



Gerald Delaune, REWC, RRC, RRO, Level II CIT, CSI

204 E. 2nd Ave, Suite 241
San Mateo, CA 94401
(214) 957-2768
gdelaine@brillouinconsulting.com
www.brillouinconsulting.com



PROFESSIONAL PROFILE

Gerald Delaune has visually assessed thousands of commercial offices, retail strip centers, shopping malls, medical offices, condominiums, and multi-family housing structures varying from hi-rise, mid-rise, low-rise and single-story structures across North America, Bahamas and Puerto Rico. Gerald performs forensic investigations of building envelope components including, but not limited to, roofing, waterproofing, glass and glazing, storefront, curtainwall, single-hung & double-hung windows, fixed panel glass windows, face brick, thin brick, masonry, stucco, EIFS, stone, precast, tilt-wall, aluminum composite panels, SIPS, GFRC, ferro cement, fiber cement siding, etc., on numerous commercial offices, retail strip centers, shopping malls, medical office, hospitals, condominiums, and multi-family housing structures across North America, Bahamas and Puerto Rico. Gerald has provided restoration design for structures in TX, LA, MS, CA, FL, MD, AZ, CO, TN, GA, AL, MO, IL, NY, VA, SC, NM, and Canada. Gerald has performed third-party construction document peer review for Architectural firms with projects throughout FL, TX, and the Bahamas. Gerald has also provided litigation support for construction deficiencies in FL, TX, OK, MS, LA, GA, and CA.

POSITIONS

Brillouin Consulting

Grapevine, TX

Senior Manager

Apr 2026 - Present

Perform forensic investigation of building envelope components, third-party construction document peer review, and litigation support for construction deficiencies throughout the US and abroad, including but not limited to, TX, FL, OK, LA, GA, and CA. Significant testimony experience - deposition, arbitration and trial, along with mediation presentation experience.

MC Consultants, Inc.

Dallas, TX

Expert – Building Envelope

2023 - Apr 2026

Responsibilities included forensic investigation, document review, field investigation, development of repair recommendations, construction management, property loss assessment, standard of care and expert witness testimony. Expertise in litigation support and investigations involving building envelope assessment, field-testing of building envelope components for water and moisture intrusion, building envelope component failure, projects involving construction disputes, commercial and residential construction encompassing all phases of scheduling, estimating, fenestration installation, thermal and moisture protection, commercial storefront & curtain wall systems, residential windows and project management.

Partner Engineering & Science, Inc.

Plano, TX

Technical Director

2021 - 2023

Performed QAQC of project technical documents for Building Envelope. Managed 5 direct report Senior Project and Project Managers in all aspects of Building Envelope Consulting (such as Assessments, Forensic Investigations and Testing and Re-Roof design). Author design documents for building envelope systems for new construction and renovation construction. Compiled construction documents and project specific specifications for reconstruction and new construction projects. Provided third party review of building envelope documents (exterior wall assemblies, roofing systems and below grade waterproofing) for new construction and renovation construction. Provided forensic investigation and expert witness testimony regarding building envelope failures (such as below grade waterproofing,

exterior wall and roofing) or construction deficiencies. Performed and analyzed hygrothermal models of wall assemblies utilizing WUFI Pro 5.0. Analysis of curtain wall and glass components utilizing THERM 6, Window 6 and COMFEN 3.1 to AAMA condensation resistance factors. Performed project/contract/construction management services on roofing/waterproofing/exterior wall renovation projects.

Partner Engineering & Science, Inc.

