

Curriculum Vitae

JOSEPH A. LAROVERE, C.E.M.

HVAC, Plumbing, and Mechanical Experts
Energy Management and Building Controls Experts
Mechanical Engineering
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Summary of HVAC and Mechanical Expertise

35+ years of experience as a contractor, owner/operator, technician, and consultant to the construction industry with specialties in HVAC, Mechanical, Electrical, Plumbing, Energy Management and Control Systems.

Specialties

- **HVAC Systems**, air conditioning, heat pumps, chiller plants, heating hot water, boilers, air handlers, water source heat pumps, cooling towers, dedicated outside air, ventilation, and exhaust systems,
- **Energy management and control system**, sequence of operation, energy management and building efficiency,
- **Domestic hot water systems**, electric and gas boilers and water heaters, mixing valves and hot water recirculation systems,
- **System failures**, equipment failures, maintenance issues, preventative maintenance, water treatment, forensic investigation, and remediation
- **Project Management**, Program Management, Project Accounting, and Scheduling consulting and analysis
- **Contractor Evaluation**, Contract Review, Contractor Standard of Care, Engineering Evaluation, Site Inspections, and Retro commissioning

Recent Assignments

- Litigation related to domestic water leak and flood resulting in damages to interior finishes, investigate contractor's standard of care, means and methods and materials used during domestic water connections to water filtration system.
- Litigation and deposition for plaintiff due to personal injury caused by manufacturer defect and over pressurization of system components.
- Litigation and Mediation Brief for defense from personal injury claim related to rooftop HVAC compressor explosion, HVAC Technician v California commercial property owner.

- Litigation and Remediation of chilled water central plant, West Wendover NV – replacement of cooling towers, pumps, modifications of piping, modifications and replacement of Building Management and Control System (“BMCS”).
- Litigation involving defective replacement of thirty rooftop HVAC units in marijuana grow facility in Phoenix AZ.
- Litigation and Remediation involving defective design and construction of HVAC systems in >100,000 SF healthcare facilities.
- Evaluation and construction observation of HVAC design and construction deficiencies in outpatient aesthetic surgery facility in Scottsdale, AZ.
- Litigation related to allegations of defective design and construction of HVAC, Plumbing and Fire Protection systems in high-rise condominium facility in Phoenix AZ.
- Ongoing litigation concerning design and construction defects in 250,000 SF data center converted to clinical blood testing facility in Phoenix AZ.
- Evaluation of alleged chiller plant design and construction defects in marijuana grow facility in Phoenix AZ – ongoing litigation.
- Evaluation of allegations of HVAC design defects in design-assist project involving more than 250,000 SF of mixed use, high-rise, high-end condominiums.
- Operations and Project Management - \$50M Confidential clean manufacturing, modular data center, hyperscale data center conveyance, Denver CO 9 Months.
- Litigation on behalf of plaintiff arising out of a wrongful death case which involved analysis of a residential HVAC contractors standard of care.
- Ongoing litigation including site inspection on behalf of defense and participation in pre litigation council discussions of \$70M 70,000 square foot custom home located in Scottsdale, AZ with alleged defective workmanship installation of exterior stone cladding system.
- Project Management-\$330M Honolulu HI, Highrise Luxury Apartments.
- Litigation for defense against subcontractors’ claims related to the remodel of a football arena located in Tempe Arizona.
- Litigation including site inspections and expert report for defense of developer and builder in Lancaster Texas related to multiple charter schools. Investigations included exterior stone cladding, roofing, HVAC equipment, energy management and controls, grading and landscaping, and storm water control and erosion control.
- Litigation including cost estimating for plaintiff damages model related to hotel in Bullhead City, Arizona.
- Litigation related to defense of general contractor from the special system (fire alarm) vendor related to a military base in Monterey County, California.
- Owners Representative-\$30M Arabian Farm and Residence, Paradise Valley AZ.
- Litigation regarding Texas Utility Scale Solar schedule and delay analysis for plaintiff of subcontractor of 200-megawatt ground mounted photovoltaic solar system.

