



Ms. Anesta's background is rooted in structural and civil design, construction inspections, and multi-discipline engineering consultation and project management. She has personally designed numerous structures throughout South Florida, including single-family residences, multi-story hotels, commercial retail and warehouses, emergency operation centers, hurricane shelters, recreation centers, and water/wastewater treatment facilities. She also has extensive experience in the assessment of structural integrity, building failure, demolition, and property damage assessment, as well as seawall and retaining wall design.

Experienced in the management, design, investigation, demolition, and inspection of new construction and existing buildings for multi-discipline and structural projects in the Private and Public Sectors, she utilizes her advanced engineering knowledge, problem-solving approach, and project management skills to serve as a Forensic Expert for property damage, construction claims, commercial liability, and product liability. Fluent in the lifecycle of buildings, civil structures, retaining and seawalls, and marine structures, she is able to contribute to, optimize, and lead projects in a clear and honest manner, with the ultimate goal of providing quality work that Clients can rely on.

She has served as an Expert in forensic engineering investigations and depositions for both Plaintiffs and Defendants, involving structural failure, property losses, and construction defect matters. She acts as a Consultant to homeowners, attorneys, insurance companies, adjustment firms, government entities, and other forensic engineering firms. She is a FEMA Subject Matter Expert and FEMA Adjunct Instructor in the field of Structural Engineering, and has assisted as a Structural First Responder in Hurricane Florence (2018), Hurricane Dorian (2019), the Surfside Building Collapse (2021), Hurricane Ida (2021), Hurricane Ian (2022), Hurricane Idalia (2023), New Mexico Wildfires & Floods (2024), Hurricane Helene (2024), Hurricane Milton (2024), and the Venezuelan Earthquakes (2026). Additionally, she has performed structural evaluations of damaged structures following Hurricanes Matthew (2016), Irma (2017), Florence (2018), Michael (2018), Dorian (2019), and Sally (2020), as well as other named and unnamed storm events in Florida.

Heather is an Advanced Structures Specialist on FEMA Urban Search and Rescue Florida Task Force 1, and she serves as a Structures Specialist on the FEMA DHS Incident Support Team and Structures Advisory Subgroup. She is a member of the ASCE 7 Wind Load Subcommittee, the ASCE 7-28 Wind Advisory Panel, the NCEES Structural Engineers Exam Development Committee (SE Licensing Exam Development), and is the Chair of the ASCE 11-28 Standard "Structural Condition Assessment of Existing Buildings". She is a Structural Subject Matter Expert on the FEMA Compass Mitigation Assessment Team, and is a Member of the Florida Building Commission Existing Building Inspection Workgroup, charged with providing recommendations to the Legislature regarding Florida's aging buildings' Milestone Inspection Program.

EDUCATION

Master of Science in Civil-Structural Engineering, Florida Atlantic University, Boca Raton, Florida, 2010
Bachelor of Science in Civil-Structural Engineering, Florida State University, Tallahassee, Florida, 2007

REGISTRATIONS

Professional Engineer #74733, State of Florida
Florida Board Recognized Structural Engineer, State of Florida
Structural Engineer #018.0120343, State of Vermont
StS2, Advanced Structures Specialist, FEMA Urban Search & Rescue
SCS, Structural Collapse Specialist, FEMA Urban Search & Rescue

EMPLOYMENT HISTORY

Anesta Consulting, Inc., President & CEO	2015 – Present
Rimkus Consulting Group, Senior Consultant	2015 – 2022
Stantec Consulting, Inc., Associate, Project Engineer	2012 – 2015
C3TS, P.A., Project Manager, Project Engineer	2009 – 2012
Walsh Engineering, Inc., Structural Designer	2006 – 2009
McDaniel Engineering, Undergraduate Internship	2005 – 2006

A full list of Design, Assessment, Advisory, and Project Management Experience is available upon request.



Forensic Investigations & Expert Opinions

Various Property & Construction Inspections & Reviews for Cause, Origin, and Duration of Damage

- Building Envelope
- Catastrophic Events
- Collapse
- Construction Claims
- Construction Defects
- Construction Materials
- Corrosion
- Damage to Structural and Aesthetic elements
- Fire Damage
- Flooring
- Foundation Issues & Settlement
- Marine
- Moisture Exposure & Duration
- Peer Reviews
- Pool Damage
- Roof Damage
- Storm-Related Damage including Wind, Hail, Flood, Surge, and Rain
- Structural Design, Installation, & Condition of Concrete, Masonry, Steel, Timber, Foundations, Cladding, Finishes, and other materials
- Structural Integrity Evaluations
- Vehicle Impact
- Water Intrusion
- Water Leaks

Deposition Experience

Ms. Anesta has provided deposition testimony in Florida for plaintiffs and defendants.