Plano, TX

Senior Project Manager/Senior Building Envelope Consultant

2021 - 2021

Responsibilities included Owner's representative during reconstruction of storm damaged buildings. Author design documents for building envelope systems for new construction and renovation construction. Compiled construction documents and project specific specifications for reconstruction and new construction projects. Provided third party review of building envelope documents (exterior wall assemblies, roofing systems and below grade waterproofing) for new construction and renovation construction. Performed non-destructive testing for entire building envelope (including IR Thermography, AAMA testing standards, ASTM testing standards, Rilem Tube test, ice-puck testing, uplift chamber testing). Provided forensic investigation and expert witness testimony regarding building envelope failures (such as below grade waterproofing, exterior wall and roofing) or construction deficiencies. Performed and analyzed hygrothermal models of wall assemblies utilizing WUFI Pro 5.0. Analyzed curtain wall and glass components utilizing THERM 6, Window 6 and COMFEN 3.1 to AAMA condensation resistance factors. Performed final observation/punch list installation of all types of new roofing systems (including BUR, PVC, TPO, standing seam metal, SBS modified, fully adhered, or mechanically adhered, asphalt shingle) and prepared field observation reports. Performed project/contract/construction management services on roofing/waterproofing/exterior wall renovation projects.

CBRE

Dallas, TX

Senior Project Manager/Senior Building Envelope Consultant

2017 - 2020

Performed due diligence assessments and reports for building envelope on properties throughout the United States. Owners' representative during reconstruction of storm damaged buildings. Performed design documents for building envelope systems for new construction and renovation construction. Prepared bid documents and project specific specifications for reconstruction and new construction projects. Provided third party review of building envelope documents (exterior wall assemblies, roofing systems and below grade waterproofing) for new construction and renovation construction. Performed nondestructive testing for entire building envelope (including IR Thermography, AAMA testing standards, ASTM testing standards, Rilem Tube test, ice-puck testing, uplift chamber testing). Provided forensic investigation and expert witness testimony regarding building envelope failures (such as below grade waterproofing, exterior wall and roofing) or construction deficiencies. Performed and analyzed hygrothermal models of wall assemblies utilizing WUFI Pro 5.0. Analysis of curtain wall and glass components utilizing THERM 6, Window 6 and COMFEN 3.1 to AAMA condensation resistance factors. Observed installation of all types of new roofing systems modified, fully adhered or mechanically adhered, asphalt shingle) and prepare field observation reports. Performed project/contract/construction management services on roofing/waterproofing/exterior wall renovation projects.

Conley Group

Las Colinas, TX

Technical Director

2016 - 2017

Performed design documents for building envelope systems for new construction and renovation construction. Prepared bid documents and project specific specifications for reconstruction and new construction projects. Provided third party review of building envelope documents (exterior wall assemblies, roofing systems and below grade waterproofing) for new construction and renovation construction. Performed non-destructive testing for building envelope components (including IR Thermography, AAMA testing standards, ASTM testing standards, Rilem Tube test, uplift chamber testing). Performed and analyzed hygrothermal models of wall assemblies utilizing WUFI Pro 5.0. Analysis of curtain wall and glass components utilizing THERM 6, 4 Window 6 and COMFEN 3.1 to AAMA condensation resistance factors.

Infinity Exterior Envelope Consultants**Coppell, TX****Vice President/Principal Building Envelope Consultant**

2014 - 2015

Performed design documents for building envelope systems for new construction and renovation construction. Prepared bid documents and project specific specifications for reconstruction and new construction projects. Provided third party review of building envelope documents (exterior wall assemblies, roofing systems and below grade waterproofing) for new construction and renovation construction. Performed non-destructive testing for entire building envelope (including IR Thermography, AAMA testing standards, ASTM testing standards, Rilem Tube test, uplift chamber testing). Performed and analyze hygrothermal models of wall assemblies utilizing WUFI Pro 5.0. Analysis of curtain wall and glass components utilizing THERM 6, Window 6 and COMFEN 3.1 to AAMA condensation resistance factors. Observed installation of all types of new roofing systems (including BUR, PVC, TPO, \standing seam metal, SBS modified, fully adhered or mechanically adhered, asphalt shingle) and prepared field observation reports. Performed project/contract/construction management services on roofing/waterproofing/exterior wall renovation projects.

