



### Alfonso E. Alzamora, PE, CGC

Vice President and Principal Weston, Florida aalzamora@gciconsultants.com (786) 423-6171

## **PROFESSIONAL PROFILE**

Professional Engineer and Certified General Contractor with 20 years of consulting and engineering experience, specializing in the design, evaluation, inspection, and testing of building envelope systems, including exterior wall claddings, fenestrations, waterproofing, and roofing systems, for new and existing structures. Member of various industry organizations and accredited LEED professional. Extensive experience includes work on hundreds of projects throughout North America and the Caribbean, providing technical expertise on all types of building projects to develop and construct high-performance building enclosure systems as well as conducting forensic evaluations on buildings with envelope performance problems, that often lead to remedial design and management of restoration programs and expert witness testimony.

### **PROFESSIONAL EXPERIENCE**

2015 - Present	: <b>Vice President and Principal</b> GCI Consultants, LLC – Weston, Florida Building Envelope Consulting and Engineering Firm
2013 - 2015:	<b>Director of Building Envelope Technology</b> Premiere Design Solutions, Inc. – Weston, Florida Full-service Engineering Consulting Firm
2011 - 2013:	Vice President and Director of Engineering GCI Consultants, LLC – Weston, Florida Building Envelope Consulting and Engineering Firm
2009 - 2011:	<b>Senior Consultant</b> GCI Consultants, LLC – Weston, Florida Building Envelope Consulting and Engineering Firm
2005 - 2009:	<b>Consultant</b> GCI Consultants, LLC – West Palm Beach, Florida Building Envelope Consulting and Engineering Firm
2003 - 2005:	<b>Project Manager</b> RC Aluminum Industries, Inc. – Miami, Florida Architectural Glass and Aluminum Systems Design, Manufacturing, and Installation Firm



### 2002 - 2003: **Project Engineer**

Civil Projects and Contracts, Inc. – Bogota, Colombia Civil and Structural Engineering Consulting and Construction Firm

### **EDUCATION**

- 2003 **Graduate Degree, Construction Management and Control Specialist** Universidad del Norte, Barranquilla, Colombia
- 2002 **Bachelor of Science, Civil Engineering** Minor in Construction Management and Control Universidad del Norte, Barranquilla, Colombia

### **PROFESSIONAL REGISTRATIONS AND CERTIFICATIONS**

**Professional Engineer, State of Florida** License No. 73806

Professional Engineer, State of Texas License No. 139218

**Professional Engineer, State of Louisiana** License No. 45366

**Certified General Contractor, State of Florida** License No. CGC1526894

**LEED Green Associate, Green Building Certification Institute (GBCI)** Certification No. 11236102

#### **PROFESSIONAL ASSOCIATIONS**

American Society of Civil Engineers (ASCE) Member No. 9142098 Architectural Engineering Institute (AEI) Construction Institute (CI) Structural Engineering Institute (SEI)

National Society of Professional Engineers (NSPE) Member No. 300784218 Professional Engineers in Construction (PEC)

International Institute of Building Enclosure Consultants (IIBEC) Consultant Member No. 44190



#### **ASTM International (ASTM)**

Member No. 1027307

Committee D08 Roofing and Waterproofing

Subcommittee D08.22 Waterproofing and Dampproofing Systems Committee E06 Performance of Buildings Subcommittee E06.51 Performance of Windows, Doors, Skylights and Curtain Walls Subcommittee E06.55 Performance of Building Enclosures Committee E58 Forensic Engineering

Subcommittee E58.06 Incidents Involving Structures

## **REPRESENTATIVE PROJECT ASSIGNMENTS**

**Diplomat Resort – Condition Assessment & Restoration (2014 - 2019), Hollywood, FL** This project comprised the restoration of an existing 36-story hotel building, convention center, and parking garage. Retained as the Engineer of Record and Special Inspector for concrete restoration, stucco repair, window repair, waterproofing, and paint project. Conducted a building envelope assessment of the existing conditions and made engineering decisions on the requirements, systems, and products to be specified for restoration. Prepared construction documents for all aspects of the required restoration project as the Engineer of Record, including permit plans and specifications. Conducted code compliance structural inspections of the restoration work as the Special Inspector, and relevant field testing to verify water resistance aspects of the building envelope repairs. Reviewed, approved, and prepared RFI/submittal responses and progress reports. Prepared and provided the final signed and sealed Engineering Statement of Inspection for all pertinent aspects of the restoration project upon satisfactory completion, as required to close the corresponding building permits.

