

Barrow Engineering, LLC

Structural & Forensic Engineering / Inspections

Richard S. Barrow, P.E., S.E., S.I.

Barrow Engineering, LLC.
P.O. Box 1128
Estero, FL 33929

Curriculum Vitae

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(239) 410-7768

EXPERTISE

Mr. Barrow has been practicing structural engineering for over 37 years. He founded Barrow Engineering, LLC in 2021 to specialize in forensic engineering, structural repairs, and claim investigations.

Mr. Barrow has performed numerous forensic investigations involving structural failures, design deficiencies, faulty construction, construction pay applications, failure to disclose defects, grading issues, cladding failures, roof damage, site plans, pool leaks, water intrusion, fire, wind, subsidence, and vehicular impact. Design of shoring and other remedial actions have been provided as part of forensic projects where there are conditions that may become unsafe or need repair. Mr. Barrow is experienced in insurance claim work, litigation, and testimony involving legal issues. He has testified under oath in court and in depositions and has presented at mediation and arbitration hearings.

Prior to Barrow Engineering, LLC., Mr. Barrow was the president and founder of Liebl & Barrow Engineering, Inc. ("LBE") located in Fort Myers, FL. From its inception in 1998 through 2021, the firm worked on nearly 3,000 projects, specializing in structural design, inspections, restoration, and forensic investigations. LBE designs included coastal construction projects involving high winds, wave loads, flooding, and scour. LBE designed or specified repairs for a variety of structures, including residences, pools, high rise condominiums, churches, schools, offices, and industrial facilities. Projects of note include 450,000 sf of independent living facilities and clubhouses on one site, a 10-story high-rise condominium, a 48,000 sf three-story educational building, a 50,000 sf four-story office building, a 300,000 sf of apartments in 18 three-story buildings, a 50,000 sf of church sanctuary and fellowship facilities, and a 40,000-sf college auditorium and museum.

Mr. Barrow began his post graduate career in structural engineering with a large international firm in Houston, Texas. His structural work included the design of a 245-foot-tall refinery structure, a blast resistant control room, a 120-foot-tall derrick structure, and the support for a 1,730-ton electrostatic precipitator. Mr. Barrow progressed to become a project leader for several industrial projects valuing up to \$32,000,000 in construction costs. He led the civil/structural quality assurance program for a \$200,000,000 project and led the company concrete construction development program, which included development of specifications, design procedures, and mix designs.

Mr. Barrow subsequently worked at four engineering firms in southwest Florida where he provided structural, forensic, and land development engineering services.

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Mr. Barrow is a licensed Professional Engineer in five states and a licensed Structural Engineer in one state. He is also a licensed Special Inspector (i.e., Threshold Inspector) in the State of Florida which allows him to inspect tall or high occupancy structures. Mr. Barrow has been the Special Inspector for over 100 structures which involved a variety of structural systems, including 1,100,000 sf of mixed-use facilities on one site.

Mr. Barrow researched and tested concrete materials for his master's thesis from the University of Texas at Austin. He also worked at the Army Corps of Engineers Construction Research Laboratory.

STATE LICENSES

Active Professional Engineering Registrations

- Texas P.E. 71142 (1991)
- Alabama P.E. 31350-E (2010)
- North Carolina P.E. 034213 (2008)
- Georgia P.E. 032845 (2008), S.E. 000207 (2021)
- Florida P.E. 49231 (1995)
- Florida S.I. 2015 (Special Inspector, 2001)

PROFESSIONAL HISTORY

- Barrow Engineering, LLC., Fort Myers, FL: 2021 to present (owner/manager)
- Liebl & Barrow Engineering, Inc., Fort Myers, FL: 1998 to 2021 (owner/president)
- TKW Consulting Engineers, Inc., Fort Myers, FL (senior engineer)
- McKee & Associates, Inc., Bonita Springs, FL (vice president)
- The M.W. Kellogg Company, Houston, TX (senior engineer)
- University of Texas/Center for Transportation Research, Austin, TX (research assistant)
- HRP Construction, Inc., South Bend, IN (staff engineer)
- U.S. Army Corps of Engineers Construction Engineering Research Laboratory, Champaign, IL:1982-1985 (student trainee)