Childress Engineering Services, Inc.**Plano, TX****Senior Building Envelope Consultant/Building Envelope Consultant**

2007 - 2013

Designed and developed custom wall systems. Designed and analyzed various cladding components for exterior wall systems and skylights. Prepared bid documents and project specific specifications for reconstruction and new construction projects. Provided third party review of building envelope documents (exterior wall assemblies, roofing systems and below grade waterproofing) for new construction and renovation construction. Provided field life safety assessment and damage investigation following catastrophic events including fires, floods, tornados, hurricanes and structural failures. Prepared preliminary and final damage assessment reports outlining damages and reconstruction recommendations. Field-testing of building envelope systems (including exterior wall, roof's and below grade waterproofing). Performed non-destructive testing for entire building envelope (including IR Thermography, AAMA testing standards, ASTM testing standards, Rilem Tube test, uplift chamber testing). Performed infrared surveys utilizing a Mobilr camera and provide reports using IR Analyzer. Perform and analyze hygrothermal models of wall assemblies utilizing WUFI Pro 5.0. Analysis of curtainwall and glass components utilizing THERM 6, Window 6 and COMFEN 3.1 to AAMA condensation resistance factors. Observed installation of all types of new roofing systems (including BUR, PVC, TPO, standing seam metal, SBS modified, fully adhered or mechanically adhered, asphalt shingle) and prepare field observation reports. Performed design of roofing systems for new construction and renovation construction. Direction of construction management services for renovation construction projects.

Childress Engineering Services, Inc.**Plano, TX****Network Systems Administrator**

1998 - 2007

Responsibilities included leading direction, creation and implementation of solutions for an efficient and effective IT infrastructure. Instruct and guide our I.T. staff in areas of research for software upgrades, server hardware, workstation hardware and new software purchases for compatibility with existing software and equipment.

Childress Engineering Services, Inc.**Plano, TX****Senior Cad Designer/Project Manager**

1995 - 2007

Designed intricate window wall and curtainwall systems with Glazing Contractors and Architects. Assisted in the preparation of shop drawings for the design and installation of custom window wall and curtainwall. Reviewed and approved all shop drawing submittals. Designed intricate window wall and curtainwall systems with Project Architects, General Contractors.

Architectural Wall Systems**Forney, TX****Drafting Department Manager**

1993 - 1995

Oversaw all Drafting Department employees. Designed intricate window wall and curtainwall systems with Glazing Contractors and Architects. Assisted in the preparation of shop drawings for the design and installation of custom window wall and curtainwall. Reviewed and approved all shop drawing submittals. Designed intricate window wall and curtainwall systems with Project Architects and General Contractors.

Curtain Wall Design and Consulting
Project Manager / Senior Designer

Dallas, TX
1986 - 2002

Designed intricate thin veneer stone (granite) steel strong-back systems and handset stone projects with Contractors and Architects. Assisted in the preparation of shop drawings for the design and installation of custom stone systems. Reviewed and approved all shop drawing submittals.

Lee Industries
Project Manager / Designer

Waggaman, LA
1983 - 1989

Designed intricate thin veneer stone (granite) steel strong-back systems and handset stone projects with Contractors and Architects. Assisted in the preparation of shop drawings for the design and installation of custom stone systems. Review and approve all shop drawing submittals.

ACADEMIC CREDENTIALS

Delgado Junior College
Engineering Technology

New Orleans, LA

CERTIFICATIONS

- Fall Protection Competent Person
- ITC Level 1 Thermographer
- ITC Level II Thermographer
- Mobile Elevating Work Platform (MEWP)
- OSHA 10-hr Occupational Safety and Health Training Course
- OSHA 30-hr Competent Person Training Course
- RRC – Registered Roof Consultant (2013)
- RRO – Registered Roofing Observer (2010)
- REWC – Registered Exterior Wall Consultant (2012)
- WUFI – ORNL5, WUFI-Pro 5 and Weather Analyzer 1.0

