



Curriculum Vitae

NAME:

JOHN D. RISI, MS, P.E.
Principal, Iris Technologies, LLC
911 Marfell Street
Erie, Colorado 80516

EDUCATION:

Doctor of Philosophy, Mechanical Engineering, Ongoing Coursework and Dissertation, Colorado State University, Fort Collins, Colorado, Spring 2010
Master of Science, Mechanical Engineering, February 1995,
Virginia Polytechnic Institute and State University, Blacksburg, Virginia
Bachelor of Science, Mechanical Engineering, May 1990,
Colorado State University, Fort Collins, Colorado

**PROFESSIONAL
COURSES &
SEMINARS:**

- Construction Defects, Failures and Repairs, Paul J. Bennett, P.E., Knott Laboratory, LLC, 2012 Colorado Chapter Educational Institute, Colorado Chapter of the International Code Council, Denver, Colorado, March 2012.
- Fire Resistive Construction and Fire stopping Requirements of the IBC, Riche Walke, Underwriters Laboratory, Inc. and Brice Miller, International FireStop Council, 2012 Colorado Chapter Educational Institute, Colorado Chapter of the International Code Council, Denver, Colorado, March 2012.
- Grease Hoods, Guy McMann, Jefferson County Building Department, 2012 Colorado Chapter Educational Institute, Colorado Chapter of the International Code Council, Denver, Colorado, March 2012.
- Construction Law Seminar presented by Sherman & Howard, Denver, Colorado, March 2012.
- Realizing Performance of the Building Enclosure, Wagdy Anis, FAIA, Wiss, Janney, Elstner Associates, Inc., Building Enclosure Council Fall Seminar, Denver, Colorado, September 2010.
- Materials Issues in Mechanical Design, W.S. Sampath, Ph.D., Graduate Coursework, Colorado State University, Fort Collins, Colorado, Fall 2010
- How to Design Horizontal Deck Waterproofing, Air Barrier and Building Envelope Solutions in the Corrective Construction Market, WR Grace Technical Services, Lakewood, Colorado, April 2010.
- Moisture Control, Indoor Air Pollution and Mold in Buildings, Joseph Lstiburek, Building Science Corporation, 2010 Colorado Chapter Educational Institute, Colorado Chapter of the International Code Council, Denver, Colorado, March 2010.
- Understanding NFPA 70E and Arc Flash Hazards, Lewellyn Technology, Denver, Colorado, January 2010.
- Air and Moisture Transmission through Walls at Transitions and Details, Vince Cammalleri, AIA and Michael Louis, P.E., Simpson Gumpertz & Heger, Inc., Building Enclosure Council Fall Seminar, September 2009.



- The Ins and Outs of Building Envelopes, Best Practices for Following Air, Heat and Moisture, Susan Raterman, CIH and Steve Easley, Building Enclosure Council, Denver, Colorado, October 2008.
- 2008 Colorado Chapter Educational Institute, Colorado Chapter of the International Code Council, Denver, Colorado, March 2008.
- Uncovering Colorado's Building Enclosure Issues, Colorado Fall Seminar, Building Enclosure Council, Denver, Colorado, October 2007.
- Advanced Facilities Management & Engineering Conference, Denver, Colorado, November 2006.
- C-470 at I-70 Girder Collapse, National Transportation and Safety Board, Denver, Colorado, June 2006.
- Fire Investigation and Product Liability Litigation, Department of Engineering Professional Development, The University of Wisconsin, Madison, Wisconsin, June 2006.
- Guarding Against Construction Defect Claims in Colorado, presented by Lorman Education Services, Boulder, Colorado, February 2006.
- Analysis of Changes in the 2005 National Electric Code, presented by the International Association of Electrical Inspectors, Greeley, Colorado, May 2005.
- Preventing Moisture and Mold Problems: Design and Construction Guidelines, presented by the American Society of Heating, Refrigerating and Air-Conditioning Engineers, Inc., Orlando, Florida, February 2005.
- Construction Defect Claims in Colorado, presented by Lorman Education Services, Denver, Colorado, January 2005.
- Construction Defects and Insurance Coverage in Colorado, Brendan O. Power and Jack D. Robinson, Spies, Powers & Robinson, P.C., presented by Lorman Education Services, Denver, Colorado, May 2004.
- Commercial Roofs Damage Assessment, Haag Engineering Company, Denver, Colorado, February 2004.
- Wind Effects on Structures, Haag Engineering Company, Denver, February 2003.
- Sudden Damage vs. Maintenance Problems in Buildings, Haag Engineering Company, Denver, 2003.
- Roof Area Calculations and Inspection Techniques, Haag Engineering Company, Denver, 2003.
- Wood Roofs Damage Assessment, Haag Engineering Company, Denver, Colorado, February 2003 and February 2004.
- OSHA Industry and Construction Site Safety Course, Ludington and Associates Health and Safety Consultants, October 2001.
- High Altitude HVAC Design Considerations, ASHRAE Technical Conference, April 2001.
- HVAC Fan Selection, ASHRAE Technical Conference, April 2001
- Construction Defects and the Long Lasting Impacts - Denver Claims Association, May 2000.
- CAGE - Steeply Dipping Bedrock, April 27, 2000.
- National Fire, Arson and Explosion Investigator Training Program, National Association of Fire Investigators, Longmont, Colorado, February 2000.



