

Robert H. Midkiff, Jr., P.E. | Principal Civil/Structural Engineer

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Professional Summary:

Mr. Midkiff has forty-five years of experience in structural and civil design, construction, project management, and evaluation of commercial, industrial and residential buildings for attorneys, insurance companies, and property owners. Mr. Midkiff's expertise includes origin and cause (O & C) investigations related to structural failures and damages, catastrophe response, hail and wind damage, foundation settlement, and structural repair design. Mr. Midkiff has also performed structural design for large commercial and industrial buildings.

Mr. Midkiff has extensive experience on the evaluation of damaged and failed structures, building code violations, construction defects, building foundation damage, retaining wall failure, and OSHA structural load ratings.

Areas of Expertise:

- Water Intrusion
- Structural Failures of Building Components and Systems
- Structural Foundation Failures
- Hail / Wind Damage to Commercial Roofing Systems
- Construction Defect Evaluation
- Welding Evaluation
- Vibration and Fatigue Analysis
- Wind Load Analysis
- Design and Analysis of Cold-Formed Steel Structures
- Design and Analysis of Aluminum Structures, Including Street Lighting Poles
- Design and Analysis of Flat Bottom Tanks Per API-650
- Design and Analysis of Steel, Wood, and CMU Structures
- Structural Analysis – Post Fire

Licenses and Certifications:

Professional Engineer, AL, #22382
Professional Engineer, FL, #53022
Professional Engineer, GA, #24420
Professional Engineer, KY, #20503
Professional Engineer, MD, #23240
Professional Engineer, NC, #15197
Professional Engineer, SC, #18827
Professional Engineer, TN, #104717
Professional Engineer, VA, #0402-010388
Professional Engineer, WV, #13793
AHERA-OSHA O&M Certificate

Project Experience:

**Coltex Incorporated, Clover, SC
Wind Damage Investigation -**

Investigated wind damage to roof of 89,000 sq. ft. commercial building. Determined cause and origin and evaluated the damages, including failure of heavy timber roof framing.

**Lowe's of Murray, KY
Structural design -**

Structural design and specifications for the construction of a 130,000 square foot retail facility. Construction was masonry walls with conventional steel joists and decking with a single-ply roofing system.

**Lowe's of White Marsh
(Baltimore), MD
Structural Failure**

Evaluated failure of steel roof joists due to snow loading. This included a site inspection and review of construction documents; and interviews with the structural engineer of record, the steel fabricator and steel erector. Determined cause and origin.

Multiple Lowe's Locations in Thirteen Western States

Managed construction of 135 new Lowe's in AK, AZ, CA, CO, HI, ID, MT, NM, NV, OR, UT, WA, WY. Construction expenditures were approximately \$1.3 billion.

Court Qualifications/ Depositions:

Litigation CV available upon request.

Professional Experience:

EFI Global, Charlotte, NC, Structural Engineer, 2011 - Present
Progressive Design, Inc., Richmond, VA, Manager of Civil/Structural Engineering, 2011 Lowe's Companies, Inc., Director of Engineering & Construction, 1998 - 2011
BETCO, Inc., Chief Engineer, 1996 – 1998
CMI, Inc., Project Engineer, 1992 – 1996
BNE, Rocky Mount, NC, Director of Site Development, 1986 – 1992
Hapco Division, DKM Inc., Abingdon, VA, Manager of Engineering, 1977 – 1983
Chicago Bridge & Iron Co., Oak Brook, IL, Field Engineer / Design Engineer, 1973 – 1977



Specialized Education:

Anchorage to Concrete, ACI, Richmond, VA, 2010
Construction Materials Testing, Forensic Evaluation, Environmental Testing,
EAS/Carolinas, Wilkesboro, NC, 2010
HSS Connection Design, AISC, Jacksonville, FL, 2010
ACI-318-08, The Structural Concrete Standard, ACI, Charlotte, NC, 2008
Troubleshooting Concrete Forming & Shoring, ACI, Williamsburg, VA, 2009

Education:

BS, Civil Engineering, Virginia Tech, Blacksburg, VA, 1973
MBA, Marketing & Finance, Virginia Tech, Blacksburg, VA, 1986

Courses Instructed/ Guest Lecturer:

Structural Design Issues for West Region Lowe's, 2001
Successful Contract Administration for Lowe's General
Contractors, 2005 Insurance Based Civil/Structural Site
Investigations, 2016