



REGINALD FEQUIERE, M.S., P.E., S.I.

Mr. Fequiere is a graduate of Florida International University in Miami with a Master's of Science in Structural Engineering and a graduate of University Quisqueya, Port-au-Prince, Haiti with a Bachelor's of Science in Civil Engineering. Mr. Fequiere has extensive design experience of structures in high velocity hurricane zones and is well versed in the design of structures in seismic regions.

Throughout his career, Mr. Fequiere has gained experience in concrete restoration, a 40 year re-certification of aging buildings, and experience in the design of concrete, steel, light gauge metal, masonry, and timber structures. He has worked on multiple types of projects, including residential, single, and multi-story structures; commercial high-rise buildings; and industrial and government buildings and has extensive experience in the design of building shell components such as exterior spandrel glass framing, Densglass soffits, and masonry walls. Mr. Fequiere has performed construction administration duties on multiple projects in Florida and is familiar with the local construction practices and field conditions. As part of his construction administration duties, he has had to perform structural evaluation of distressed building components to determine each cause and provide solutions to remediate each problem. His experience includes projects located in the United States, the Caribbean, and in the Middle East, and he has acquired considerable knowledge of different building codes.

Mr. Fequiere's forensic experience includes damage assessment for residential and commercial buildings, including roof evaluation for wind, storm, and impact damage; building shell evaluation for storm and vehicular impact damage; structural evaluation of buildings for damages resulting from settlement, fires, and sinkhole activity; damage evaluation of flooring systems and finishes as result of moisture exposure, impact damage, or installation issues; and evaluation of flood damage.

Mr. Fequiere is also trained and certified as a Residential Roof Inspector to assess damage to all major types of residential steep slope roofs, including damage from wind and hail and can evaluate installation, weathering, maintenance, mechanical damages, and repair costs of asphalt composition, wood shingle/shake, concrete, clay tile, and asbestos-fiber cement roof coverings.

Mr. Fequiere has been designated as an expert witness and has provided expert witness testimony at trials and in depositions when requested.

EDUCATION

M.S. – Civil Engineering (Structural Design) – Florida International University, 2006

B.S. - Civil Engineering – University Quisqueya, Port-au-Prince, Haiti, 2003

LICENSES AND CERTIFICATIONS

Professional Engineer Licenses

California #73502

Florida #71923

Georgia #37974

Louisiana #PE0045624

Other

Florida: Special Inspector (SI)

PROFESSIONAL AFFILIATION

National Council of Examiners for Engineering and Surveying (NCEES) Records Program

SPECIALIZED TRAINING

BURSI Seminar: Fundamentals of Commercial Roofing

Efflorescence: Causes and Cures

Hurricane Damage: Wind vs. Water Determination

Moisture Control in Brick Masonry

Evaluation of damage in concrete elements

Repair planning and preparation of concrete elements

Building pathology: Site drainage problems, Foundations, Roofs

Roofing : Flexible Membrane edge design- Flexible Membrane wind design

Leak Detection for Roofs

Roofing in high velocity hurricane zones

HAAG Engineering Company, Residential Roof Course Workbook-Haag Certified Inspector Program, 2012.

2020 Advanced Florida Building Code

Design of Buildings for Coastal Flooding

Anatomy of Construction Defects

Design of Buildings for Tornadoes

Design of Foundation Repair

WORK EXPERIENCE

U. S. Forensic, LLC

2011 - Present

Professional Engineer

- Analyze failures in civil/structural engineering disciplines relating to residential and commercial buildings.
- Perform flood damage evaluations and evaluate design and construction defects, structural failures, foundation failures, roof failures, hail damage to roofing, water source identification, and construction compliance.
- Draft reports to document and communicate the findings of each investigation and forensic evaluation.

Desimone Consulting Engineers

2005 – 2011

Senior Project Engineer

Project Engineer

- Performed the design and construction administration duties of numerous engineering projects consisting of new construction, and modifications to existing features.
- Supervised the construction of high-rise and residential structures.
- Coordinated efforts of structural, mechanical, electrical, and plumbing consultants and trades during the design and construction phases of projects.
- Coordinated the preparation of construction documents for the purposes of permitting and as-built drawings.
- Performed structural engineering design of residential and commercial building structures to resist wind and seismic loading.

