



Sergio G. Arratia

PE

Senior Managing Engineer

Department

Engineering Services

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Locations

Boca Raton, FL

Biography

Sergio Arratia has been involved with civil engineering for most of his life, as his father, another Civil Engineer, shared the passion for the career with him. After earning his master's degree at the University of Arkansas, Sergio worked as a design engineer and eventually became a project manager at a structural engineering consulting firm. His interest in understanding how structural systems are designed, analyzed, built, and maintained led him to the field of forensic engineering. As forensic engineer for over 5 years, Sergio provides technical consultation related to construction evaluation of residential and commercial structures, failure analysis, evaluation of scope and cause of damage to structures, wind and hail damage assessment, water intrusion investigation, remediation analysis, structural load analysis, structural design analysis, cause and origin of plumbing leaks, and ADA compliance. Sergio also serves as an engineering expert witness providing sworn statements and witness testimony. His clients include insurance companies, legal firms, independent adjusters, municipalities, private companies, homeowners, and individuals. He is fluent in both Spanish and English and also provides services to Latin America and the Caribbean.

Credentials

- PE | Professional Engineer
- National Council of Examiners for Engineering and Surveying Record (#13-923-04)
- HAAG Certified Inspector - Commercial Roofs (#201804300)
- HAAG Certified Inspector - Residential Roofs (#201804300)
- FenestrationMaster® Professional Certification
- Florida Association of Realtors® (#SL3359394)
- National Association of Realtors® (#278050977)

Representative Consulting Assignments

- Multi-Level Garage Structure | Kendall, FL | Evaluate scope of damage to concrete structure from vehicle fire
- High-Rise Building | Miami Beach, FL | Evaluate reported damage to fenestration as a result of hurricane winds
- Residential Structure | Boaz, AL | Evaluate structural damage as a result of tornado winds and debris impact
- Commercial Metal Building | Cocoa, FL | Evaluate roofing and siding damage as a result of hail impact
- High-Rise Building | Aventura, FL | Evaluate reported damage to roofing as a result of hurricane winds
- Walkway Safety | Sunrise, FL | Evaluate construction of public walkway for ADA compliance
- Condominium Complex | Naples, FL | Evaluate structural damage as a result of hurricane winds and storm surge in large condominium complex

Professional Experience

- 2023 - Current | Senior Managing Engineer | YA Engineering Services
- 2018 - 2023 | Consulting Engineer | Engineering Design & Testing Corp.
- 2015 - 2018 | Project Manager | Bryntesen Structural Engineers
- 2011 - 2014 | Project Manager | Tatum-Smith Engineers, Inc.
- 2008 - 2010 | Design Engineer | CMC Joist and Deck

Area of Practice

- ADA Compliance Assessment
- Bridge Engineering
- Building Envelope
- Building Code Upgrade Review
- Condition Assessment
- Construction Administration
- Damage Assessment
- Failure Analysis
- Litigation Support
- Non-Destructive Testing
- Plumbing Systems
- Roofing
- Structural Analysis

Publications and Presentations

- Evaluation of Bridge Deck Curing Procedures, University of Arkansas
- Identifying Damage to Concrete and Clay Roof Tiles, EDT The Stress Point
- Why is My Building Cracking?, EDT The Stress Point
- What is the Relationship Between MPH and PSF?, EDT The Stress Point

Education

- University of Arkansas - Master of Science - Civil Engineering - Fayetteville - Arkansas
- University of Arkansas - Bachelor of Science - Civil Engineering - Fayetteville - Arkansas

Affiliations

- American Concrete Institute (ACI)
- American Society of Civil Engineers (ASCE)
- Fenestration & Glazing Industry Alliance (FGIA)
- Chi Epsilon National Civil Engineering Honor Society
- Tau Beta Pi National Engineering Honor Society

Licenses

- 37444-E - Alabama - Professional Engineer
 - 15388 - Arkansas - Professional Engineer
 - 82552 - Florida - Professional Engineer
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