**PROFESSIONAL
REGISTRATION:**

Registered professional engineer in the State of Colorado, No. 36345
Registered professional engineer in the Commonwealth of Virginia,
No. 0402 030609

**PROFESSIONAL
AFFILIATIONS &
CERTIFICATIONS:**

- Certified Energy Manager (CEM)
- Recipient of the Virginia Energy Award
- American Society of Mechanical Engineers
- American Society of Heating, Refrigerating and Air Conditioning Engineer

PUBLICATIONS:

Risi, John D., Bunce, Eric, and McKinney, W. Wesley, "Power Watch: Monitoring and Metering," *Pure Power*, September 2001.

Risi, John D. "Seat Belt Forensics" *The Investigative Engineer*, August 2000.

Risi, John D., Fronapfel, Edward F., and Bunn, Steve, "Hail-Resistant Roofs: Fact or Fiction?" *The Investigative Engineer*, May 2000.

Risi, John D., "Automotive Accident Reconstruction," *The Investigative Engineer*, March 2000.

Risi, John D and Mowery, David K., "A Case Study of Energy Savings and Environmental Impact Reduction for a Textile Facility," *Proceedings of the 18th World Energy Engineering Congress*, Atlanta, Georgia, November 1995.

Risi, John D., Burdisso, Ricardo A. and Fuller, Chris R., "Analytical Investigation of Active Control of Radiated Inlet Fan Noise," *The Journal of the Acoustical Society of America*, 98 (6), December 1995.

Risi, John D., "Energy Savings with Compressed Air," *The Journal of the Association of Energy Engineers*, Vol. 92, No. 6, 1995.

Risi, John D., "Energy Savings with Compressed Air," *Proceedings of the International Energy and Environmental Congress*, Richmond, Virginia, August 1995.

Risi, John D., "Analytical Investigation of Active Control of Radiated Inlet Fan Noise from Turbofan Engines," Masters Thesis, Virginia Polytechnic Institute and State University, February 1995.

Risi, John D. and Mashburn, William H., "Merging Industry and the University: Developing the Industrial Energy Center," *Proceedings of the 17th World Energy Engineering Congress*, Atlanta, Georgia, December 1994.

Risi, John D., Burdisso, Ricardo A., "Analytical Investigation of Adaptive Control of Radiated Inlet Noise from Turbofan Engines," *Proceedings of Noise-Con 94*, pp. 395-402, 1994.

**BACKGROUND &
EXPERIENCE:**

Principal, Iris Technologies, LLC, Erie, Colorado. Provide engineering failure analyses for the insurance industry, legal community and private sector. Conduct research and experimental investigations in the areas of product failure, fire causal analysis, moisture infiltration, material performance, environments conducive to fungi



growth, plumbing systems and components, HVAC system performance, indoor air quality, and roofing and waterproofing systems. Evaluate design and construction techniques and associated defects in general construction and mechanical, electrical and plumbing systems. Provide expert testimony and mediation services for all above-described areas. Provide design analysis and guidance for building envelopes, mechanical systems and product enhancements, and conduct dew point analyses for building assemblies.

