete, steel, wood, masonry) for laboratory testing coordination; provide repair recommendations and remediation scope development
- Prepare objective, evidence-based forensic reports for insurance carriers, attorneys, and property owners with consistent delivery within approximately ten business days
- Support business development through technical presentations and relationship management with insurance carrier and legal clients; ensure code compliance per IBC, ACI 318, AISC, and ASCE 7.

October 2021
to December 2023

Bridge Diagnostics Inc.
Louisville, CO

Staff Engineer

Managed instrumentation and structural monitoring projects for infrastructure assets including bridges and dams. Coordinated multi-disciplinary project execution from design through field installation and ongoing monitoring.

- Designed and implemented long-term structural health monitoring systems for critical infrastructure including I-74 River Bridge over Mississippi River
- Executed live load testing and instrumentation installation on dam structures (PacifiCorp - Lake Merwin, Yale Dam, Swift Dam) using rope access techniques
- Performed real-time data collection, structural analysis, and technical reporting
- Managed project logistics, client correspondence, budget tracking, and deadline compliance
- Coordinated with production teams and field crews ensuring adherence to installation standards

April 2018
to September 2021

OnSite Structural Engineering
Lafayette, CO

Structural Engineer

Provided structural engineering design and construction observation services for residential and light commercial projects. Collaborated with architects, contractors, developers, and property owners throughout project lifecycle.

- Performed structural design calculations and prepared construction documents for wood, steel, concrete, and masonry structures
- Designed foundation systems, lateral force-resisting systems, and gravity load-bearing elements
- Conducted field observations to verify compliance with structural drawings and building code requirements
- Analyzed structures using hand calculations, spreadsheets, and RISA software for various load conditions and combinations
- Ensured compliance with IBC, ACI 318, AISC 360, and ASCE 7 standards

August 2016
to April 2018

Telluride Engineering
Telluride, CO

Structural Engineer

(Concurrent with Peak Property ownership)

- Performed structural design for new construction and renovation projects
- Investigated water infiltration and weather-related damage to building envelopes
- Designed structural repairs and remediation solutions

June 2009
to August 2018

Peak Property Management
Telluride, CO

Co-owner / Partner

- Co-owned and operated property management company while maintaining structural engineering practice and professional development

May 2006
to June 2009

Town of Mountain Village
Mountain Village, CO

Combination Inspector II / Engineer

Construction management services for pre-stressed concrete water storage tanks, including coordinating requests for quotes and preparation of site layout drawings of construction operations.

REGISTRATIONS and CERTIFICATIONS

Licensed Professional Engineer in Alabama (#PE57083)

Licensed Professional Engineer in Arizona (#78624)

Licensed Professional Engineer in Colorado (#PE.0058992)

Licensed Professional Engineer in Florida (#104429)

Licensed Professional Engineer in Kansas (#PE32411)

Licensed Professional Engineer in Louisiana (#PE.0051413)

Licensed Professional Engineer in Mississippi (#37584)

Licensed Professional Engineer in Montana (#87069PE)

Licensed Professional Engineer in Nebraska (#E-2069)

Licensed Professional Engineer in New Mexico (#28808)

Licensed Professional Engineer in Oklahoma (#PE 36003)

Licensed Professional Engineer in South Dakota (#20701)

Licensed Professional Engineer in Texas (#153586)

Licensed Professional Engineer in Utah (#296375-2202)

Licensed Professional Engineer in Wyoming (#PE19579)

National Council of Examiners for Engineering and Surveying (NCEES) (Record No. 12-584-44)

Society of Professional Rope Access Technicians (SPRAT) Level 1

OSHA 10-Hour Construction Safety

OSHA Confined Space Entry

OSHA Hazardous Materials

PROFESSIONAL ORGANIZATIONS

American Society of Civil Engineers (ASCE)
Structural Engineers Association of Colorado (SEAO-C)

CONTINUING EDUCATION

2026

- *Stacked for Success: Design Considerations for Modular Light-Frame Wood Projects*, WoodWorks Wood Products Council
- *Better Safe When Soaring: Bird-Friendly Glazing Approaches*, Simpson Gumpertz & Heger (SGH)
- *Reaching New Heights: Tall Veneers with Masonry*, International Masonry Institute (IMI)
- *Wood Design, Loads, Disaster Mitigation and Ethics*, Virginia Polytechnic Institute and State University (Virginia Tech)
- *Mitigating Challenges Related to Waterproofing Below-Grade Structures*, Wiss, Janney, Elstner Associates (WJE)
- *Professional Practice and Ethics*, Nebraska Board of Engineers and Architects (NBEA)
- *Adhered Veneers Wall Systems: Where to Start to Achieve Better Results*, Wiss, Janney, Elstner Associates (WJE)
- *Your Next Hire Might Not Be Human: How AI and Outsourcing Are Rewriting the Rules*, BQE Software Inc
- *Decoding CVN Impact Testing for Structural Steel*, Nucor
- *Considerations for Selecting Building Enclosure Systems for Single-Family Residential Construction*, Simpson Gumpertz & Heger (SGH)
- *When Old Buildings Meet New Standards: Energy Code Compliance Challenges*, Simpson Gumpertz & Heger (SGH)