#### Panorama Tower (2014 - 2018), Miami, FL

This project consisted of the new construction of an 86-story mixed-use residential development with an elevated recreation deck and parking garage. Retained as the Building Envelope Consultant and Special Inspector. Consulted on the water resistance aspects of the building envelope design, reviewed applicable submittals, and performed code compliance structural inspections of the exterior glazing systems, louvers, metal doors, and railings per Florida Building Code requirements. Specifically, conducted inspections to verify that the structural attachments of the referenced systems were installed in compliance with permitted submittals, including shop drawings and product approvals. Conducted field water infiltration tests of glazing systems. Prepared multiple progress inspections and field test reports. Prepared and provided final signed and sealed Engineering Statement of Inspection for the applicable systems as required to close the corresponding permits.

### 8th Avenue Residences (2014 - 2016), Fort Lauderdale, FL

This project consisted of the new construction of a 30-story high-rise residential building and an attached 6-story parking garage with an elevated recreation deck. The building is located in the Las Olas area of Fort Lauderdale and houses 254 apartment units. Retained as the Building Envelope Consultant and Special Inspector. Consulted on the water resistance aspects of the building envelope design, reviewed applicable submittals, and performed code compliance structural inspections of the exterior glazing systems per Florida Building Code High Velocity Hurricane Zones (HVHZ) requirements. Specifically, conducted inspections to verify that the

structural attachments of the exterior glazing systems were installed in compliance with permitted submittals, including shop drawings and product approvals. Conducted field water infiltration tests of glazing systems and provided spot-check inspections of exterior walls, stucco, waterproofing, and roofing systems. Prepared multiple progress inspections and field test reports. Prepared and provided final signed and sealed Engineering Statement of Inspection as required to close the exterior glazing permit.

## Marriott Hotel – Condition Assessment & Repair Specification (2013 - 2014), Columbia, SC

This project comprised the assessment and repair specification of an existing 15-story hotel building in downtown Columbia, SC. Retained as the Building Envelope Consultant. Conducted a condition assessment consisting of inspections and testing of the façade, glazing systems, skylights, roofing system, and waterproofing components that made up the building envelope to document existing conditions and identify deficiencies. Prepared the corresponding Condition Assessment and Water Infiltration Testing Reports, including a summary of observations, repair and replacement recommendations, and preliminary cost estimates for budgeting purposes. Developed and prepared technical drawings and specifications for contractor bidding on the required repair work. Monitored the repair project through spot-check inspections and field water infiltration testing. Prepared multiple progress inspections and field test reports, and the final report.

## Ocean View B Condo – Condition Assessment & Restoration (2013 - 2015), Sunny Isles Beach, FL

This project comprised the restoration of an existing 17-story condominium building and a 4story parking garage structure. Retained as the Engineer of Record and Special Inspector for the concrete restoration, waterproofing, and window replacement project. Conducted a condition assessment and prepared construction documents, including permit plans and specifications, for the concrete restoration & waterproofing of the parking garage and replacement of the tower balcony doors and transoms. Conducted code compliance structural inspections of the concrete restoration work and of the new balcony doors and transoms attachments. Conducted field testing to verify the water resistance performance of the newly installed balcony doors and transoms. Prepared progress inspection reports and field test reports. Prepared and provided the final signed and sealed Engineering Statement of Inspection as required to close the corresponding building permits.

## Sanibel Harbour Tower – Forensic Investigation & Litigation Support (2010 - 2011), Fort Myers, FL

This project comprised forensic investigation and repair specification of an existing 13-story condominium building built circa 1985. The structure was concrete with stud walls and sheathing. Retained as the Building Envelope Consultant. Conducted a building envelope forensic investigation of the existing window and exterior wall systems; including testing and disassembly of selected building elements to reveal concealed as-built conditions at suspect problem areas. Made engineering decisions on the requirements and type of systems to be specified and prepared the corresponding remediation and replacement specification and technical drawings. Provided pre-litigation support to the legal team involved with the project, which included participating in mediation meetings between the opposing parties.

### Causeway Square (2008 - 2009), North Miami, FL

This project consisted of the new construction of a 4-story mixed-use building. The building had a total approximate area of 165,000 SQFT. Retained as the Building Envelope Consultant.



Consulted on the water resistance aspects of the building envelope design, reviewed applicable submittals, and acted as an authorized representative of the Special Inspector performing code compliance structural inspections of the exterior glazing systems per Florida Building Code HVHZ requirements. Specifically, conducted inspections to verify that the structural attachments of the exterior glazing systems were installed in compliance with permitted submittals, including shop drawings and product approvals. Conducted field water infiltration tests of glazing systems and provided spot-check inspections of exterior walls, stucco, waterproofing, and roofing systems. Prepared multiple progress inspection and field test reports, and the final compliance statement.

