

D. MICHAEL DOWDALL, P.E.

Senior Vice President



Summary

Mr. Dowdall has more than 30 years of experience in mechanical design and forensic mechanical engineering. He specializes in complex facilities, such as mission critical facilities and clean rooms. In addition to his knowledge of design and construction, he is experienced with forensic investigations and expert witness testimony, primarily for HVAC equipment failures and installation issues. Mr. Dowdall is also skilled at commissioning and life-cycle cost analysis.

Areas of technical expertise

- Mechanical Engineering (Piping, Equipment, HVAC and Controls)
- Plumbing Engineering
- Forensic Mechanical Engineering
- Forensic Plumbing Engineering

Education

- B.S.M.E., 1982, The University of Kansas

Registrations

- Licensed Professional Engineer in AL, AZ, AR, CA, CO, FL, GA, IL, IN, IA, KS, KY, LA, MA, MI, MN, MS, MO, NE, NH, NM, NY, NC, OH, OK, PA, SC, SD, TN, TX, VA, WA, DC, WV, and WI.

Professional activities

- Member, American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE)
- Member, National Society of Professional Engineers (NSPE)

Select project experience

Mechanical engineering (piping, HVAC and controls)

ISP Chemicals, Clean Room, Calvert City, KY.* Design-build services for the design, construction, startup, and commissioning of a Class 100 clean room for production of a hygroscopic powder.

DJ Engineering, Inc., Clean Room, Augusta, KS.* Design-build services for the design, construction, startup, and commissioning of a Class 1000 aerospace carbon fiber composite component production clean room.

Boehringer Ingelheim Vetmedica, Inc., Boiler, St. Joseph, MO.* Design-build services for the installation, startup, and commissioning of a 1,000-horsepower, 175 psi boiler.

Plumbing engineering

Wastewater Pump Stations 36 and 63, Christchurch, NZL. Peer review for the development of temporary and permanent pump stations for the reconstruction associated with earthquake damage.

Forensic mechanical engineering

North Shore Towers, Floral, NY. Cause and origin investigation and validation of repair costs on a 2000 hp stationary 10-cylinder natural gas engine connected to a 2Mw generator.

St. Clair Condominiums, Houston, TX. Forensic investigation of a multistory PVC condenser water piping system failure.

Allen Ritchey, Inc., Yuba, OK. Cause and origin investigation and validation of repair costs to repair a sunken dredge and diesel engines inundated by water.

Forensic plumbing engineering

CAT 90-Sandy, Multiple Locations. Damage assessments related to the inundation of water in multiple facilities in NY and NJ, specifically as it relates to HVAC, electrical, plumbing, and fire protection equipment.

*Denotes work performed with previous employer.

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Sworn testimony

Deposition, Aria Longboat Key Condominium Association, Inc. v. BBC KEY, LLC, et al., regarding temperature, humidity, and pressure control within multiple condominiums, in the Circuit Court of the Twelfth Judicial Circuit in and for Sarasota County, FL, July 16, 2021, April 5, 2021, and March 4, 2021.

Deposition, 1515 Sunset vs. OHL-Arellano Construction Co., regarding HVAC issues and condenser water piping. Miami-Dade County, Florida, Circuit Court, Eleventh Judicial District, 2020.

Deposition, ECC Centcom Constructors, LLC vs. Michael Baker International, regarding alleged mechanical design defects in a new BEQ, 2020.

Deposition, Imahouse, LLC vs. Marketplace Designers LLC, regarding defects in new building HVAC systems, 2020.

Deposition, 18201 Collins Avenue Condominium Association, Inc. vs. Royale Florida Enterprises, Inc., et al., regarding defects in a highrise condominium building. Circuit Court of the 11th Judicial Circuit, Miami-Dade County, FL, 2019.

Deposition and arbitration, FH Brooklyn, LLC vs. Macdonald-Miller Facility Solutions, Inc., regarding design issues on a design build midrise private dormitory. Arbitrator: Christopher J. Soelling, 2019.

Deposition, Two City Plaza Condominium Association Inc. vs. Kolter City Plaza II Inc. et al., regarding defects in a high rise condominium building. Circuit court of the 15th Judicial Circuit, Palm Beach County, FL, 2018.

Deposition, Zurich American Insurance a.s.o. 111 West Wacker vs. S. Mechanical, regarding the failure of a chilled water system expansion bellows, State of Illinois, Circuit Court of Cook County, 2017.

Deposition, Village of Pleasant Prairie vs. Partners in Design Architects, et al., regarding defects in a Natatorium. State of Wisconsin, Circuit Court, Kenosha, 2016.

Litigation

People vs. Hrynenko, et al., regarding a natural gas explosion. Indictment 74-2016, Supreme Court, New York County, Part 77. 2019.

455 Companies, LLC vs. Landmark American Insurance Co., regarding a building heating system and frozen pipes. United States District Court, Eastern District of Michigan. 2018.

CONTACT

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