CONTINUING EDUCATION

- Phase III of Concrete Roof Deck Moisture Research – NRCA – March 2025.
- Thermal Bridging Mitigation in the 2024 International Energy Conservation Code – Stantec – March 2025.
- Developing Investigation Protocols Following Structural Failures – SGH – April 2022.
- Exposing Exposed Concrete: Considerations for Design, Construction and Maintenance – SGH – March 2022.
- Terra Cotta: Understanding and Rehabilitating Historic Facades – SGH – February 2022.
- Innovation Pitfalls: Lessons Learned from Rehabilitating Early Brick Veneer Wall Assemblies – SGH – January 2022.
- Assessing Building Enclosures Using Drone-Deployed Digital and Thermal Imaging – SGH – January 2022.
- Water Penetration and Air Leakage Testing of Flanged Commercial Windows – IIBEC – September 2021.
- Cladding and Building Enclosure Component Connections Through Foam Plastic Continuous Insulation: Design and Prescriptive Code Compliance – IIBEC – September 2021.
- Changes Coming to the 2021 IBC Requirements for Exterior Walls on Commercial Buildings – IIBEC – September 2021.
- Saddle Flashing Detailing, Mock-ups and Construction Sequencing – IIBEC – September 2021.
- Diary of a BECxP: Delegated Design Dilemmas – IIBEC – September 2021.
- Steep Slope Roofs in the Wind – IIBEC – September 2021.
- Polyvinyl Fluoride (PVDF) Coating Failures – September 2021.
- Low Slope Lessons from 30 years of Hurricane Events – IIBEC – September 2021.
- Construction Industry Liability for Failure to Adapt to Climate Change – IIBEC – 2021.
- Addressing Moisture Durability on Low Slope Roofing – GAF – May 2020.

CONTINUING EDUCATION (CONTINUED)

- Maximizing Roof System Energy Efficiency and Performance – GAF – May 2020.
- PVC Membranes & Systems – Siplast – May 2020.
- Liquid-Applied PMMA Membrane Technology – May 2020.
- Decoding Commercial Roofing Codes – GAF – May 2020.
- Cold Storage and Low Slope Roofing – GAF – April 2020.
- Wind Design and Value Engineering – GAF – April 2020.
- Assessing Retrofit Single-ply Roof Systems Installed over Existing Metal Roof Systems – RCI – March 2019.
- Variations in the Free-Fall Velocities of Hail – RCI – March 2019.
- International Codes Update -RCI – March 2019.
- Roof Consultants New Challenge: OSHA’s 1910 Walking-Working Surface Standard – RCI – March 2019.
- Performance Influence: Roofing Assemblies Interface with Decks – RCI – March 2018.
- Know your Code Requirements! – RCI – March 2018.
- Avoiding Condensation in Low-Sloped Roofing Assemblies – RCI – March 2018.
- Roof Drainage Design, Roof Collapses and the Codes – RCI – March 2018.
- Combination of Different Insulation Technologies to Enhance Performance of Exterior Wall Assemblies – RCI – March 2018.
- Climate Change Adaptation Technologies for Roofing – RCI – March 2018.
- Peer Review: Effective, Efficient and Educational – RCI – March 2017.
- Structural Assessment of Glass Restoration – RCI – March 2017.
- Critical Components of Welding Thermoplastic Membranes – RCI – March 2017.
- Drone Surveying: 3-D Enabled Automation of Roofing and Building Envelope – RCI – March 2017.
- Top Ten List: What Gets a Metal Roof Designed in Trouble? – RCI – March 2017.
- Moisture Migration: Causes and Cures – RCI – March 2016.
- Roof Fasteners for Metal Deck Roofing Systems: Energy Impact on Reroofing and Recover Scenarios – RCI – March 2016.
- Professional Liability Claims – RCI – March 2016.
- Adding Air Barrier and Thermal Improvements to Existing Buildings RCI – March 2016.
- Recent Developments in Below-Grade and Plaza Deck Waterproofing Systems – RCI – March 2016.
- Concrete Deck Moisture Issues: Causes and Preventative Measures – RCI – March 2016.
- Understanding Low-Sloped (Hydrostatic) Standing Seam Roofs – RCI-March 2015.
- Innovative Waterproofing Solutions for Blind-Side Waterproofing – RCI – March 2015.
- The Problems with and Solutions for Ventilated Attics – RCI – March 2015.
- Selection and Use of Sealants on the Exterior Envelope – RCI – March 2015.
- Reroofing Over a Wet Concrete Substrate – RCI – March 2015.
- Design of Non-Ballasted Low-Slope Roof Assemblies for Wind Resistance – The Current Situation and Recommendations for the Future – RCI – March 2014.
- Retrofitting Exterior Wall Assemblies with Rainscreen Systems – RCI - March 2014.
- Roofing Wind Speeds: ASCE 7, Uplift Ratings and Warranties – RCI - March 2014.
- The Effects of Hail on Metal Roofing Systems – RCI – March 2014.
- Air Barriers Impact on Energy Use in a Building – RCI – March 2014.
- Conventional Roofing Assemblies: Measured Thermal Benefits of Light and Dark Roof Membranes and Alternate Insulation Strategies – RCI – March 2014.
- Being a Professional Building Consultant in a Hail/Storm Damage Claim – RCI – February 2014.
- What it Means to be a Professional Building Consultant – RCI – January 2014.
- Metal Roofing – RCI – December 2013.
- Vegetative Roofing for the Design Professional – December 2013.
- Roof System Design LBL Modified Bitumen Technology – November 2013.
- Roof Systems Thermal and Moisture Design – RCI – October 2013.
- Reducing the risk of moisture problems in concrete roof decks – RCI – March 2013.