2025

- *Practical Design of Slabs on Grade*, American Society of Civil Engineers (ASCE)
- *Structural Behavior of Wood Diaphragms: From Rigid to Flexible*, WoodWorks Wood Products Council
- *Forensic Engineering for Historic Structures*, Women in Restoration & Engineering (wire)
- *Avoiding Problems in Masonry Construction*, American Society of Civil Engineers (ASCE)
- *Revised Flood Load Combinations to Use with ASCE 7, Chapter 2*, American Society of Civil Engineers (ASCE)
- *Architectural Terra Cotta In-Situ Repairs*, International Masonry Institute (IMI)
- *2025 Ethics Roundtable Session 2*, New Mexico Board of Licensure for Professional Engineers and Professional Surveyors
- *Loadbearing Masonry Design: Advanced Planning Strategies for Structural Integrity & Efficiency*, International Masonry Institute (IMI)
- *Introducing the AISC Steel Construction Manual*, Women in Restoration & Engineering (wire)
- *Pier and Beam Foundation Design for Wind and Flood Loads*, American Society of Civil Engineers (ASCE)

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- *Mastering Metal: Key Insights for Field-Applied Architectural Coatings*, Wiss, Janney, Elstner Associates (WJE)
 - *Construction Specification Writing Guidance*, Women in Restoration & Engineering (wire)
 - *Challenges with Low-Slope Roof Replacement*, Women in Restoration & Engineering (wire)
 - *Block Party: Building Better CMU Foundations*, International Masonry Institute (IMI)
 - *What Is Corrosion and How Do I Find It in My Structure?*, Simpson Gumpertz & Heger (SGH)
 - *Challenges with Below-Grade Waterproofing*, Women in Restoration & Engineering (wire)
 - *Floor Vibrations in Buildings: From Modern Designs to Adaptive Reuse*, Wiss, Janney, Elstner Associates (WJE)
 - *Industrial Insights: Designing and Building New Industrial Buildings*, Simpson Gumpertz & Heger (SGH)
 - *Professional Engineering & Surveying Practice Update/Ethics*, Texas Board of Professional Engineers and Land Surveyors (TBPELS)
 - *Corrosion Basics and Assessment Techniques for Historic Concrete and Masonry Structures*, Women in Restoration & Engineering (wire)
 - *Beyond the Routine (Inspection)*, Wiss, Janney, Elstner Associates (WJE)
 - *After the Fire: Damage Assessment for Repair of Mass Timber Building Elements*, Wiss, Janney, Elstner Associates (WJE)
 - *Industrial Insights: Addressing Aging Infrastructure of Pipes and Tanks*, Simpson Gumpertz & Heger (SGH)
 - *Industrial Insights: Considerations for Marine Structures*, Simpson Gumpertz & Heger (SGH)
 - *The E&A Act, Potential Updates to Board Rules, and When Licensed Architects and Professional Engineers Need to Be Involved in a Project's Design*, Nebraska Board of Engineers and Architects (NBEA)
 - *Industrial Insights: Maintaining Existing Industrial Buildings*, Simpson Gumpertz & Heger (SGH)
 - *Sustaining Parking Garages: Proactive Approaches to Repair and Maintenance*, Simpson Gumpertz & Heger (SGH)
 - *Industrial Insights: Hazards and Resilience of Industrial Facilities*, Simpson Gumpertz & Heger (SGH)
 - *Wildland-Urban Interface Areas: Lessons Learned from Past Wildfires*, Simpson Gumpertz & Heger (SGH)
 - *Nondestructive Evaluation (NDE) Tools for Existing Masonry Structures*, Women in Restoration & Engineering (wire)
 - *Design of Tall Brick Veneer Structures*, International Masonry Institute (IMI)
 - *Roofing for Renewables: Designing Low-Slope Roof Systems for Photovoltaics*, Simpson Gumpertz & Heger (SGH)
 - *Designing Steel Connections Without Drilling or Welding*, Lindapter
 - *Build a Strong Defense Against Concrete Surface Scaling*, Women in Restoration & Engineering (wire)
 - *Investigating and Evaluating Truss Designs*, Paragon
 - *Metal Roof Design: Top 10 Problems and How to Solve Them*, AEC Daily Corporation
 - *Pursuing Building Energy Regulations: Energy Analysis Tools for Iterative Design*, Simpson Gumpertz & Heger (SGH)
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2024

