STEPHEN M. REDDING, PE, LEED AP

Firm: Manager, Stephen Redding P.E., PLLC

Education: Bachelor's of Science 1970; Master of Mechanical Engineering, 1971, Rice University

Registrations: Registered Professional Engineer, Texas & Colorado

Professional Memberships and Affiliations:

Past President, ASHRAE Houston Chapter General Chair, Host Committee for 2018 National ASHRAE Meeting American Society of Plumbing Engineers, Past Member Chairman, City of Bellaire, Tx, Bldgs & Standards Commission



Adjunct Lecturer- Rice University School of Architecture, 2009-2024 Guest lecturer- University of Houston School of Architecture Speaker at AIA, ASHRAE, IREM, BOMA professional organizations Chair (starting 2023), City of Bellaire, Tx, Bldgs & Standards Commission 2019-2023

Professional Experience: 50+ years as a practicing consulting engineer for Heating, Ventilation and Air Conditioning (HVAC) and plumbing design and construction administration of new facilities, additions, and renovations. Mr. Redding has experience in the HVAC, plumbing and electrical design and analysis of commercial, institutional, industrial, governmental and residential facilities. Experience includes schools, universities, laboratories, hotels, office towers, parking garages, multifamily, retail, restaurants, warehouses, military facilities, courthouses, prisons, jails, churches, hospitals, clinics, veterinary hospitals, nursing homes, physician buildings and retirement centers. His expertise also includes code review and analysis, peer reviews of HVAC design and forensic analysis.

Stephen M. Redding, PE, PLLC 2016-2024: MEP consulting, peer reviews, forensic and systems analysis and troubleshooting, expert witness analysis, general consulting **Socotec** 2016-2024: contract consultant (part-time): litigation support; expert witness analysis **Shah Smith and Associates** 2016-2020 contract consultant (part-time): project management of institutional and health care projects

KCI Technologies, Inc. (acquired RLB): VP/ Regional Practice Leader, MEP design, 2014-2016

Redding Linden Burr (RLB) (MEP consulting engineering firm): Founding Principal, 2000-2014

Stephen M. Redding PE Inc. / Suttles Linden Redding (MEP consulting engineering firm): Founding Principal, 1985-2000

Lockwood Andrews Newnam, Inc.: Project Manager, Dept. Head, Project Engineer, 1972-1985

Standard Oil of California, Project Engineer, 1971-1972

Depositions as a designated expert:

- In 2023: Chardale Properties v. CMP, et al
- In 2021: Brazos Presbyterian Homes, Inc., vs Lendlease (Us) Construction, Inc., et. al.



 In 2021: The Insurance Company of The State of Pennsylvania as Subrogee of Union Investment Real Estate Gmbh vs. Air Conditioning Innovative Solutions, Inc.,

Representative Projects and Assignments:

- Forensic Analyses / Reports of Findings / Certificates of Merit
 - Retirement center humidity and comfort issues
 - o Humidity issues at veterinary hospital
 - HVAC issues at manufacturing clean room
 - Water check valve failure
 - Humidity issues at a synagogue
 - o Retirement center HVAC chilled water insulation issues
 - o HVAC issues at manufacturing facility
 - Multifamily HVAC and humidity investigations
 - Auto dealership HVAC issues
 - Hotel domestic hot water issues
 - o HVAC issues at air traffic control tower
 - Pizza restaurant humidity issues
 - HVAC issues at medical-professional office building
 - Restaurant HVAC and humidity issues
 - o HVAC water pipe failure assessment- large retail mall
 - o Odor investigations-large urban Hotel
 - o Floor buckling / moisture intrusion investigations- large residence
 - Bowling alley HVAC and humidity issues
 - Retail lease HVAC pipe leakage issues
 - o Refrigerated warehouse: root cause analysis for mold and HVAC issues
 - HVAC deficiency investigations- auto dealership
 - HVAC deficiency investigations- multi-building community center
 - HVAC deficiency investigations- high rise condominium
 - o HVAC investigations after flooding- multifamily
 - Nursing home-mold and mildew issues
 - Large Hotel- mold and mildew issues
 - High-rise hotel-- smoke evacuation system issues
 - Major League Baseball Stadium: analysis and remedial documentation for failed chilled water insulation systems; addition of chilled water heat exchanger
 - Major League Football Stadium and Convention Ctr: analysis and remedial documentation for failed chilled water insulation systems
 - o Mold / mildew investigations- medical surgery center
- Due Diligence Property Condition Reports
 - Commercial office building Due Diligence/Property condition report- multiple instances
 - Convention Center property condition report
 - Port of Houston- building condition assessments
- Building Commissioning and Certifications
 - Retro-commissioning and ASHRAE Level I/II analyses of multiple commercial buildings
 - Facilitation of LEED certification- multiple commercial buildings
 - o Facilitation of Energy Star certification- multiple commercial buildings
 - Energy simulations of large building performance for energy code or LEED certification

