



JAMES R. (J.R.) WHIPPLE, PE, SE, MLSE

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J.R. Whipple, PE, SE, MLSE

Principal Engineer

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PROFESSIONAL ENGINEERING REGISTRATIONS (PE):

Colorado PE #44704

Arizona PE #53073

Iowa PE #27546

Nebraska PE #19484

Nevada SE #023577

New Mexico PE #19753

North Dakota PE #10363

Utah SE #10412736

PROFESSIONAL MEMBERSHIPS & AFFILIATIONS:

- ACI-American Concrete Institute
- NSPE-National Society of Professional Engineers
- NCEES-National Council of Examiners for Engineering and Surveying
- ACEC-American Civil Engineers of Colorado

PO Box 1238

Parker, CO 80134

www.riveteng.com

EDUCATION:

B.S.E Civil Engineering, Arizona State University, 2005 Summa Cum Laude

ENGINEERING WORK HISTORY:

Principal, Rivet Engineering Group, LLC - January 2017 to Present

Senior Engineer, Knott Laboratory, LLC - December 2012 to January 2017

Chief Engineer, Sticks & Stones Engineering - September 2011 to December 2012

Branch Manager & Structural Engineer, RMG - March 2008 to August 2011

Structural Designer, PK Associates - January 2006 to March 2008

Design Engineer & Truss Designer, Jordan Engineering - July 2004 to Dec 2005

Truss Designer & Estimator, Ballard Truss in Snowflake - Jan 2002 to July 2004

FORENSIC ENGINEERING EXPERIENCE:

Mr. Whipple's investigation and forensic experience includes hail damage, wind damage, seismic/earthquake damage, water damage, flood damage, building envelope failures, freeze damage, ice dams, snow load damage, moisture intrusion, ventilation deficiencies, building collapses, foundation failures, roofing issues, construction defects, vehicle impacts to buildings, hail damage to vehicles, as well as the investigation of fraudulent/suspicious activity by others. Mr. Whipple's investigations have identified issues with various building components and roofing products such as asphalt shingles, cedar shakes, concrete tiles, Masonite Woodruff fiberboard shingles, metal R-panels, as well as commercial roofing membranes such as PVC, TPO, EPDM, Modified Bitumen (Mod-Bit), Spray Foam (SPF), Built-Up Roofing (BUR), and standing seam metal panels. Mr. Whipple's forensic and structural investigations have discovered issues not just with roofing and siding products, but also with installation errors and items including flashings, underlayment, boots, stacks, chimneys, transitions, vents, stucco, synthetic stucco (EIFS), wood siding, brick, adobe, masonry veneer, water-resistive barriers (WRB), vapor barriers, organic growth, long-term deterioration, freeze/thaw, mold, rust, corrosion, deferred maintenance, and wear & tear. His credentials as Professional Engineer and additional expert certification as SE (Structural Engineer) and MLSE lend greater credibility to his fair, unbiased, and balanced opinions in his expert reports, depositions, and testimony.

STRUCTURAL ENGINEERING EXPERIENCE:

Mr. Whipple has years of experience investigating and designing repairs to include residential and commercial roofing products, siding and cladding products, windows and doors, structural systems, foundations, as well as drainage issues and retaining walls including the determination of cause, damage extent and value of loss, source and origin investigations, and resolving insurance appraisals. He provides clear and concise engineering documents for each phase of claims and construction projects via concerted process of synergistic and open communication with colleagues, clients, attorneys, other experts, contractors, architects, managers, and Board Members. Many of the projects in Mr. Whipple's design portfolio include repairs to correct damage to existing structures, drawn from his years of experience in design related to ground-up construction, additions, and renovations. Mr. Whipple is well-versed in building design, forensic investigations, shop drawings, evaluation, and providing reasonable engineered solutions via reports, plans, and specifications for vertical construction as well as work with drainage issues, pavement, and flatwork repair. Mr. Whipple's structural design experience includes familiar construction materials such as reinforced concrete, post-tensioned concrete, structural steel, light-gauge steel, concrete masonry units, brick masonry, heavy timber, sawn lumber (stick framing), and pre-engineered components such as decking, trusses, I-joists, beams, columns, railings, and open web joists. His design experience also includes specialty projects involving structural stone, adobe, helical piers, and chemical grout injection for stabilizing soils. Local conditions dictate that many of Mr. Whipple's engineering projects must resist extreme environmental conditions such as heavy snow loads, high winds, steep slopes, corrosive environments, and/or expansive soils.