CONTINUING EDUCATION (CONTINUED)

- Testing metal wall panels – RCI – March 2013.
- Standard of Care – What is your risk – RCI – March 2013.
- Building Envelope Commissioning – RCI – March 2013.
- Advances in Fluid applied Roofing – RCI – February 2013.
- Waterproofing Design and Construction Coordination and Sequencing – RCI – March 2013.
- Communication Strategies for Expert Witnesses – RCI – April 2012.
- Evolution of EIFS – RCI – April 2012.
- Repair Strategies for Metal Roofing – RCI – April 2012.
- Water Testing Misconceptions: Fenestration Product Certification vs. Forensic Investigation of Building Leaks – RCI – April 2012.
- Thermal Storage with PCM vs. Thermal Insulation in Hot Climates – RCI – April 2012.
- Evaluating Condensation Resistance for the Design of Wall Assemblies – RCI – April 2012.
- Liquid Sealants: Selection, Design and Installation – RCI – April 2011.
- Cladding Attachment Schemes for Three-Coat Stucco Veneer on Thick Continuous Insulation Based on Experimentally Validated Finite-Element – RCI – April 2011.
- Case Studies of Roofing and Cladding Failures Involving Internal Pressurization and Topographic Effects – RCI – April 2011.
- Dynamic Building Envelope Closure Systems – RCI – April 2011.
- Communication Strategies for Expert Witnesses – RCI – April 2011.
- Sustainable Insulation: The Hard Choice – RCI – April 2011.
- Dynamic Water Vapor Permeance of Building Materials and the Benefits to Buildings – RCI – April 2011.
- Predicting the Hygrothermal Performance of Commercial Building Envelope Systems Using Computer Modeling Techniques of ASHRAE Standard 160-2009 – RCI – March 2010.
- Key Life Issues in Roof Design – RCI – March 2010.
- Below-Grade and Plaza Waterproofing – RCI – March 2010.
- Vegetated Roofing Systems at the University of Wisconsin – Milwaukee – March 2010.
- On-Site and Laboratory Studies of Surface Damage to Curtain wall Glass – March 2010.
- ON-DEMAND: Green Building Envelope Design – CSI – October 2009.
- Symposium on Building Envelope Technology – RCI – October 2009.
- Insulated Wall Cladding for Sustainable & Energy Efficient Design – Dryvit Systems – September 2009.
- Insulated Cladding Solutions for High Performance Buildings – Dryvit Systems – September 2009.
- Achieving Energy Efficient Roofing with Building Integrated Photovoltaics, Green Roofs and Energy Star Design - Tremco Group - September 2009.
- Elements of Commissioning and Testing for High Performance Building Enclosures - Tremco Group – September 2009.
- Blast Mitigation Through Windows and Glazing – CSI – July 2009.
- How the Courts Interpret Specifications – CSI – July 2009.