- *Design of Roof Structures - Avoiding Common Errors*, American Society of Civil Engineers (ASCE)
- *Engineering Judgment - Structural Renovation of a 100-Year-old Historic Barn*, American Society of Civil Engineers (ASCE)
- *Curtainwall Primer for Design Professionals*, American Society of Civil Engineers (ASCE)
- *Engineering Practice for Wetting-Induced Collapse of Soils*, American Society of Civil Engineers (ASCE)
- *Geo-Structural Investigation of Existing Structures*, American Society of Civil Engineers (ASCE)
- *Optimizing Value, Performance, Constructability & Sustainability with Shrinkage-Compensating Concrete*, CTS Cement Manufacturing Corporation
- *Understanding IECC Building Enclosure Requirements*, Simpson Gumpertz & Heger (SGH)
- *Lab Live: Wood*, Simpson Gumpertz & Heger (SGH)
- *Quality Management During Design and Construction*, American Society of Civil Engineers (ASCE)
- *Investigation and Repair of Fire-Damaged Framing*, American Society of Civil Engineers (ASCE)
- *Passive House Panel Discussion: Tackling Hot Topics for an Evolving Industry*, Simpson Gumpertz & Heger (SGH)
- *Office-to-Residential Conversions: Strategic Modifications to Building Enclosure Systems*, Simpson Gumpertz & Heger (SGH)
- *2024 Ethics Roundtable Session 1*, New Mexico Board of Licensure for Professional Engineers and Professional Surveyors
- *Foundation Repair of San Francisco's Millennium Tower*, Simpson Gumpertz & Heger (SGH)
- *Investigation of Winter Roof Failures - Lessons Learned*, American Society of Civil Engineers (ASCE)
- *Collapse! Aftermath and Investigation*, Wiss, Janney, Elstner Associates (WJE)
- *Fast Cure Deck Membrane*, Sika USA
- *Wind Events and Glass Breakage: Lessons Learned in San Francisco*, Wiss, Janney, Elstner Associates (WJE)
- *Built to Last: Resilient Design Considerations for Building Enclosures*, Simpson Gumpertz & Heger (SGH)
- *Building Enclosure Commissioning (BECx): What You Need to Know*, American Society of Civil Engineers (ASCE)
- *Building Envelope Design and Construction Considerations: Lessons Learned in BECx*, Simpson Gumpertz & Heger (SGH)
- *Masonry Meets the Future*, International Masonry Institute (IMI)
- *Understanding and Evaluating Roofing Moisture Problems*, Simpson Gumpertz & Heger (SGH)
- *Lab Live: Coatings*, Simpson Gumpertz & Heger (SGH)
- *Repairing and Strengthening Bridges Using FRP*, Sika USA
- *Lessons Learned from IMI's Masonry Construction Document Reviews*, International Masonry Institute (IMI)
- *Debunking the Myths of Single Wythe Construction*, International Masonry Institute (IMI)

- *What Comes First? Balancing Safety and Deferred Maintenance Projects for Aging Buildings in Denver*, Simpson Gumpertz & Heger (SGH)
- *Understanding Building Enclosure Commissioning*, Wiss, Janney, Elstner Associates (WJE)
- *Do's and Don'ts of Concrete Repair Part 1*, Sika USA
- *Collapse Analyses of the World Trade Center Towers Following 9/11 Event*, Simpson Gumpertz & Heger (SGH)
- *Structural Fundamentals: Masonry Notes, Details, and Prototypes*, International Masonry Institute (IMI)
- *Masonry Movement Joints*, International Masonry Institute (IMI)
- *Stabilizing Masonry Construction: How to Recognize Issues and What to Do*, International Masonry Institute (IMI)
- *Protecting Structural Metals: Coatings for Corrosion Management*, Simpson Gumpertz & Heger (SGH)

2023

- *Mass Masonry Buildings, Part 2: Investigating, Diagnosing, and Mitigating Leakage Problems*, Simpson Gumpertz & Heger (SGH)
- *Masonry and Embodied Carbon*, International Masonry Institute (IMI)
- *2023 Ethics Roundtable Session 4*, New Mexico Board of Licensure for Professional Engineers and Professional Surveyors
- *Lab Live: Low-Slope Roofing*, Simpson Gumpertz & Heger (SGH)
- *To Coat or Not to Coat Existing Masonry Facades*, International Masonry Institute (IMI)