- University / College-MEP design
 - University of Houston- Energy Research Park: new construction & renovation
 - Rice University energy systems retro-commissioning analysis for Duncan Hall. Multiple renovation projects. New baseball stadium
 - Texas Southern University energy systems retro-commissioning analysis
 - Houston Community College System- design MEP engineer, Northeast Campus
 Classroom Bldg and Truck Driving school
 - Lone Star Community College System multiple renovation projects
 - Baylor College of Medicine air handler and hood exhaust additions
 - o TAMU- College Station- life safety renovations to an existing building
- K-12 Schools-MEP design
 - Houston ISD: new 1500-student high school.
 - St. John's School- new Dining Hall
 - New Caney ISD: multiple projects
 - Humble ISD: multiple projects, renovation and new construction. Energy Retrocommissioning of 3 schools
 - Ft Bend ISD: HVAC equipment replacements
 - Canutillo ISD: new high school
 - Conroe ISD: transportation facility additions and renovations
- Laboratory Design
 - Hospital research and clinical labs- new and remodel- various projects
 - University research labs- new and remodel- various projects
 - High school science labs- various projects
- Food Service Design
 - New full-service stand-alone restaurants multiple designs
 - New fast-food restaurants multiple new and site-adapted designs
 - New full-service restaurants in hotels multiple designs
 - Houston ISD: kitchen for new 1500-student high school.
 - o St. John's School- new Dining Hall & Kitchen
 - Canutillo ISD: Kitchen for new high school
- City of Houston / Houston First / Harris County -MEP design
 - NRG complex-consultation re Astrodome renovation
 - Julia Ideson Library expansion and renovations
 - Partnership Tower: project manager for MEP design of office tower and garage
 - Hilton Americas Hotel: multiple projects including central plant renovations, air balance, kitchen pipe replacement, domestic water systems upgrades, air balance, lighting upgrades.
 - George R. Brown Convention Center: multiple projects including central plant renovations, Building Automation Systems upgrades, cooling tower upgrades, building automation systems upgrade, kitchen pipe replacement, lighting upgrades and LEED certification, Pappas restaurant lease space design. Major additions and renovations to GRBCC, Avenida and Hilton Garage (in association with Trak Engineering)
 - Wortham Center chiller replacements; building automation systems upgrade
 - Jones Hall prelim. design of HVAC renovations and building automation systems upgrade
 - o Harris County Joint Processing Center: new jail and courtroom facility
 - Port of Houston- multiple renovation projects

- Medical / Healthcare MEP design
 - Surgical Specialty Hospital expansion, Houston, TX
 - Surgical Center, Cypress TX
 - 80,000 sq ft Hospital, Fort Worth, TX
 - Specialty Pharmacy
 - Patient floors / LDR / Cysto buildout at large urban Hospital
 - Multiple freestanding Dialysis Centers
 - MRI imaging suites
 - Operating rooms and patient floor renovations, large hospital, Houston TX
 - Medical office buildings- doctor's offices, dental
 - Multiple Assisted Living Centers & Nursing Homes
 - Medical Office bldg Core & Shell- Kingwood TX
 - Renovations to Medical School/ Clinic, Galveston TX
- Hotel
 - Hotel Icon: conversion of existing office building into a 138-room hotel
 - Magnolia Hotel: conversion of 18-story bldg into a 314-room hotel
 - Embassy Suites Hotel- new high-rise hotel in San Antonio
 - Hilton Hotel, Austin- total renovtn plus addition of a new floor
- Other Commercial, Industrial and Residential projects -MEP design
 - Wells Fargo Tower: cooling tower & chiller replacements
 - Space Shuttle & 747 carrier exhibit, NASA visitor center
 - San Felipe Plaza: cooling tower replacements atop a high-rise building
 - o Market Square Tower: new 40-story apartment building
 - Multistory downtown parking garage
 - Binz Building: chiller replacement; lease space buildouts
 - o 801 Travis: chiller replacement; cooling tower and energy recovery analysis.
 - Houston Center: multiple infrastructure upgrade projects and lease space buildouts
 - Allen Center: multiple infrastructure upgrade projects and lease space buildouts
 - o Greenway Plaza- chiller plant upgrade and lease space buildouts
 - o Post Oak Central- chiller upgrade projects and lease space buildouts
 - Multiple core and shell office buildings
 - Office / warehouse- multiple projects
 - Data centers
 - Churches- expansion, new construction and renovations
 - Apartment buildings- new and renovations
 - Group housing for non-profits and NGOs
 - Retail and strip shopping centers
 - Condominium Associations: analysis and replacement of HVAC systems
 - Facilitated LEED certification of multiple commercial buildings