### Two City Plaza (2005 - 2008), West Palm Beach, FL

This project consisted of the new construction of a 21-story luxury high-rise condominium located in downtown West Palm Beach. Retained as the Building Envelope Consultant. Consulted on the water resistance aspects of the building envelope design, reviewed applicable submittals, and acted as an authorized representative of the Special Inspector performing code compliance structural inspections of the exterior glazing systems per Florida Building Code HVHZ requirements. Specifically, conducted inspections to verify that the structural attachments of the exterior glazing systems were installed in compliance with permitted submittals, including shop drawings and product approvals. Conducted field water infiltration tests of glazing systems and provided spot-check inspections of exterior walls, stucco, waterproofing, and roofing systems. Prepared multiple progress inspection and field test reports, and the final compliance statement.

A complete list of project assignments is available upon request.

## **PUBLICATIONS AND PRESENTATIONS**

Pushing the Building Envelope Newsletter: "Why Hire a Building Envelope Consultant?", March 2012

Pushing the Building Envelope Newsletter: "A Comprehensive Approach to Special Inspections", April 2011

Pushing the Building Envelope Newsletter: "Selecting Appropriate Windows and Doors – Wind Loads and Water Performance", January 2011

GCI Professional Education Conference: "Infrared Survey", West Palm Beach, FL, August 2009

## **PROFESSIONAL TRAINING COURSES AND SEMINARS**

Johnston Service Corp.: "2020 Advanced FBC 7th Edition: Significant Changes to Chapter 16 - Structural Design Building", Web Seminar
Titan Continuing Education, Inc.: "Avoidable Construction Disasters", Web Seminar
Titan Continuing Education, Inc.: "Construction Trends - Materials", Web Seminar

2022	Titan Continuing Education, Inc.: "Fundamentals of Concrete", Web Seminar
2022	Ezekiel Enterprises, LLC: "Energy Performance of LEED for New Construction Buildings", Web Seminar
2022	Titan Continuing Education, Inc.: "Introduction to Zero Energy Buildings", Web Seminar
2022	Titan Continuing Education, Inc.: "Understanding the Economic Benefits of Going Green", Web Seminar
2021	International Institute of Building Enclosure Consultants (IIBEC): "Green Roof Failures – What's to Blame", Web Seminar
2021	International Institute of Building Enclosure Consultants (IIBEC): "Winds of Change: How ASCE 7-16 is Affecting Florida", Web Seminar
2021	Ezekiel Enterprises, LLC: "Deterioration of Concrete", Web Seminar
2021	Ezekiel Enterprises, LLC: "Energy Efficient Cool Roofs", Web Seminar
2020	AEC Daily Corporation: "A Practical Look at Green Buildings", Web Seminar
2020	U.S. Green Building Council (USGBC): "Case Study: USGBC Headquarters", Web Seminar
2020	Green Building Education Services (GBES): "Global Tools: Green Star SA", Web Seminar
2020	Titan Continuing Education, Inc.: "2017 Advanced Florida Building Code", Web Seminar
2020	Titan Continuing Education, Inc.: "Wind Mitigation", Web Seminar
2020	Titan Continuing Education, Inc.: "Construction Trends – Technology", Web Seminar
2020	Titan Continuing Education, Inc.: "Employee Management", Web Seminar
2020	Xypex Chemical Corporation: "Concrete Waterproofing with Crystalline Technology Course", Pembroke Pines, FL
2019	Conference on Advanced Building Skins, Bern, Switzerland
2019	American Society of Civil Engineers (ASCE): Engineering Investigations of Hurricane Damage: Wind versus Water", Web Seminar
2019	Soprema Inc.: "SBS Roofing Technology & Design", Wadsworth, OH