UNIVERSITY EDUCATION AND ACADEMIC HONORS

- Master of Science in Civil Engineering, University of Texas at Austin, Austin, TX (1988)
- Phil M. Ferguson Endowed Presidential Graduate Scholarship in Civil Engineering (University of Texas)
- Bachelor of Science in Civil Engineering with Honors, Purdue University, West Lafayette, IN (1986)
- Army Corps of Engineers/Purdue University, Cooperative Education Program
- Tau Beta Phi – Engineering Honor Society
- Chi Epsilon – Civil Engineering Honor Society
- Phi Sigma Theta – National Honor Society
- Tony Clarke Scholarship – School of Civil Engineering (Purdue University)

SPECIALIZED TRAINING AND CERTIFICATIONS

- National Academy of Forensic Engineers – Board Certified in Forensic Engineering (2018- present)
- Volunteered as a structural specialist for a Florida urban search and rescue team (USAR) for 11 years. Received over 200 hours of training from FEMA / U.S. Army Corps of Engineers (“FEMA/USACE”) on structural collapses, failures, and rescue operations.
- FEMA/USACE Urban Search & Rescue Structures Specialist STS1 certification (2007)
- FEMA/USACE Urban Search & Rescue Structures Specialist STS2 certification (2008)

AFFILIATIONS

- National Council of Structural Engineers – past president of the southwest Florida branch and state board representative
- National Society of Professional Engineers (2013-present)
- National Academy of Forensic Engineers (2018-present)
- American Concrete Institute: active voting member on Committee 311 – Inspection of Concrete (2021-present)
- American Concrete Institute: active member on Committee 332G –Residential Concrete (2024-present)
- American Society of Civil Engineers: Current Chairman of the Executive Board of the Forensic Engineering Division (FY2025). Also, an active member on the Committee on Forensic Investigations (2016-present).

PEER-REVIEWED PUBLICATIONS

- *Failure Reduction Through Construction Inspections*, Proceedings ASCE’s 9th Forensic Engineering Congress, November 2022.
- *Do Not Forget Serviceability!*, Richard S. Barrow, Structure Magazine, June 2021.
- *Fuzzy Wood and Coastal Piles*, Richard S. Barrow, Structure Magazine, June 2020.
- *Guidelines for Failure Investigation*, edited by Richard S. Barrow, Ronald W. Anthony, Kimball J. Beasley, and Stewart M. Verhulst. American Society of Civil Engineers (2018). (Mr. Barrow was also a co-author).
- *Temperature Rise and Durability of Concrete Containing Fly Ash*, R.S. Barrow, K.M. Hadchiti, P.M. Carrasquillo, R.L. Carrasquillo, American Concrete Institute SP -114 (1989).
- *Effect of Fly Ash on the Temperature Rise in Concrete*, Richard S. Barrow and Ramon L. Carrasquillo, Research Report 481-2, Center for Transportation Research, Bureau of Engineering Research, The University of Texas at Austin (1988).

- Assisted on study: *Development of Polyurethane Foam Flotation Bridging/Rafting Systems up to Military Load Class 20*, Orange S. Marshall, US Army Corps of Engineers, Construction Engineering Research Laboratory, Volume M-348 (1984).

PEER REVIEWER FOR PUBLICATION

- *Forensic Engineering 2024: Finding Answers to the What, Why, Who and How of Preventing Failures*, Proceedings ASCE's 10th Forensic Engineering Congress, November 2024.

PRESENTATIONS

- Short course: *Guidelines for Failure Investigations – Volume 2*, ASCE 9th Forensic Engineering Congress in Denver, CO (2022).
- Short course: *Forensic Investigation Topics: An Update from the Committee*, ASCE/SEI Structure Congress 2022 in Atlanta, GA (2022).
- Short course: *Conducting Failure Investigations*, ASCE 8th Forensic Engineering Congress in Austin, TX (2018).

EXPERT WITNESS DESIGNATION

This curriculum vitae shall not be used for expert witness designation unless an authorized proposal has been executed with Barrow Engineering, LLC.