

## David Amori, PE, RRC, CIT | Vice President, Engineering Practice Leader

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### Professional Summary:

Mr. Amori is responsible for the oversight of the engineering service line; product delivery, quality, training and mentoring, business development, and executive team liaison. This role also includes teaching continuing education classes to individuals in the insurance industry on topics such as building construction, structural engineering, and building envelope investigations. Mr. Amori is a Structural/Geotechnical Engineer and Registered Roof Consultant with more than 25 years of domestic and international experience in building and heavy civil construction and engineering. He also performs forensic structural, geotechnical, construction defect, and building envelope related investigations and consulting.

### Licenses and Certifications:

Professional Engineer, CO, #35124  
Professional Engineer, FL, #77844  
Professional Engineer, LA, #32976  
Professional Engineer, NV, #23945  
Professional Engineer, NY, #92046  
Professional Engineer, OK, #26644  
Professional Engineer, TX, #90564  
NCEES Model Law Engineer, #51594  
Registered Roof Consultant, RCI, #609  
Certified Infrared Thermographer, Infrasppection Institute, #10781  
EVS/R – Roof Specialist  
Rope Access Level III Competent Person

### Project Experience:

#### **Building Envelope**

##### **Roof Assessments**

Performed hundreds of forensic investigations including construction defect, design omission, cause and origin, water infiltration, roof collapse, post-hurricane/flood evaluations, wind related structural evaluations, and retrofit design.

##### **Infrared Assessments**

Used Infrared Thermography to detect thermal anomalies that could be associated with build envelope defects such as water infiltration, air leakage, and insulation deficiencies. Has performed dozens of assessments nationwide for forensics evaluations, assessments related to real estate transactions, and general consulting for new roof/roof repair.

##### **TD Bank**

Evaluated and design the roof replacement for several bank buildings along the east coast of the United States. Scope included assessment of the existing roof system, code compliant design of a new system, energy calculations, building department liaison, construction document, bid package generation, and construction compliance.

**Texas A&M Systems**

Provided roof uplift and spray rack testing for several newly constructed buildings along the South Texas Coast. Uplift testing was a construction compliance test to determine the resistance of the roof membrane to uplift pressure that would be imposed by high velocity winds. Spray rack testing was conducted on curtain walls and selected fenestrations to determine water resistance compliance with the project documents. This included an imposed pressure differential across the specimen.

**VA Administration**

Assessed new roof construction on several buildings at a south Texas campus. The assessment included IR Thermography, a thorough document review, and visual assessment. New construction services including testing of window and curtain wall systems using differential pressure (ASTM 1105) and negative pressure uplift testing of low-slope roof systems (FM1-52).

**Hotel and Convention Center, Beaumont, TX**

Conducted a roof storm damage assessment of a hotel and convention center in the wake of Hurricane Ike.

**Pasadena ISD, Pasadena, TX**

Lead a team of professionals to conduct storm evaluations of 37 facilities for the School District in the wake of Hurricane Ike.

**Construction Defect Hotel, Santiago, Chile**

Site assessment, analysis and report of a construction related defect resulting in water infiltration and reliable damage to 150+ units of a high-rise hotel in Santiago.

***Structural*****Multiple Locations**

Performed hundreds of forensic investigations including construction defect, foundation performance evaluations, design omission, cause and origin, water infiltration, structural assessment, structural assessment post-fire, roof collapse, post-hurricane/flood evaluations, wind related structural evaluations, and retrofit design.

**Structural Condition Assessment; Corpus Christi, Texas**

Performed the structural assessment and development of code compliant retrofit of the historic Nueces County Courthouse.

**Structural Condition Assessment; Corpus Christi, Texas**

Provided the structural assessment of a 10-story pre-cast concrete and masonry multi-family residence.

**Construction Management**

Project Manager for dozens of commercial, light industrial and educational facilities in Northern Colorado and Nebraska. Responsible for contract administration, construction supervision, quality assurance, layout, and design team liaison.

***Heavy Civil, Industrial, and Petro Chemical*****Petroleum Storage Tanks, Braithwaite, LA**

Forensic investigation of causation, mechanism of causation, and scope of repairs for a tank farm damage by high velocity winds and storm surge from Hurricane Isaac.

**Waste Water Treatment Plant, Uruguay**

Forensic investigation of the design and construction conditions that lead to differential settlement of the biological reactor basin floor resulting in concrete joint failure. Loss exposure: \$7 Million USD.

**Hydroelectric Plant, Peru**

Forensic investigation of the failure of a conventionally reinforced concrete lined vertical shaft (excavated rock tunnel) that is part of the water conduction system feeding the turbines. Loss exposure: \$15 Million USD.

**Flint Hills Resources, Corpus Christi, Texas**

Conducted a foundation investigation to determine to cause of differential settlement for a process heater.

**Sherwin Alumina, Gregory, Texas**

Conducted a foundation evaluation to determine the cause of differential settlement of a caustic solution storage tank.