2019	Soprema Inc.: "PMMA/PMA Liquid Applied Roofing & Waterproofing", Wadsworth, OH
2019	Soprema Inc.: "Below Grade Waterproofing Systems & Design", Wadsworth, OH
2019	BNP Media Continuing Education Center – Architecture & Construction: "Minimizing Risk in Blindside Waterproofing Applications", Web Seminar
2018	RCI Florida Chapter Educational Session: "Below Grade Waterproofing & Design", Fort Lauderdale, FL
2018	RCI Florida Chapter Educational Session: "The Art of Metal Roofing", Fort Lauderdale, FL
2018	RCI Florida Chapter Educational Session: "Building Enclosure, Code Related Performance & Hurricane Irma", Fort Lauderdale, FL
2018	RCI Florida Chapter Educational Session: "PVC, TPO and SBS Roofing", Fort Lauderdale, FL
2018	RCI Florida Chapter Educational Session: "Stucco & EIFS", Fort Lauderdale, FL
2017	RCI Professional Training Seminars and Symposium: "A Field Study of Thermal and Hygrothermal Performance on Attics with Various Retrofitting Strategies" Champions Gate, FL
2017	RCI Professional Training Seminars and Symposium: "Orders of Failure in Building Skin Design and Construction" Champions Gate, FL
2017	RCI Professional Training Seminars and Symposium: "Sealant Restoration for High-Rise Buildings" Champions Gate, FL
2017	RCI Professional Training Seminars and Symposium: "An SPF Retrofit to Stop Leakage" Champions Gate, FL
2017	RCI Professional Training Seminars and Symposium: "Roof Water Catchment and Filtration Systems" Champions Gate, FL
2017	RCI Professional Training Seminars and Symposium: "When Form Really Does Follow Function: Aesthetics Informed by Environmental Conditions" Champions Gate, FL
2017	RCI Professional Training Seminars and Symposium: "Roofing and Design Professional Warranties" Champions Gate, FL
2017	RCI Professional Training Seminars and Symposium: "Designing Rooftop Amenity Spaces: Complexity, Coordination and Conflict Avoidance" Champions Gate, FL

2017	RCI Professional Training Seminars and Symposium: "High-Performance Buildings: Integrating the Wall and Roof Air Barriers" Champions Gate, FL
2017	RCI Professional Training Seminars and Symposium: "Flashing of Curtainwall and Storefront Systems in Commercial Applications" Champions Gate, FL
2017	RCI Professional Training Seminars and Symposium: "Masonry Movement Joints" Champions Gate, FL
2017	RCI Professional Training Seminars and Symposium: "Curtainwall Failures – Design or Products" Champions Gate, FL
2017	RCI Educational Program: "Waterproofing", New Orleans, LA
2016	RCI Professional Training Seminars and Symposium: "The Performance of Weather-Resistant Barriers in Stucco Assemblies", Houston, TX
2016	RCI Professional Training Seminars and Symposium: "Aluminum Window Still Anchors and Supplemental Waterproof Flashing Design Practices", Houston, TX
2016	RCI Professional Training Seminars and Symposium: "The Ideal Third-Party Warranty: A Risk-Managed Approach", Houston, TX
2016	RCI Professional Training Seminars and Symposium: "Playing Against a Stacked Deck: Restoration of a Stone Fin Façade", Houston, TX
2016	RCI Professional Training Seminars and Symposium: "Everyone Loves a Pool, But What's Lurking Beneath the Surface?", Houston, TX
2016	RCI Professional Training Seminars and Symposium: "Design Practices for Tower and Steeple Restoration", Houston, TX
2016	RCI Professional Training Seminars and Symposium: "When the Numbers Don't Work: Engineering Judgement for Historical Buildings", Houston, TX
2016	RCI Professional Training Seminars and Symposium: "Air Barrier Integration: Don't Entangle Yourself with These Common Pitfalls", Houston, TX
2016	RCI Professional Training Seminars and Symposium: "Upgrading the Performance of Heritage Windows to Suit Modern Design Conditions", Houston, TX
2016	RCI Professional Training Seminars and Symposium: "Design Considerations for Renewing Podium Waterproofing", Houston, TX
2016	RCI Professional Training Seminars and Symposium: "Fully Soldered Metal Roofing: More Complicated Than You Think", Houston, TX

