


NATIONAL ACADEMY OF BUILDING INSPECTION ENGINEERS  
2018 ANNUAL BUILDING INSPECTION ENGINEERING

# CONFERENCE



**NABIE**  
NATIONAL ACADEMY OF BUILDING INSPECTION ENGINEERS  
FEBRUARY 16-18, 2017  
SAN ANTONIO, TEXAS



## Keynote Speaker



### Michael E. Aitken

P.E., Fellow NSPE

President-Elect 2017-18

President 2018-2019

National Society of Professional Engineers

Mr. Aitken is a mechanical engineer with more than 25 years' experience in the fields of engineering, project management, property condition inspections and expert witness testimony. He is currently the Vice President of MEA Consulting Engineers which he founded with his wife in April 2000.

Long active in both the National Society of Professional Engineers and its state affiliate, NSPE-Colorado, Mr. Aitken he has been president of NSPE-Colorado and a member of NSPE's Board of Directors, House of Delegates, Budget & Finance Committee, Audit Committee, and PE Conference Task Force. In 2016 he was named a NSPE Fellow.



### Andy Severy

Simpson Strong-Tie

Mr. Severy joined Simpson Strong-Tie in 2004 as a Retail Specialist focusing on sales to home centers. In 2011 he took on the role of Territory Manager. He is a member of a number of local central Texas building - related organizations.

Along with managing the day to day sales operations of Central Texas, Andy's responsibilities also include educating engineers, architects, building officials, suppliers, and contractors on the proper application and installation of structural connectors and fasteners.

## SCHEDULE OF EVENTS

### Friday February 16

- 7:00 - 8:30 AM** Registration & Continental Breakfast
- 8:30 - 8:45 AM** Welcome and brief opening remarks from NABIE President Mark Waldman
- 8:45 - 10:00 AM** Michael Aitken, P.E. – President of NSPE - *Keynote Address*  
The state of NSPE and collaboration between NSPE and NABIE in the past and in the future.
- 10:00 - 10:15 AM** Break
- 10:15 - 11:45 AM** Steve Smith – Leica Geosystems – *Leica Digital Imaging*  
This presentation by Mr. Steve Smith is an introduction to laser scanning technology and the uses of the Leica BLK360 device. Digital laser scanning can be a valuable tool to building inspection engineers. It can be used to capture in-situ conditions with great precision and accuracy for documentation purposes and for later post-processing to monitor building movement or prepare digital drawings.  
This short course in laser scanning will open your eyes to the LEICA technology already in use and the practical applications for engineering professionals involved in building investigations and problem solving.

**11:45 - 12:45 PM** Lunch

The annual Fiesta San Antonio is one of the largest parades in the nation, second only to Mardi Gras.



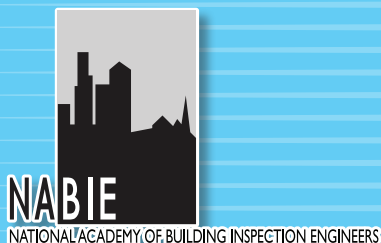
- 12:45 - 2:30 PM** Andy Severy – Simpson Strong Tie –  
*Light Framed Wood Deck Requirements for the 2015 IRC*  
Wood-framed residential decks are very common throughout the United States. They are a part of the structure and thus governed by the residential code and must be properly constructed to resist forces from both occupants and nature.  
These forces must be transferred through structural elements and to the foundation completing the continuous load path required in Chapter 3 of the International Residential Code. This class will take a look at some of the core code requirements for deck framing construction and inspection
- 2:30 - 2:45 PM** Break
- 2:45 - 4:30 PM** Patrick Caldwell – ArcSite Software  
ArcSite is a product, built from the ground up as a portable field personnel tool. It allows for precise and comprehensive collection and presentation of field conditions in an easy to use mobile app.

## Engineering Ethics

A code of professional ethics results when a field organizes itself into a profession. The resulting code is central to advising those professionals how to conduct themselves, to judge their conduct and to understand the profession.

As a member of the National Academy of Building Inspection Engineers (NABIE), your clients obtain your services based

upon your experience, professionalism and truthful accounting of the properties you inspect. Your professional ethics continue to build this trust between you and your client. Through the review of several NSPE Board of Ethical Review case studies, we will discuss and explore your ethical responsibility as P.E.



# SCHEDULE OF EVENTS

## Saturday February 17

- 7:00 - 8:15 AM** Order of the Engineer Induction Ceremony & Breakfast  
The Order of the Engineer was initiated in the United States to foster a spirit of pride and responsibility in the engineering professional, to bridge the gap between training and experience, and to present to the public a visible symbol identifying the engineer.
- 7:00 - 8:30 AM** Continental Breakfast
- 8:30 - 10:15 AM** Bill Light – Sika – *Concrete Repair & Protection: A Comprehensive Approach*  
The program focuses on developing a comprehensive concrete repair and protection strategy that not only addresses current problems, but the root cause as well.
- 10:15 - 10:30 AM** Break
- 10:30 - 12:15 PM** David Harro – G3 Group – Honorary Theodore Simon Lecturer – *Geological & Geotechnical Investigation Procedures for Evaluation of the Causes of Subsidence Damage.*  
This course will cover what it means for a P.E. conducting ground subsidence investigations, including a review of Florida Geological Survey Special Publication No.57. Professional expertise is needed for a complete and comprehensive assessment of any structure affected by subsidence; sinkholes pose a unique challenge.
- 12:15 - 1:15 PM** Lunch



