



# **RESUME OF ASHLEY M. GIESA, PE**

## **SUMMARY**

Professional Mechanical Engineer with experience in heating, ventilation and air conditioning (HVAC) design, construction and specification of commercial buildings. Code compliance, LEED compliance, and building performance compliance. Indoor air quality evaluations relating to HVAC, building envelope and environment. Forensic evaluations involving HVAC and refrigeration equipment and systems,

Industrial Hygienist with experience in mold sampling and remediation, AHERA asbestos building inspector certified, safety and warnings evaluations, indoor air quality and the evaluation of associated building systems and envelopes, multiple continuing education courses in industrial hygiene, preparing for certification test (CIH).

Accident reconstruction experience including low-speed, bicycle and pedestrian accidents, trailer damage, rules of the road compliance, airbag module evaluation, time-distance and speed calculations. 3-D accident modeling and point of view studies.

Product liability cases include appliance water and fire losses, equipment product and material failure analysis, life safety systems failures, installation and design failures and inconsistencies.

## **PROFESSIONAL EXPERIENCE**

### **MDE Inc. – Seattle, WA (2010 to Present)**

Professional Engineer – Mechanical: Failure analysis of heating, cooling and ventilation systems for commercial and residential properties. Forensic evaluations and failure analysis for plumbing systems and components, and appliances. Code compliance for plumbing and ventilation systems. Industrial hygiene evaluations including asbestos, mold, air quality, occupational safety, lead, etc. Vehicular accident reconstruction and failure analysis.

### **MacDonald-Miller Facility Solutions – Seattle, WA (2006 – 2010)**

Project Engineer – Responsible for HVAC design-builds ranging from large commercial new construction buildings to smaller tenant improvements. Design responsibilities included 3-D modeling of HVAC and plumbing systems, mechanical/ electrical/ plumbing plan coordination and conflict resolution, construction management, field coordination, and equipment selection. Also assisted in green building design compliant with LEED standards using building energy performance analysis software, increasing ventilation, indoor air quality needs, and reducing the use of hazardous refrigerants in building equipment.

## **PROFESSIONAL REGISTRATION, CERTIFICATION**

Engineer In Training, State of Washington – #28872, (2008)

Accredited Professional (AP), Leadership in Energy and Environmental Design (LEED), (2009)

Professional Engineer, State of Washington - #48944, (2011)

AHERA Asbestos Building Inspector certified

## **PROFESSIONAL ASSOCIATIONS**

Member – American Society of Heating, Refrigerating and Air Conditioning Engineers (ASHRAE), 2007 to present

Member – American Society of Mechanical Engineers (ASME), 2010 to present

Member – Engineers Without Borders, 2003 to present  
Member – Indoor Air Quality Association – 2013 to present  
Member – American Society for Testing and Materials – 2012 to present  
Member – Society of Automotive Engineers (SAE) – 2012 to present  
Member - American Industrial Hygiene Association - 2014 to present  
Member - Indoor Air Quality Association - 2014 to present

## **EDUCATION & TRAINING**

B.S. Mechanical Engineering, Washington State University, Pullman, WA, (2006)  
Columbia Hydronics Plumbing Seminar, (2007)  
Intermediate Level Indoor Environmentalist Course, IAQA, (2012)  
At Scene Traffic Crash Investigation, Institute of Police Technology and Management, (2010)  
Traffic Crash Reconstruction, Institute for Police Technology and Management, (2010)  
ARC/CSI Crash Conference, (2011)  
Event Data Recorder Use in Traffic Crash Reconstruction, Institute of Police Technology Management, (2013)  
Fundamentals of Industrial Hygiene, Utah Safety Council, (2013)  
Respiratory Protection Course, Georgia Tech OSHA Training Institute, (2014)  
Air Sampling Fundamentals for the Workplace, Georgia Tech OSHA Training Institute, (2014)  
Applied Industrial Toxicology for Safety and Health Professionals, North Carolina Occupational Safety and Health and NIOSH, (2014)  
Toxicity of Chemicals, North Carolina Occupational Safety and Health and NIOSH, (2014)  
Biological Monitoring: A Practical Self-Study Guide, American Industrial Hygiene Association (AIHA), (2014)  
Practical Noise Control Engineering, AIHA, (2014)  
Ethics for the OH&S Professional, AIHA, (2014)  
Exposure and Chemical Monitoring - Beyond IH Fundamentals, AIHA, (2014)  
Asbestos Inspector, AHERA and Argus Pacific, (2015)  
EIH II: Practical Applications of OEHS Math, AIHA, (2015)  
Ergonomics Toolkit: Applying Basic Tools in Assessments, AIHA, (AIHce 2015)  
Introduction to Human Health Risk Assessment, AIHA, (AIHce 2015)