EXEMPLAR PROJECTS

COMMERCIAL DESIGN

- One Central Park East | Phoenix, AZ | 23-story structural steel and reinforced concrete tower *
- Franklin Tower Condos | Denver, CO | Replace Cladding, structural repairs, waterproofing
- Three Springs | Durango, CO | Three 2-story buildings of structural steel & reinforced concrete *
- Martinez Park Apartments | Denver, CO | Fire Repair to 24-unit Apartment Building
- 40 Madison Street | Denver, CO | Deck and Waterproofing Investigation and Structural Repairs
- Famous Steakhouse | Castle Rock, CO | Multiple Awnings added to Existing Structure
- The View | Northglenn, CO | Repairs to Balconies at 24 buildings / 144 locations
- Park Regency Condos | Denver, CO | Architectural and Structural Railing and Panel Replacement
- Business Park | Littleton, CO | Cladding Replacement, Thermal Envelope Repairs
- Larimer Place | Denver, CO | Multiple Window Replacements and Balcony Terrace Enclosures
- Hampton Inn | Glendale, CO | Pool Area Repairs and Renovation
- Arapahoe Ridge Clubhouse | Erie, CO | Structural Investigation and Flatwork Repairs
- Palomino Park Resort | Highlands Ranch, CO | Clubhouse Foundation and Guard House Repairs
- Terra Vista Apartments | Littleton, CO | Renovations, Moisture, Cladding, and Structural Repairs

RESIDENTIAL DESIGN

- Wood-Framed Apartment Buildings | Metro-Phoenix, AZ | Wood Framing & Post-Tension *
- Single-Family Residences | Summit County, CO | Wood- and Steel-Framed, some w/ Walkouts
- Off-Grid Cabins | Summit County, CO | Wood Framed w/ Treated Wood Foundation
- Single-Family Addition | Fairplay, CO | Wood Framed Addition w/ Concrete Foundation
- Single-Family Additions | Denver, CO | Numerous Repairs, Additions, Pop-Tops, Renovations
- River Park Townhomes | Summit County, CO | Wood Framed Decks w/ Concrete Piers Foundation

CONSTRUCTION DEFECT | EXPERT WORK

- Adams County SD14 v. AP Construction | Commerce City, CO | Asphalt, Pool, Water, Foundation
- Century City Condos v. Century City, LLC | Aurora, CO | Egress, Site Drainage, Asphalt
- Taylor Morrison v Austin Martin v D Hernandez Const | Broomfield, CO | Roofing

POST-LITIGATION REPAIR DESIGNS

- Barrington Heights HOA | Colo. Spgs., CO | Building Envelope, Retaining Wall, and Drainage
- Highlands at Stonegate North HOA | Parker, CO | Building Envelope, Structural, and Drainage
- Workplace Lofts HOA | Denver, CO | Building Envelope, Roofing, Structural, and Drainage
- Fire Clay Lofts HOA | Denver, CO | Building Envelope, Decks, Roofing, Structural, Masonry,
- Fair Wind II HOA | Broomfield, CO | Water Intrusion, Structural, Cladding, Decks
- Heritage Todd Creek | Brighton, CO | Cladding, Building Envelope, Structural, Flatwork

STORM DAMAGE / CATASTROPHE

- Numerous residential and commercial fire repair plans, Wildfire Damage
- Repair plans for residential, commercial, and institutional buildings impacted by errant vehicles
- Earthquake damage to single-family residences *
- Hail Damage to various roofing types: Shingles, Modified Bitumen, EPDM, TPO, and Conc. Tiles
- Wind Damage to Roofing / Cladding / Structures
- Mechanical Damage, Manufactured Damage, Disputed Causes, and SIU Investigations

INSURANCE APPRAISAL / UMPIRE ASSIGNMENTS

- Copper Oaks v. American Family Ins. | Lakewood, CO | Appraiser for Carrier
- New Creations Ministries v Church Mutual | Longmont, CO | Appraiser for Carrier
- Numerous Property Owners v. Various Insurance Co's | Denver-Metro, CO | Appraiser for Carrier

*Projects completed prior to Rivet Engineering

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PRESENTATION HISTORY & PROFESSIONAL DISTINCTIONS

PRIMARY TECHNICAL CONFERENCES AND SEMINARS:

- Colorado Chapter of the International Code Council Education Institute, 1-day course: *Building Loads and Wall Bracing* regarding structural design and environmental loads on buildings, including seismic and windstorm effects. March 6, 2018; March 5, 2019; and March 3, 2020; March 9, 2022.
- Colorado Chapter of the International Code Council Education Institute, 1-day course: *Rain, Snow, and Ice Loads* regarding structural design and snow, hail, rain, ice, and wind effects on buildings. March 1, 2016 and March 7, 2017.

PROFESSIONAL DISTINCTIONS:

- National Society of Professional Engineers, Colorado, 2016 Project Manager of the Year.
- NCEES Model Law Structural Engineer (MLSE) and Record Holder.

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