- Litigation for defense of mechanical contractor due to allegations arising out of a fuel oil spill at hospital in Prescott Valley, Arizona.

Project Types

- Health care facilities
- Mission Critical/Data Centers
- Clean Rooms
- Operating Suites
- Apartments and Condominiums
- Medical Office Buildings
- K-12 Schools
- Higher Education
- Commercial Office Buildings
- Highrise Buildings
- Casinos
- Hospitality
- Assisted Living Facilities
- Military Facilities
- Manufacturing and Semi-Conductor Facilities
- Residential

Certifications

- **C.E.M.** - Certified Energy Manager
- Honeywell Tridium Niagara AX
- Honeywell Tridium Niagara 4
- Johnson Controls Facility Explorer
- **LEED AP BD&C** (Inactive)

Education

- **Association of Energy Engineers:** Certified Energy Manager Exam Preparation
- **Green Ideas:** LEED AP Exam Preparation
- **Arizona Builders Alliance:** Leadership Development Forum, Executive Management Forum
- **Scottsdale School of Real Estate:** Arizona Real Estate School and Exam Preparation
- **Refrigeration School Inc:** HVAC Electromechanical Technologies Certificate
- **Johnson Controls:** Metasys Engineering, Facility Explorer Certification
- **Honeywell:** Niagara AX Certification
- **Glendale Community College:** Microsoft Works, Microsoft DOS, Drafting
- **Heat Pump Council:** Heat Pump Troubleshooting
- **Trane:** Screw Chiller Maintenance, Trane Tracer 100 Programming
- **US Navy:** Principles of Naval Engineering, Propulsion Engineering and Machinist's Mate Class A, Basic Enlisted Submarine School, Trident Submarine Diesel Engine Operator, Oxygen

Generator Operator and Maintenance, Combined Maintenance (hydraulics, compressed air, blowers, pumps, and valves), Chemical Biological and Radiological Warfare, Machinery Repair, Quality Control and Controlled Material Management, Principles of Naval Engineering, Air Conditioning and Refrigeration

Professional Associations

- **SEAK**-Expert Witness Directory 2024-Current
- **Experts.com**-Expert witness and business consultants directory 2025-Current
- **ASHRAE**-American Society of Heating Refrigeration and Air Conditioning Engineers: 2003-Current
- **AEE**-Association of Energy Engineers: 2011- Current
- **FEWA**-Forensic Expert Witness Association: 2023-Current
- **USGBC**-United States Green Building Council: 2008-Current
- **American Subcontractors Association**: 2015-2016 Chapter Past President
- **Arizona Association of School Board Officials**: 2009-2016
- **Arizona Builders Alliance**: 2009-2016
- **Association of Realtors**: 2001-2006

Press

- **Denver Business Journal**: Dated June 6, 2023-RK Mission Critical Vice President Promotion
- **AZ Big Media**: dated February 18, 2019-IMCOR Vice President Promotion
- **AZ Big Media**: dated December 12, 2018-Great Wolf Lodge topping out ceremony
- **BACnet international**: Journal Issue 06 Dated September 2013-Greenway Middle School
- **Association of Energy Engineers**: dated January 20, 2011-Certified Energy Manager Achievement
- **Naval Training Center Great Lakes**: dated December 18, 1987-Honor Graduate

Past Employment

- **Vice President Interstate Mechanical Corporation (IMCOR)**, Phoenix AZ, 2019 - 2020
As the VP of Construction, I had full responsibility for field operations, project management, virtual design (BIM), Preconstruction, purchasing, prefabrication, and Information Technology. I managed a \$30M business unit with 200 employees. While at IMCOR my notable accomplishments were the successful closeout of the state's first indoor waterpark and hotel plumbing installation, completion of the rough-in of a luxury high-rise apartment building in downtown Tempe with significant challenges to overcome related to quality, manpower, and

productivity. Completely revamped the company's IT infrastructure. Implemented web-based project management software to improve the efficiency of the project management team.