PROFESSIONAL AFFILIATIONS

- IIBEC – International Institute of Building Envelope Consultants (Consultant Member).
- IIBEC Education Committee Member.
- IIBEC Components and Cladding Wind Design – Continuing Education Credit Course - Comparison of ASCE 7 -05 to 22 – Co-authored – 2025.
- IIBEC Rooftop Quality Assurance Course – Co-authored - 2026.
- IIBEC REWC Committee Member.
- IIBEC REWC Exam Task Force – Re-write Certification Exam -2016.
- CSI – Construction Specifications Institute (Professional Member).
- NRCA – National Roofing Contractors Association (AEC Individual).
- ASTM – American Society for Testing and Materials (Participating Member).
- ASTM Committee D08 on Roofing and Waterproofing

PROFESSIONAL AFFILIATIONS (CONTINUED)

- ASTM Committee C14 on Glass and Glass Products.
- ASTM Committee E06 on Performance of Buildings.
- ICRI – International Concrete Repair Institute.

RELEVANT PROJECTS

- University of Illinois – Chicago 1990.
- 125/145 High Street, Boston, MA – 1990.
- Federal Triangle, Washington, DC – 1992.
- San Francisco Federal Courthouse, San Francisco, CA – 1994.
- Tampa Bay Buccaneers Football Stadium, Tampa, FL - 2011.
- Martin Luther King Community Center, Dallas, TX – 2010.
- Pearl River County School District, Picayune, MS – 2010.
- Georgia World Congress Center, Atlanta, GA - 2008.
- Dallas Theological Seminary, Dallas, TX – 2015.
- Valley Baptist Medical Center, Harlingen, TX – 2013.
- Scott & White Hospital – CAM – Temple, TX - 2015.
- Ector County Coliseum, Odessa, TX – 2016.
- Hope Cottage, Dallas, TX – 2016.
- Army Air Force Exchange Services, Dallas, TX – 2016.
- The Mayfair at Turtle Creek, Dallas, TX - 2016.
- Southwest Airlines Wings Office Building, Dallas, TX – 2017.
- UT Dallas Brain Performance Institute, Dallas, TX – 2017.
- 461 Dean, Brooklyn, NY – 2017.
- Pep Boys (27 Stores) Puerto Rico – 2017.
- Marquette Plaza. Minneapolis, Mn – 2018.
- Wells Fargo Headquarters, Des Moines, IA – 2018.
- AT&T Winspear Opera House – 2019.
- 23rd Street Station/Panama City Square, Panama City, FL – 2019.
- Imperial Oil Company – Strathcona, Edmonton, Alberta, CA - 2019.
- Imperial Oil Company – Nanticoke, Nanticoke, Ontario, CA – 2019 – 2020.
- EMPCO – Irving Terminal – 2020.
- ExxonMobil Baytown BOP Base Control Center Roof Replacement – 2020.
- ExxonMobil Joliet MCR Main Control Room Roof Replacement – 2021.
- The Current Hotel – Tampa - 2021.
- ExxonMobil Joliet Administration Building Roof Replacement – 2022.
- Paramount at Lake Eola – Orlando – 2023.
- Tesla – Miami – 2023.
- Stanton Miami Beach Marriott – 2023.
- Baptist MD Anderson Cancer Center – Jacksonville - 2023.
- The Center for Advanced Healthcare – The Villages – 2024.
- Arabella Condominiums - Houston, TX 2024.
- Hyde Miami - Miami, FL - 2025.

PRESENTATIONS

- Electronic Field Vector Mapping – February 21, 2017 – Dallas AIA, Dallas, TX.
- Drones: The New Frontier in Building Performance – NFMT: High Performance Building + Workplace – May 2017 – Arlington, TX.
- Safety Moment – Slips, Trips & Falls – July 2020.
- Fall Protection, Safety Training Seminar – January 2023.
- Building Envelope Training Sessions – monthly 2025.