***Geotechnical*****Corpus Christi International Airport; Corpus Christi, Texas**

Conducted reinforced concrete pavement failure evaluations for taxi and runways.

**Water Reservoir, Cajamarca, Peru**

Construction supervision of a water retention dam; placement of over 500,000 cubic meters of engineered fill, subgrade preparation for installation of geosynthetics, construction of water channels, erosion controls, and access roads.

**South Padre Island, Texas**

Forensic investigation of the cause of differential settlement of a 30+ story post-tension concrete multi-family residential building. Building was founded on auger-cast piles. Loss exposure: \$35 Million USD.

**Water Reservoir, Alaska**

QA/QC supervisor for the construction of a zoned earth embankment water reservoir. The project included a reinforced concrete spillway, and excavated key-trench and a pressured grouted cut-off curtain.

**Tailing Facilities / Leach Pads, Various North and South America**

Provided laboratory testing and analysis of construction materials for the design of heavy civil projects related to the mining industry. QA/QC supervisor for the construction of geosynthetic lined earth embankment tailing facilities and leach pads. The projects included earthwork, geosynthetics, concrete, and solution collections systems.

**Remote Office Manager, Various Locations, Peru**

Managed onsite office during a \$250 million facilities expansion. Supervised staff administration, equipment and materials logistics, and cost control. Lead the development and implementation of a cost tracking and reporting system. Provided technical support and supervision for our materials testing laboratory. Also responsible for blast safety coordination.

### Professional Experience:

**EFI Global, Inc.**, 2006 – Present

Vice President, Engineering, November 2013 - Present

Senior District Manager, San Antonio, TX, 2006 – October 2013

**PSI**, Branch Manager, Corpus Christi, TX, 2003 – 2006

**Brown Engineering**, Senior Consultant, Austin TX, 2002 – 2003

**RC Heath Construction Company**, Project Manager, Fort Collins, CO, 2001 – 2002

**The Neenan Co.**, Project Manager, Fort Collins, CO, 1999-2001

**Knight Piésold**, Staff Engineer, Denver CO, 1991-1998

### Education:

Master of Science, Civil Engineering, University of Missouri S&T, 2016

Master of Science, Construction Management, University of Birmingham, UK, 1999

Bachelor of Science, Civil Engineering, University of Colorado at Denver, CO, 1995

### Affiliations:

RCI, Inc. (RCI)

Claims Litigation Management (CLM) - Fellow

### Courses Instructed/ Guest Lecturer:

Soil Mechanics

Construction Defects

Structural Assessment: Repair v Replace

Storm Assessment of Commercial and Residential Roofing

Foundation Evaluations

Basic Building Construction

Moisture Migration through Buildings

Hail Damage to Residential Roofs

EVS - Roof Specialist Program Residential and Commercial Roofing

### Publications and Presentations:

Bogdon, Michele and Amori, David, "Squaring the Slab – An Engineering Perspective on Evaluating Foundations for Reuse", Claims Management, October 2014.

Byer, Sarah and Amori David, "Structural Deficiencies in Roof Collapses Can Lead to Subrogation Opportunities", Claims Journal, October 2014

Amori, David P., "Common Examples of Non-Storm Related Moisture Intrusion" Claims Management, August 2014.

Amori, David P., "Inspection of Residential and Commercial Roofs and Extent of Damage," PLRB Western Regional Conference, June 2014.

Amori, David P., "Foundation Issues Related to Winter Weather and Snow Loads," Claims Journal Interview, March 2014.

Amori, David P., "How Hot is Too Hot. A Structural Assessment of Fire Damaged Buildings," Claims Management, October 2013.

Amori, David P., "Precarious Foundations," Claims Magazine, July 2013.

Amori, David P. and Johnson, Shawn, "After the Storm: Analyzing Tornado Structural Damage," PropertyCasualty360.com, May 22, 2013.

Amori, David P., "Qualitative Analysis and Investigation of Water Infiltration into Buildings," Emerging Environmental Claims Managers Association (EECMA), May 2012.

Amori, David P., "Wind Related Design Considerations for Roof Decks," National Roof Deck Contractors Association (NRDCA), April 2012.

Amori, David P., "Case Study: Field Uplift-Resistance Testing of Low-Slope, Built-Up Roofs Along the South Texas Coast," Peer Reviewed Paper Proceedings, 27<sup>th</sup> RCI International Convention and Trade Show, March 2012.

Amori, David P., "Raising the Roof on Wind-Resistant Technology," Claims Magazine, January 2012.

Amori, David P., "Roof Uplift Testing: A Risk Assessment of Roofing Systems to Determine Insurability in Hurricane Prone Areas," PLRB National Conference, April 2011.

Amori, David P., "Assessment of Wind-Related Damage to Commercial Roofing," Claims Magazine, June 2009.

\*\*Court and Litigation CV available on request