

**Todd A. Springer, P.E., CXLT**  
**Augspurger Komm Engineering, Inc.**  
**3315 E. Wier Avenue**  
**Phoenix, AZ 85040**  
**602-443-1060**  
**602-443-1074 fax**  
**www.akeinc.com**

### **EDUCATION**

Bachelor of Science, Mechanical Engineering, Arizona State University, 2006

### **EXPERIENCE**

Mr. Springer provides expert consulting and testimony with regard to building envelope installation and performance with a focus of water intrusion, as well as exterior building system evaluations with regard to hail and wind damage. In addition, he regularly addresses building code and ADA compliance issues, as well as human factors as they relate to pedestrian locomotion and environment interaction.

Mr. Springer's expertise also involves the analysis of consumer product failures as they relate to design, installation, and usage. He regularly applies this knowledge in fire causation investigations and other matters involving personal injury or property damage.

### **PROFESSIONAL REGISTRATION**

State of Arizona, Mechanical Engineer, #54476

### **EXPERIENCE**

2008 – Present Augspurger Komm Engineering, Inc.  
2006 – 2007 East Valley Glass, Installation Foreman

### **PROFESSIONAL AFFILIATIONS**

American Society of Mechanical Engineers, Member  
National Academy of Forensic Engineers, Correspondent  
ASM International, Member  
National Fire Protection Association, Member  
National Association of Fire Investigators, Member

### **CONTINUING EDUCATION**

International Association of Arson Investigators, Inc., AZ Commercial Kitchen Fires Course, December 7-8, 2016, Phoenix, AZ  
International Association of Arson Investigators, Inc.; Fire/Arson IV Seminar, Mesa, AZ; April 11-15, 2016  
International Association of Arson Investigators, Inc.; Fire/Arson III Seminar, Flagstaff, AZ; October 11-16, 2015  
Excel Tribometers, LLC, CXLT Certification Program, Philadelphia, PA, May 5, 2015  
International Association of Arson Investigators, Inc.; Fire Arson II Seminar; Prescott, AZ; April 13-17, 2015

### **CONTINUING EDUCATION – Continued**

International Association of Arson Investigators, Inc.; 921 Update Class – 2014 Edition; May 15, 2014  
International Association of Arson Investigators, Inc.; Fire/Arson Investigation I Seminar; Mesa, AZ; Sept 23-27, 2013  
Liability Issues for Expert Witnesses (TASA) Online, August 6, 2013  
National Association of Subrogation Professionals (NASP), Residential Electrical Fires Online, July 16, 2013  
Fire Findings Seminar, “Investigation of Gas and Electric Appliance Fires,” April 16-19, 2013, Benton Harbor, MI  
AZ. Chapter of the International Association of Arson Investigators, Inc., 2013 Fuel Gas Fire Seminar, March 18, 2013  
Strategic Considerations Regarding Expert Reports-Practical Considerations and New Rule 26 Amendments, Web Seminar, NASP, February 29, 2012  
Why Plastics Fail Web Seminar, NASP, January 24, 2012  
NFPA Seminar “Fire and Explosion Investigations,” Ft. Lauderdale, FL, June 20-21, 2011  
ASM International “Metallurgy for the Non Metallurgist Conference,” OH, January 11-15, 2010  
ARC-CSI 8<sup>th</sup> Annual Crash Conference, Las Vegas, NV, June 1-4, 2009  
The TASA Group Presents: “The Life of a Lawsuit,” Web Seminar, April 21, 2009  
Solid Works Essentials, Digital Dimensions, Phoenix, AZ, February 2-6, 2009  
Forensic Photography Techniques, Michael Wilson, Phoenix, AZ, December 18, 2008  
Machine Guarding, National Safety Council, September 22, 2008

### **PUBLICATIONS**

Springer, Todd A. (2015). Forensic Evaluations of Built-up Roofing Storm Damage Claims and the Appraisal Process. *Journal of the National Academy of Forensic Engineers*, 32(2), 33-40.

Eric A. Beebe, E.I.T., Kevin W. Hollander, Ph.D., David S. Komm, P.E., and Todd A. Springer, E.I.T., “Non-Destructive Testing Methods for Examination of Failed Plastic Parts,” ASME Early Technical Conference, Arlington, TX, April 2009.

### **PRESENTATIONS**

*Forensic Evaluations of Storm Damage Claims and the Appraisal Process*. National Academy of Forensic Engineers, Summer Meeting, Seattle, WA, July 17-19, 2015.

*Life Skills and Career Opportunities*. Behavioral Intervention Class, Connolly Middle School, Tempe, AZ; May 19, 2014.

*It Needs to be Repaired, But is it Storm Damage?* Arizona Insurance Claims Association; May 15, 2014.

### **CERTIFICATIONS**

U.S. Department of Labor, Mine Safety and Health Administration Training Course, 2010, 2011, 2012, 2013, 2014.

Certified XL Tribometrist

## **DESIGN EXPERIENCE**

### Redesign/Modifications of a Bucyrus-Erie 60-L Water Well Drilling and Servicing Rig

Alteration of mast raising and lowering system from cable and winch to hydraulic operation and evaluation of existing equipment in varying configurations to determine loading and stresses on components and alterations in system performance.

### Car Cooling Device

Analysis of heat transfer rates, cooling capacity, cooling capacity requirements, and the implementation of various methods and devices for rapid heat transfer.

### Water Wall Redesign

Analysis of flow patterns, flow rates, and design around existing geometry

### Redesign of High Temperature Furnace for the Department of Energy

Determination of critical stress points, and bending tolerances. Thermal analysis of heat exchange rates and thermal expansion. Design of long term, precise loading mechanism. Evaluation of creep characteristics.

### Commissioning of a steam generator for Royden construction.

Review and evaluation of gas, air, water, and electrical subsystems, including the management of such systems through relay and recording profile controllers. Evaluation of component quality, compatibility and conformance with applicable codes. Application of appropriate personal protective equipment for safe use of machine.