Director, Mechanical Forensic Services, Professional Investigative Engineers, Westminster, Colorado. Provide claims support and expert testimony for all mechanically oriented forensic investigations including product failure, roofing system design, design and construction deficiencies, fire cause and origin evaluations and automotive accident reconstruction. Investigate the cause and origin of mold and fungus growth in residential structures.

Senior Facilities Engineer, Agilent Technologies, Loveland, Colorado and Hewlett-Packard Company, Loveland, Colorado. Lead mechanical engineer responsible for all major site systems including chillers, cooling towers, low-pressure steam and hot-water boiler systems, compressed air and vacuum systems, humidification and dehumidification systems, fire protection systems, plumbing systems, all air-handling systems and roofing systems.

General Manager and Co-Founder, Industrial Energy Center, Virginia Polytechnic Institute and State University, Blacksburg, Virginia. Created the Industrial Energy Center in cooperation with Virginia Power, United Cities Gas Company and Virginia's Center for Innovative Technology. Supervised teams of 6 to 10 personnel on energy surveys of small, medium and large manufacturing and commercial facilities.

Graduate Research Assistant, Vibrations and Acoustics Laboratory, Virginia Polytechnic Institute and State University, Blacksburg, Virginia. Developed a numerical simulation routine to investigate the potential of active control of radiated inlet noise from turbofan engines; install and test various solution applications on a Pratt and Whitney JT15D turbofan engine.

**COURT & DEPOSITION
EXPERIENCE:**

Court Testimony, People of the State of Colorado v. Beverly Benson, Court 186L, City and County of Denver, Denver District Court, Case No. 00M7459, January 2001.

Deposition Testimony, Terrence Fleisher v. KDC-Peoria Distribution Center, LLP, City and County of Denver, Denver District Court, Case No. 01-CV-2946, March 2002.

Deposition Testimony, New Orleans Assets, L.L.C. v. Carl E. Woodward, L.L.C., et al., United States District Court, Eastern District of Louisiana, Civil Action No. 01-2171, January 2003.



Court Testimony, Williams et al. v. Sun Vail Condominium Association, Eagle District Court, Eagle, Colorado, Case No. 01 CV 108, May 2003.

Deposition Testimony, Robert J. Laukaitis, Elizabeth P. Laukaitis and Patricia Louis Watson v. ARC Dealerships, Inc., Home Smart, Inc., Hallmark Homes and Grant, Huerfano District Court, Walsenburg, Colorado Case No. 02-CV-70, Division D, June 2003.

Deposition Testimony, John and Rebecca Mobley v. Andrew Development, LLC, ALFA Design Construction Project Experts, Inc., and Ranko Mocevic, Douglas County District Court, Castle Rock, Colorado, Case No. 02 CV 1186, December 2003.

Deposition Testimony, Vail Commons Residential Homeowners Association, Inc. v. Douglass Roofing Company, KAT Construction, and Kern Builders, Inc., Eagle District Court, Eagle, Colorado, Case No. 02 CV 394, December 2003.

Deposition Testimony, Marian T. Florez v. State Farm Fire and Casualty Company, District Court, City and County of Denver, Denver, Colorado, Case No. 2003 CV 6576, December 2003.

Deposition Testimony, Chris Ferris et al. v. Poplarhouse, LLC et al., Summit County District Court, Breckenridge, Colorado, Case No. 02-CV-265, April 2004.

Deposition Testimony, Mildred Krittr v. Dillon Companies, Inc., District Court, City and County of Denver, Colorado, Case No. 03CV7309, Courtroom 8, July 2004.

Deposition Testimony, Michael W. and Sheryl A. DeGenring v. Timothy A. Glasco, et al., District Court, Summit County, Colorado, Case No. 04-CV-64, Courtroom L, November 2005.