Projects

- VIRGIL'S BARBECUE RESTAURANT, PARADISE ISLAND, BAHAMAS (2011). Project consisted of the renovation of some dining and kitchen areas within the Atlantis resort in the Bahamas.
 - Evaluated existing structural elements, strengthening deficient members, providing new structural elements to support the new equipment, providing structural details, performing site visits to evaluate the progress of construction, insuring that construction was consistent with the approved drawings, and addressing changes to field conditions that occurred during construction.
- 1101 BRICKELL, MIAMI, FLORIDA (2010). A Proposed 800 feet tall residential development.
 - Evaluated the gravity & lateral framing systems that resists the wind loads.
 - The project also included a two-story all glass addition that was to house a bank branch office. Designed, detailed, and prepared

permit documents and handled the coordination with the architect for this portion of the project.

- ATLANTIS TEEN CLUB, NASSAU, BAHAMAS (2010). Project consisted of retrofitting an existing ballroom to transform it into a night club and gaming area for young adults.
 - Evaluated the existing steel frames for the new loading due to the mechanical, lighting, and ceilings that were added.
 - Detailed miscellaneous support elements and reviewed the design by specialty engineers of several specialty items.
- AL AIN WILDLIFE PARK AND RESORT, ABU DHABI, UNITED ARAB EMIRATES (2009-2010). Proposed residential and resort development.
 - Established the lateral & gravity framing systems that were to resist the applied wind and seismic loads and the detailed the structural members.
 - Managed and developed the overall design of the structural system for the residential development, the main lobby, restaurant structure, and several miscellaneous site structures (pedestrian bridges, canopy structure etc.).
 - The design was performed taking into consideration construction methods available in the region.
- SONESTA RESORT, KEY BISCAYNE, FLORIDA (2011). Proposed resort consisting of four 180 feet tall residential towers with a two-level underground garage in Key Biscayne, Florida.
 - Established the design parameters and defined the gravity and lateral structural system-
 - Prepared the structural portion of the permit package for all phases of project.
- 900 BISCAYNE, MIAMI, FLORIDA (2006 - 2008). Residential building 660 feet tall in downtown Miami.
 - Designed link beams and their connections, valued engineering of shear walls, and pile cap reinforcement.
 - Performed the construction administration duties for the project and provided engineering support for miscellaneous items.
- MARQUIS, MIAMI, FLORIDA (2005 - 2008). Residential building 700 feet tall in downtown Miami.
 - Designed the lateral system to withstand wind loads.
 - Designed post-tension slabs using the FEM software Ram Concept.
 - Designed additional components, including shear walls, link beams and foundations.
 - Valued engineering of shear walls and foundations.

- Performed construction administration and miscellaneous designs.
- THE MOHEGAN SUN CASINO – CENTRAL PLANT - CONNECTICUT (2008). Design of a steel truss utility bridge to connect supply pipes from the Central Plant to the rest of the facilities on the site.
 - Designed steel trusses and their connection to the existing central plant.
- GSA OFFICE BUILD-OUT AT THE OMNI CENTER, MIAMI, FLORIDA (2009). Project consisted of evaluating the structure in the existing space for the implementation of an office space for a GSA diplomatic security office.
 - Evaluated the structure for the different loading requirements imposed by the GSA office.
 - Designed miscellaneous specialty items, including the design of the support structure for a chair lift for handicap access.
- PORT OF MIAMI-TERMINAL B & C RENOVATION, MIAMI, FLORIDA (2010). Project consisted of adding two new gates accesses to the cruise ships and required replacing the existing cladding with new cladding and addition of access doors.
 - Designed the support structure for the new cladding.
 - Provided engineering support during the construction phase.

Ronial Enterprises Inc.

2004- 2005

Engineer

- Designed light gauge metal structures,
- Performed concrete restoration design, forensic work and design of steel & timber structures as well as 40 year certifications of building structures.

Projects

- PERFORMING ARTS CENTER OF GREATER MIAMI, MIAMI, FLORIDA (2004 - 2005). World class performance hall.
 - Designed and performed special inspections duties for complex ceiling framing (domes, drum walls, soffits, etc.) for both the Concert Hall and the Opera House.
- PALMETTO GENERAL HOSPITAL, MIAMI, FLORIDA (2004 - 2005). Project consisted of an expansion of the medical facilities by adding a second story to an existing building.
 - Designed and detailed exterior light gauge metal framing for the addition to original structure.

Forensic Engineering Experience (2004 - 2005)

- SOUTH FLORIDA BLOOD BANK, WEST PALM BEACH, FLORIDA. Evaluated water damage after hurricane Wilma.

- LA COSTA CONDOMINIUM, MIAMI BEACH, FLORIDA. Evaluated and prepared repair procedures for concrete columns.
- KERMARBLE WAREHOUSE, HIALEAH, FLORIDA. Evaluated of the cause of slab cracks on warehouse floor, reviewed the original slab design, and determined code compliance of the in-place slab structure.