- *Roof Damage Cause, Origin, & Duration*
- *Water Damage Cause, Origin, & Duration*
- *Seawall Damage and Replacement*
- *Kitchen Cabinet Detachment Cause & Origin*
- *Floor Tile Delamination Cause & Origin*
- *Post-Tension Design, Installation, & Encapsulation Condition*
- *Reinforced Concrete Design, Installation, & Condition*
- *Stucco and Waterproofing Condition*
- *Structural Integrity*
- *Wind Damage*

Design, Consultation, and Management Experience

Structural Analysis & Design	Structural Condition Assessments
• Buildings ○ <i>Low & Mid-Rise Single-Family & Multi-Family Residential, Commercial, Hotels</i> ○ <i>Concrete, CMU, Timber, Steel, Precast Concrete, Post-Tension Concrete</i> ○ <i>Feasibility Studies</i> ○ <i>Shallow and Deep Foundations</i> ○ <i>New Construction</i> ○ <i>Renovations</i> ○ <i>Repairs</i> • Civil Structures ○ <i>Water Treatment Plants</i> ○ <i>Wastewater Treatment Plants</i> ○ <i>Lift Stations</i> ○ <i>Pump Stations</i> ○ <i>Fire Stations</i> ○ <i>Fleet Maintenance Buildings</i> • Marine ○ <i>Boat Ramps, Boat Lifts</i> ○ <i>Seawalls</i> ○ <i>Stationary & Floating Docks</i> ○ <i>Water Parks, Aquatic Parks</i>	• Buildings ○ <i>Low, Mid, & High-Rise Single-Family & Multi-Family Residential, Commercial, Hotels</i> ○ <i>Concrete, CMU, Timber, Steel, Precast Concrete, Post-Tension Concrete</i> ○ <i>Shallow and Deep Foundations</i> ○ <i>Building Code Analysis</i> ○ <i>Reinforced Concrete Condition & Corrosion</i> ○ <i>Repair Protocols</i> ○ <i>Retaining Walls</i> ○ <i>Structural and Civil Design Peer Reviews</i> • Civil Structures ○ <i>Water Treatment Plants</i> ○ <i>Wastewater Treatment Plants</i> ○ <i>Lift Stations</i> ○ <i>Pump Stations</i> ○ <i>Fire Stations</i> ○ <i>Fleet Maintenance Buildings</i> • Marine ○ <i>Boat Ramps, Boat Lifts</i> ○ <i>Corrosion – Steel and Concrete</i> ○ <i>Seawalls</i> ○ <i>Stationary & Floating Docks</i> ○ <i>Water Parks, Aquatic Parks</i>
Demolition Consultation Project Management & Consultation	

A full list of Design, Assessment, Advisory, and Project Management Experience is available upon request.



Management & Leadership Experience

ASCE 11 Structural Condition Assessment of Existing Buildings – Chair	2023 – Present
ASCE 7-28 Wind Load Subcommittee – Chapter 30, Components & Cladding Task Group Chair	2023 – Present
FEMA US&R Florida Task Force 1 – Structures Specialist Training Coordinator	2022 – Present
ASCE 7-28 Wind Research Advisory Panel – Advisor	2021 – Present
Soccer Association of Boca Raton – Adult Program Director, SafeSport Trained	2020 – Present
HUD Residential Resilience Guidelines – Wind Task Group Leader & Advisory Group Member	2020 – 2022
National Council of Structural Engineers Associations – SEER Committee Southeast Leader	2017 – 2021
Florida Structural Engineers Association – South Florida Chapter Treasurer	2015 – 2017
ACE Mentorship – Structural Engineering Mentor & Coordinator	2013 – 2017
Florida Structural Engineers Association – State Membership Committee Chair	2013 – 2016
Stantec Structural Discipline Coordination Leader – Quality Management	2014 – 2015
National Council of Structural Engineers Associations – Joint BEC & YMG Committee Project Leader	2013 – 2014
Stantec Leadership Development Program	2013
National Council of Structural Engineers Associations – Young Member Group Founder & Chair	2012 – 2014
Florida Structural Engineers Association – Palm Beaches Young Member Group Founder & Chair	2011