Deposition Testimony, George Head, et al. v. Dencal Construction Incorporated, et al., District Court, Summit County, Colorado, Case No. 04 CV 343, November 2005.

Deposition Testimony, Briargate at Seventeenth Avenue Owners Association v. Seventeenth Avenue Group, LLC, et al., District Court, City and County of Denver, Colorado, Case No. 03 CV 2776, January 2006.

Deposition Testimony, E. Webb Bassick, IV v. Booth Creek Townhouse Association, Inc., et al., District Court, Eagle County, Colorado, Case No. 03 CV 516, March 2006.

Deposition Testimony, Karen Shoresman Frame v. Leland Construction and Donald Leland Lucas, District Court, Boulder County, Colorado, Case No. 2005 CV 226, April 2006.

Deposition Testimony, Crestone Management, Inc. v. Arapahoe County, Colorado v. MacGregor Wathen Construction Co., et al., District Court, Arapahoe County, Colorado, Case No. 02CV475, April 2006.

Court Testimony, Karen Shoresman Frame v. Leland Construction and Donald Leland Lucas, District Court, Boulder County, Colorado, Case No. 2005 CV 226, April 2006.



Deposition Testimony, Ogallala Community Hospital and Health Foundation, Inc., v. Vitztum Commercial Flooring, Inc, et al., United States District Court for the District of Nebraska, Case No. 7:04-CV-5012, June 2006.

Deposition Testimony, MIRR Maintenance, Inc. v. Condominium Care Inc. and The Seven Springs Owners Association, District Court, City and County of Denver, Colorado, Case No. 06 CV 6282, April 2007.

Court Testimony, E. Webb Bassick, IV v. Booth Creek Townhouse Association, Inc., et al., District Court, Eagle County, Colorado, Case No. 03 CV 516, June 2007.

Deposition Testimony, Shelter Insurance Companies v. AJ Shirk Roofing, LLC and ABC Supply Co., Inc., Denver County, Colorado, Case No. 06CV11725, August 2007.

Deposition Testimony, The Paragon Building Condominium Association, et al v. Fenton Construction, Inc. and Aspen Plumbing and Heating Company, District Court, Pitkin County, Colorado, Case No. 04CV214, October 2007.

Deposition Testimony, ChrisPat Aspen, LLC and Christine Ferer v. Fenton Construction, Inc., District Court, Pitkin County, Colorado, Case No. 05 CV 111, November 2007.

Deposition Testimony, Sundown Villas Townhomes Homeowners Association, Inc. v. RBJ Enterprises, LLC d/b/a Reward Homes, et al., District Court, El Paso County, Colorado, Case No. 05 CV 935, December 2007.

Deposition Testimony, Susan Peterson v. Cole Greenwood Construction, LLC, et al., District Court, Routt County, Colorado, Case No. 06 CV 29, January 2008.

Deposition Testimony, Chirone, LLC, et al. v. Climate Control Company of Glenwood Springs, District Court, County of Eagle, State of Colorado, Case No. 2007CV347, April 2008.

Deposition Testimony, Great Northern Insurance Company v. Kitchen Perfections, et al., United States District Court for the District of Colorado, Case No. 08-CV-01413-CMA-BNB, May 2009.

Court Testimony, Michael Cessa and Victoria Cessa v. Saddle Brook Homes Homeowners Association, District Court, Jefferson County, Colorado, Case No. 08CV4665, August 2009.

Deposition Testimony, The Watersong Homeowners Association v. Peak Properties and Development Corporation, et al., District Court, Boulder County, Colorado, Case No. 2008CV50, November 2009.

Deposition Testimony, Great Northern Insurance Company v. Gray Construction, Inc. and Majestic Plumbing, LLC, District Court, Douglas County, Colorado, Case No. 09 CV 3736, April 2011.

Court Testimony, R.G.M Construction, Inc. v. Ellen H. Frohsinn, District Court, Larimer County, Colorado, Case No. 2009CV772, September 2011.

Deposition Testimony, Paul H. Marx and Kay Corken v. Alpert Custom Homes, Inc., et al., District Court, Arapahoe County, Colorado, Case No. 2010CV405, May 2011.