



UPDATED: December 2022
YEARS WITH FIRM: 10
YEARS IN INDUSTRY: 42

EDUCATION

Purdue University | West Lafayette, IN
1980 Bachelor of Science, Civil Engineering

PREVIOUS EXPERIENCE

- Contract Engineering, Motley Structural Design, LLC [2009 — 2012]
- Executive Director, Christ Community Church [2009 — 2012]
- Director of Engineering, Builders First Source [1993 — 2008]
- Regional Engineer, TruJoist MacMillan [1981— 1992]

REGISTRATIONS

Professional Engineer: NC #012713
Professional Engineer: SC #10696
Professional Engineer: FL #36383
Professional Engineer: GA #PE015393
Professional Engineer: AL #18862
Professional Engineer: IN #PE60021240
Professional Engineer: OH #54295
Professional Engineer: VA #16838
Professional Engineer: NJ #24GE03198700
Professional Engineer: CO #0059819

PROFESSIONAL ORGANIZATIONS

American Society of Civil Engineers (ACSE)
American Wood Construction (AWC)
Structural Engineering Institute (SEI)
Structural Building Components Association (SBCA)
Member Truss Plate Institute ANSI/TPI 1 Standard Project Committee (2002, 2007, 2021)

PRINCIPAL AREAS OF PRACTICE

- Engineered Wood Components (trusses, I-joist, Structural Composite Lumber) and Wood Framing (includes decks, stairs, and truss collapse)
- Structural Analysis and Design
- Building Enclosure
- Roof Systems
- Deficient Construction
- Contract Administration
- Personal Injury

Scott D. Coffman has over 40 years in structural wood design experience, predominately in engineered wood building components (trusses, I-joist, engineered wood beams), that includes engineering analysis, code compliance, product testing, field investigations, FRT lumber, construction related problems and product application and serviceability. His work involved a wide variety of institutional, light commercial and residential structures. He has been responsible for diagnosing problems and designing repairs that include coordination and monitoring of repair activities. Scott has also investigated and testified regarding deficient construction, building enclosure, and the performance of wood building products. Projects include analysis of deficient construction cases including roofs, exterior walls, structural framing, balconies and building code review.

ENGINEERED WOOD COMPONENTS

- I-Joist, LVL/PSL/LSL, Glulam, and metal plate connected wood truss analysis and design | Eastern US
- I-joist and wood truss manufacturing | OH, GA and SC
- Investigation and assessment of wood truss, I-joist, and engineered lumber components systems | Eastern US
- Investigate wood component roof and/or floor collapse | Eastern US
- Investigate Fire Retardant Treatment (FRT) truss components | throughout US
- Assessment of wood component fire or moisture damage | Eastern US
- Pressure Treated PSL design | US
- Member Truss Plate Institute ANSI/TPI 1 Standard Project Committee (2002, 2007)

STRUCTURAL

- Investigate building structural integrity, concrete floors, walls and brick veneer damage caused by sinkhole | SC
- Structural analysis and design of residential, light commercial, and pool house buildings | SC
- Evaluate load path | throughout US
- Metal building foundation analysis and design | SC
- Post frame building analysis and design | SC
- Investigate numerous residential and light commercial structural framing and foundation systems to assess structural deficiencies | SC, NC
- Investigate deficient balcony railing construction on single and multi-family residential buildings | NC, SC
- Investigate wood deck/balcony/stair design and construction deficiencies | NC, SC
- Low-slope (roof and balcony) investigations
- Residential and light commercial structures damaged by insect infestation | SC
- Analysis and design of heavy timber trusses | SC
- Structural analysis of existing wood roof framing to support photovoltaic systems | VA
- Investigate and evaluate concrete slabs and steel frames subjected to wildfire | TN
- Analysis of Roof Gutter Support Fasteners | VA

BUILDING ENCLOSURE

- Brick veneer cladding installation deficiencies on residential and mixed use structures | SC
- Wood siding, vinyl siding, and stucco installation deficiencies on residential and multi-family structures | SC

ROOF SYSTEMS

- Investigate roof installation on multi-family buildings | SC
- Investigate roof installation on residential structures including clay tile, metal panels, and membrane | SC

DEFICIENT CONSTRUCTION

- Investigate various structural, building enclosure, waterproofing, fire protection, and life-safety related deficiencies at residential developments | SC
- Investigate various structural and building enclosure related deficiencies at single family residence | SC
- Evaluate various structural framing related deficiencies at residential development | SC
- Investigate gypsum underlayment performance at residential development | SC
- Investigate wood flooring complaints for single family residences | SC, NC

CONTRACT ADMINISTRATION

- Administration of contract, foundation anchor design; True Blue, Pawley's Island | SC
- Evaluate deficient walkway railing in eight (8) building multi-family complex. Develop repair scope, selection of qualified contractor, administration of contract | Bay View Golf, Myrtle Beach, SC
- Evaluate construction deficiencies in eleven (11) building multi-family complex. Develop repair scope and administration of contract; Queens Harbour, Myrtle Beach, SC

PERSONAL INJURY CASES

- Wood truss collapse | Eastern US
- Investigation of slip and fall on farm ramp | SC
- Investigate steel frame demolition injury at manufacturing facility | SC

PRESENTATIONS AND PUBLICATIONS

- Co-Author and Presentation, Presenter: **"Mitigating Wood-Framed Egress Stair Stringer Failures"**, 9th Forensic Engineering Conference November 2022.
- Presentation, Presenter: **"Mitigating Wood Stair Failures and Errors in Substituting Dead Load for Live Load in Wood Design"**, Structural Design Topics in Wood Construction (Virginia Tech) May 2022.
- Co-Author: Coffman, S.: **"Low-Slope Roofs: Design Solutions for Building Code-Permitter Low-Slope Applications That Cause Ponding Water"**, (Reprint) Licensed Architect, Winter 2020-2021