Team & Committee Positions

FEMA DHS US&R, Advisory Operations - Structures Subgroup, Voting Member	2023 – Present
Florida Building Commission Existing Building Inspection Workgroup (FBC EBIWG) – Voting Member	2022 – Present
FEMA DHS US&R, Incident Support Team – Structures Specialist Alternate	2021 – Present
FEMA Compass Mitigation Assessment Team – Technical Consultant & Subject Matter Expert	2018 – Present
FEMA US&R Florida Task Force 1 – Advanced Structures Specialist	2015 – Present
National Council of Examiners for Engineering and Surveying – Structural Exam Development Member	2015 – Present
SEI Manual of Practice, Guideline for Structural Condition Assessment of Existing Buildings – Advisor	2021 – 2022
HUD Residential Resilience Guideline – Technical Advisor	2019 – 2022
ASCE 7-22 Wind Load Subcommittee – Associate Member	2017 – 2021
National Council of Structural Engineers Associations – SEER Committee Member	2017 – 2021
National Council of Structural Engineers Associations – Wind Advisory Committee Member	2015 – 2020
Florida Structural Engineers Association – South Florida Chapter Board of Directors	2013 – 2017
National Council of Structural Engineers Associations – Continuing Education Committee Member	2014 – 2016
National Council of Structural Engineers Associations – Young Member Group Committee Member	2012 – 2016
FES-FICE – Structural Committee Member	2013 – 2014

Relevant Awards & Certificates

FEMA NIMS ICS All-Hazards Division/Group Supervisor Course (L0960)	2023
U.S. Fire Administration (USFA) Type 3 All-Hazards Incident Management Team (AHIMT) Program (O-305)	2022
FEMA US&R Heavy Equipment & Rigging Specialist (HERS)	2022
FLUSAR Rope Rescue Operations	2022
FEMA Incident Command System 300 & 400 Certified, Management of Advanced, Complex, and Expanding Incidents	2021
FEMA Adjunct Instructor & Subject Matter Expert (Structural)	2019
SCS – Structural Collapse Specialist (Rescue Specialist) (FEMA Urban Search & Rescue)	2018
PADI Certified Diver	2018
StS2 – Advanced Structures Specialist (FEMA Urban Search & Rescue)	2017
Level I “Authorized Person” Rope Access Training	2016
StS1 – Structures Specialist 1 (FEMA Urban Search & Rescue)	2015
Stantec Emerging Leader	2013
National Council of Structural Engineers Associations – Young Member Award	2012
Certified Masonry Inspector; Masonry Institute of America	2012
LEED Accredited Professional, US Green Building Council	2009

A full list of Design, Assessment, Advisory, and Project Management Experience is available upon request.



Lectures & Instructor Engagements

Structural Condition Assessment of Existing Buildings: Standards & Guidance, ASCE/SEI Structures Congress	2025
US&R Secondary Collapse Prevention, South Carolina State Fire	2025
Enclosure Strategies for Damaging Winds, Tropical Storms, and Hurricanes, facades+	2025
Minimizing Risk of Secondary Collapse, National US&R Conference	2023, 2024
Building Collapse Analysis & Stability Monitoring, Collapse Module – FEMA US&R, StS Regional Trainings	2023, 2024
Building Collapse Analysis, Stability Monitoring, & Surfside Collapse Case Study – FEMA US&R, FL-TF1	2022
Evaluation of Building Structural Stability – A Qualitative Approach, ASCE Learning, Webinar	2022
Main Wind Force Design of Low-Rise Buildings, ASCE Learning, Virtual Workshop	2021
Wind Design of Non-Rectangular Low-Rise Buildings, ASCE Learning, Webinar & Virtual Workshop	2021, 2022
Structural Collapse Specialist Course (SCS4.0), FEMA Adjunct Instructor, FEMA FL-TF1 Training Site, Kendall, FL	2019
Lessons Learned as a Rescue Engineer during Hurricane Florence, MDRF OEM, Miami, FL	2019

Publications

ASCE/SEI 11 Structural Condition Assessment of Existing Buildings	In Progress
SEI Manual of Practice, Guideline for SCA of Existing Buildings [ASCE 11-99/MOP 158], Technical Consultant	2024
FEMA P-2342: Hurricane Ian in Florida MAT Report & Advisories 1-3, Technical Consultant	2023
HUD Residential Resilience Guidelines for Builders & Developers, Technical Consultant	2023
FEMA P-2077: Hurricane Michael in Florida MAT Report & Advisories 1 & 2, Technical Consultant	2019

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