▪ **MEP Executive MA Mortenson, Phoenix AZ, 2016 - 2019**

Assigned to the Phoenix operating group as the regional MEP expert and national MEP committee representative. Responsible for mechanical, plumbing, electrical, and special systems at all phases from Preconstruction to project close out. I reported directly to the SVP and operations manager. In addition to my primary duties, I was responsible for managing project teams and client relationships. I reported to the national MEP director as my collateral duty serving on the MEP committee. During my time on the committee, we were focused on delivering better outcomes to our owners by developing internal training and improving the overall quality of systems delivered. While at Mortenson my notable accomplishments were successful commissioning of the Apple Tilden Data Center in Mesa AZ and programming, and construction of Arizona's first Great Wolf Lodge Resort, and oversight of the preconstruction and commissioning activities on multiple projects in the commercial office building and hospitality portfolio of projects.

▪ **Executive Vice President Urban Energy Solutions, Phoenix AZ, 2009-2016**

Owner and energy management division founder as the premier electrical, solar, energy performance contracting, DDC and systems integration provider in the Arizona K-12 market. Consistently delivered a high level of customer satisfaction and job profitability. Instrumental in establishing corporate vision and establishing policies and procedures companywide to ensure consistent performance and profitability. Reported regularly to the national board of directors and met with senior leadership to align ownership's vision with local initiatives. Notable accomplishments were establishing all business processes including sales, operations, engineering, installation, and service. Created SAAS building automation and energy management server which controlled several school districts and a hospital network throughout Arizona. Experienced in energy performance contracting and energy efficiency upgrades.

▪ **Realtor Century 21 Metro Alliance, Chandler AZ 2001 - 2006**

Joined Century 21 Metro Alliance as a residential real estate agent and licensed realtor during the construction downturn of 2001 to supplement my income. During my time as a realtor, I consistently closed many real estate transactions and eventually transitioned all my real estate activities to my partner as my focus on the construction industry sector took priority.

▪ **President ECI Control Systems of Arizona, Tempe AZ, 1997 – 2008**

Joined ECI as a project manager and held every position within the company until promotion to President. Grew revenue from \$1M to \$9M annually while increasing project gross margins and penetrating vertical markets. Notable clients included Mayo Hospital, Yavapai Regional Medical Center, Intel, Qwest Communications, Opus Southwest, CBRE, Westcor Shopping Malls, Macerich, Multiple School Districts, Iridium Satellite, and Honeywell.

▪ **Controls Division Manager INRI Air Conditioning, Phoenix AZ 1985 - 1997**

Worked for family-owned commercial HVAC company during high school and after returning from serving in the US Navy. Held many positions including Journeyman sheet metal worker, service technician, and controls division manager. The company was sold to a national consolidator in 1997 when I decided to pursue a career in energy management.

▪ **MM2/SS United States Navy, 1987- 1991**

Machinist's Mate Second Class Petty Officer-Submarine Warfare Qualified

Joe graduated first in his class from propulsion engineering school and class A school at the Great Lakes Naval Training Center. Joe was one of the youngest to receive submarine warfare qualification at age 19 and the youngest in his division to be promoted to MM2 at age 20. Joe worked in engineering and was responsible for the ship atmosphere control, hydraulic, high-pressure air, refrigeration, and emergency air breathing systems onboard the USS Lafayette Ballistic Missile nuclear submarine, completing 5 patrols out of Holy Loch Scotland, diplomatic cruise to France, covert operations in the Northern Atlantic and under the polar ice caps, and completing the decommissioning at the Puget Sound Naval Shipyard before being honorably discharged. Joe received several decorations including national defense, good conduct, and rifle marksman medals as well as letters of appreciation from commanding officers and an admiral's letter from the submarine fleet commander.