2015	RCI Building Envelope Technology Symposium: "Curtain Wall Sunshade Challenges", Nashville, TN
2015	RCI Building Envelope Technology Symposium: "Too Hot to Keep Your Cool", Nashville, TN
2015	RCI Building Envelope Technology Symposium: "Starting Over: Reskinning Deteriorated Masonry Walls in Occupied Condominium Towers", Nashville, TN
2015	RCI Building Envelope Technology Symposium: "Common Deficiencies with Public School Building Envelopes", Nashville, TN
2015	RCI Building Envelope Technology Symposium: "Authenticity vs. Stability: Challenges in Restoring", Nashville, TN
2015	RCI Building Envelope Technology Symposium: "Conventional and Nonconventional Repair of Curtain Wall Systems", Nashville, TN
2015	RCI Building Envelope Technology Symposium: "Horizontal Above-Grade Waterproofing", Nashville, TN
2015	RCI Building Envelope Technology Symposium: "How to Evaluate Moisture Durability Issues due to Air Leakages in Highly Insulated Walls", Nashville, TN
2015	RCI Building Envelope Technology Symposium: "When the Field Performance of Masonry Does Not Correlate with Lab Test Results", Nashville, TN
2015	RCI Building Envelope Technology Symposium: "Replacing a Failing Building Enclosure: A Challenging Canadian Case Study", Nashville, TN
2015	RCI Building Envelope Technology Symposium: "Challenges in Preservation Engineering: Restoring a 100-Year-Old Historical Terra Cota Facade", Nashville, TN
2012	Air Barrier Association of America (ABAA) Conference: "Building Enclosure Commissioning", Chicago, IL
2012	Air Barrier Association of America (ABAA) Conference: "Four Barriers for Four Wetting Potentials", Chicago, IL
2012	Air Barrier Association of America (ABAA) Conference: "Introduction to Air Barriers", Chicago, IL
2012	Air Barrier Association of America (ABAA) Conference: "The Various Air Barriers Materials", Chicago, IL
2012	Air Barrier Association of America (ABAA) Conference: "Basic Air Barrier Requirements", Chicago, IL

2012	Air Barrier Association of America (ABAA) Conference: "Design Consideration for Air Barriers", Chicago, IL
2012	Air Barrier Association of America (ABAA) Conference: "Incorporating Air Barriers into Specifications", Chicago, IL
2012	Air Barrier Association of America (ABAA) Conference: "Masonry Veneer Anchors and Air Barriers", Chicago, IL
2012	Air Barrier Association of America (ABAA) Conference: "Whole Building Air Tightness Testing", Chicago, IL
2012	Air Barrier Association of America (ABAA) Conference: "Avoiding Pitfalls with Air Barriers", Chicago, IL
2012	Air Barrier Association of America (ABAA) Conference: "Consideration for the Whole Building Air Barrier System", Chicago, IL
2012	Air Barrier Association of America (ABAA) Conference: "Key Junctions and Interfaces for Air Barriers", Chicago, IL
2011	National Fenestration Rating Council (NFRC): "Energy Ratings and Code Compliance", Palm Beach Gardens, FL
2010	GCI Professional Education Conference: "Glazing Systems for High Velocity Hurricane Zones" presented by Crawford Tracey Corp., Palm Beach Gardens, FL
2010	GCI Professional Education Conference: "Sustainable Glazing Design" presented by Viracon, Palm Beach Gardens, FL
2009	GCI Professional Education Conference: "Understanding Air Barriers" presented by Tremco Inc., West Palm Beach, FL
2009	GCI Professional Education Conference: "Weather System Coatings and Products for Remedial Applications" presented by GE Construction Products, West Palm Beach, FL
2009	GCI Professional Education Conference: "Blast Resistant Glazing Systems and Testing" presented by Hurricane Test Laboratory, West Palm Beach, FL
2009	Fluke Corporation: "Thermal Imaging Hands-on Training Seminar", Jacksonville, FL
2008	GCI Professional Education Conference: "An Overview of AAMA 511-08", West Palm Beach, FL
2008	GCI Professional Education Conference: "Below Grade Waterproofing and Deck Coating" presented by Tremco, Inc., West Palm Beach, FL

2008	GCI Professional Education Conference: "The Roofing Industry and SBS Modified Bitumen Roofing" presented by Soprema, Inc., West Palm Beach, FL
2008	GCI Professional Education Conference: "Construction Workplace Safety Training" presented by Paychex, West Palm Beach, FL
2007	ASTM International Symposium: "Up Against the Wall: An Examination of Building Envelope Interface Techniques and Systems", Tampa, FL
2007	GCI Professional Education Conference: "SBS Modified Bitumen Roofing Systems, and Terapro Waterproofing and Surfacing System" presented by Siplast, Palm Beach Gardens, FL
2007	University of Wisconsin, College of Engineering: "Water Entry Prevention and Moisture Control in Buildings – Exterior Walls and Roofing Systems", Madison, WI
2007	University of Wisconsin, College of Engineering: "Below-Grade and Plaza Deck Waterproofing and Moisture Control", Madison, WI
2006	Lorman Education Services: "Avoiding Moisture and Mold Construction Litigation Problems", Jacksonville, FL
2006	GCI Professional Education Conference: "Commercial Glass School & Glass Performance Pitfalls" presented by Viracon, West Palm Beach, FL
2006	GCI Professional Education Conference: "An Overview of ASTM E 2112", West Palm Beach, FL
2003	Universidad Del Norte, College of Engineering: "Creativity and Leadership Seminar", Barranquilla, Colombia