CONTINUED

PRESENTATIONS and PUBLICATIONS CONTINUED

- Presentation, Presenter: **“Why Does My Roof Pond?”**, Structural Engineer’s Association of South Carolina – Greenville Chapter, August 2019.
- Presentation, Presenter: **“Design Solutions for Building Code Permitted Low-Slope Applications that Cause Ponding Water”**, presented at the 2019 IIBEC (RCI) International Convention and Trade Show, March 2019.
- Co-Author: Coffman, S., C+S Engineering: **“Design Solutions for Building Code Permitted Low-Slope Applications that Cause Ponding Water”**, March 2019.
- Co-author: Coffman, S., Component Manufacturer Advertise Addressing the Roof Truss Design Note: **“Provide adequate drainage to prevent water ponding”**, January 2019.
- **“Errors in Substituting Dead Load for Live Load in Wood Design”**, Component Manufacturer Advertiser, October 2018.
- Presentation, Presenter: **“Wood Truss Specification and Permanent Bracing Design, Structural Design Topics in Wood Construction”**, Virginia Tech, Blacksburg, VA, April 2018.
- Presentation, Presenter: **“Designing Roofs and Balconies to Avoid Ponding, Structural Design Topics in Wood Construction”**, Virginia Tech, Blacksburg, VA, April 2018.
- Author: Coffman, S.: **“Low-Slope Roof and Deck Design Considerations”**, STRUCTURE Magazine, September 2017. Reprinted Wood Design Focus, Winter 2017.
- Author: Coffman, S.: **“¼ in 12 Design Slope and Water Drainage”**, STRUCTURE Magazine, August 2017. Reprinted Wood Design Focus, Winter 2017.
- Co-Author: Coffman, S.: **“Designing for Damp Conditions”**, Structural Building Components, Sept/Oct 2016.
- Co-Author: Coffman, S.: **“The Difficulty of Differing Deflection”**: Structural Building Components, June/July 2016.
- Co-Author: Coffman, S.: **“Tending to Deflection”**, Structural Building Components, March 2016
- Seminar: **“Load Path for CSE Structural Load Pat”**, November 2015*
- Co-Author: Coffman, S.: **“Truss Industry Standard of Care Issues: Part 5”** Structural Building Components, June/July 2015.
- Co-Author: Coffman, S.: **“Truss Industry Standard of Care Issues: Part 4”**, Structural Building Components, April 2015.
- Co-Author: Coffman, S.: **“Truss Industry Standard of Care Issues: Part 3: Truss Bearing”**, Structural Building Components, March 2015.
- Co-Author: Coffman, S.: **“Truss Industry Standard of Care Issues: Part 3: Truss Connections”**, Structural Building Components, December 2014.
- Presentation, Presenter: **“Problems with Brick Veneer for Understanding Exterior Wall Failures & South Carolina Law Issues”**, SC, December 2013.

- Presentation, Presenter: **“Practical Applications of TPI 1 for the Design Professional of Record”**, NCSEA Webinar, July 2011.
- Presentation, Presenter: **“Practical Application of TPI 1 for the Design Professional of Record”**, SCSEA Conference, July 2010.
- **“The Board Footage Myth Debunked”**, Structural Building Components, August 2008.
- **“Lateral Load Capacity of Toe-Nailed Truss-To-Truss Girder Connections”**, Structural Building Components, September 2006.
- **“Wall Girders”**, Structural Building Components, March 2006.

DEPOSITIONS and TESTIMONY

- McCarty vs. Liberty Mutual (plaintiff) – 2022 Deposition – CSE File No. 409.81 Animal Damage to HVAC Duct and Condensation of Wood Framing
- Auto Owners vs. The Lee Co. (plaintiff) – 2021 Deposition – CSE File No. 2034.01 and 117.05 – Roof Blow-Off and Improper Residential Wood Frame Construction
- Ligon vs. Sharp (plaintiff) – 2021 Deposition – CSE File No. 2025.01 – Real Estate Transaction, Flood History, Third Party Report Review, Microbial Growth Causation, Repair Recommendation
- Queens Harbor (plaintiff) – 2019 Deposition – CSE File No. 406.40 – Construction Defects, Roof Cover, Structural Framing, Building Enclosure
- Cedar Bluff Court (plaintiff) – 2019 Deposition – CSE File No. 406.48 – Construction Defects, Structural Framing (exterior deck)
- Reeves vs. J&D Construction Co. Inc., Atlantic Building Components & Services, Inc., and Fox Investments, LLC (plaintiff) – 2019 Deposition – CSE File No. 205.32 – Structural framing, metal plate connected wood truss design
- Kerr vs. Living Stone (defense) – 2018 Arbitration – CSE File No. 318.05 – Structural framing, residential deck construction, wood flooring, building enclosure, retaining wall, shower system
- Collins Residence (plaintiff) – 2017 Deposition – CSE File No. 257.05 – Construction Defects, Structural Framing, metal plate wood truss design
- Young Residence (plaintiff) – 2017 Arbitration – CSE File No. 406.36 – Construction Defects, Roof Cover, Structural Framing, Site Erosion Control
- Waverly vs. Weiland (defense) – 2017 Trial – CSE File No. 370.03 – Structural Framing
- Magnolia Point (plaintiff) – 2015 Deposition – CSE File No. 405.31 – Construction Defects, Building Enclosure, Structural Framing, Siding, Brick Veneer, Guardrails, Stairs
- St. Andrews (plaintiff) – 2014 Deposition – CSE File No. 201.11 – Construction Defects, Framing