*The Buckhorn Saloon and Museum is rumored to be the bar where Pancho Villa planned the 1910 Mexican Revolution.*

- 1:15 - 2:45 PM** David Harro – G3 Group – Honorary Theodore Simon Lecturer - *Soil Mechanics 101*  
Mr. Harro will be re-visiting some of the fundamentals of soil structure interactions and geotechnical engineering as part of his lecture to help building inspection engineering professionals refresh their understanding of the basics of soil testing, classification, and behavioral mechanics especially as it concerns consolidation, settlement, elasticity, shrinkage, swelling and slope stability.
- 2:45 - 3:00 PM** Break
- 3:00 - 4:45 PM** Nate Lee – Owens Corning *Anatomy of a Shingle*  
*Asphalt Shingle 101*  
*Proper Shingle Install*  
*Components of the Roof System*  
*Online/Apps That Help Understand the Roofing System*
- 4:45 - 5:00 PM** Break
- 5:00 - 5:30 PM** Update from the Board of Directors

## Saturday Evening

- 6:30 PM** Hospitality
- 7:30 PM** Dinner, Presentations & Entertainment

## Speakers & Presenters



**David Harro**

Mr. Harro is a Professional Geologist (P.G.) and Licensed Drilling Contractor in the States of Florida and Tennessee for the G3 Group. He has performed investigations for engineering, sinkholes and environmental projects over the last 20 years.



**Patrick Caldwell**  
*ArcSite Software*

Mr. Caldwell is currently Vice President of Customer Success at Arcuition, makers of ArcSite. He has over 2 decades experience in managing and creating meaningful and usable software across a wide variety of platforms and disciplines.

Patrick's passion for understanding and translating the needs of his customers has led to a number of awards including; the IHS vision award for best new product and a gold medal at HUX conference.



**William (Bill) Light**

Mr. Light has been involved in the concrete construction industry nationally for the last 40 years. Bill's career is centered in the manufacturing and distribution fields. Bill's experience includes primary concrete related materials, chemical admixtures, reactive resins, waterproofing materials and FRP composites for concrete production and preservation of concrete structures.

Previous experience includes sales, technical service and work on various research and development teams. For the last 28 years he has been with the Sika Corporation specializing in project development involving new construction as well as repair and protection of building facades, parking garages, bridges and other civil structures.



**Robert N. Roop**  
*P.E., CBIE*

Mr. Roop is President responsible for operations and execution of all engineering projects at Lockatong Engineering, Inc. The focus of the firm is comprehensive investigations of site, mechanical, electrical, structural, roofing, life safety systems and environmental conditions of property and buildings.

Mr. Roop has over 41 years of experience in facility and environmental engineering. His technical expertise and experience includes investigations, technical feasibility studies, prototype/pilot plant design and evaluation, final design and installation of processes and commercialization of product.



**Nate Lee**  
*Regional Contractor Sales Leader  
Owens Corning Roofing & Asphalt*

Mr. Lee has 15+ Years of Commercial and Residential Roofing Experience in Sales, Service, and Operations and worked for 3 of the top 5 Roofing Contractors in the USA.

Currently a Sales Leader for Owens Corning Roofing and Asphalt with a diverse history of awards ranging from Trailblazer for customer innovation to Presidents Club for sales excellence. 1 of 4 Contractor Sales Leaders in the USA in charge of contractor training that includes install, in-home sales, and product knowledge.



**Steven W. Smith**  
*DISTO Divisional Manager  
USA/Canada at Leica Geosystems*

Mr. Smith is responsible for the sales, marketing and channel for the BLK360, Leica Geosystem's transformational product.

Stephen is working with BLK 360 customers in revolutionizing the construction industry by democratizing 3D point technology, and the high digital data of buildings for B.I.M. and other applications.

# SCHEDULE OF EVENTS

## Sunday February 18

**7:00 - 8:30 AM** Continental Breakfast

**8:30 - 10:15 AM** Robert Roop – Lockatong Engineers

The skills engineers use to solve other's problems can be applied to prepare for disaster occurring to a professional practice. This case study examines how an engineering office prepared for and executed a successful recovery from a fire that completely destroyed an office and all its contents.

Preparations included inventory records, electronic file backup, good relationships with critical vendors, off-site records storage and adequate insurance.

**10:15 - 10:30 AM** Break



*Longhorn cattle can be traced back to San Antonio's Spanish mission settlers who brought the cattle with them in 1690.*

**10:30 - 12:15 PM** Michael Aitken, P.E. – President of NSPE – Professional Ethics

Although engineers often make decisions using precise, scientific principles, answers to ethical questions are often varying shades of gray. Michael Aitken will discuss this in an ethics course which meets many states requirements for ethics credits. This course is based upon the NSPE ethics educational resources that can help you prepare you for dealing with difficult issues.

**12:15 - 12:45 PM** Closing Remarks



*San Antonio's Tower of the Americas is taller than the famous Seattle Space Needle, making it the perfect place to get a panoramic view of the city.*

*The bell at St. Mark's Episcopal Church, is made of iron scrap from cannons used during the Battle of the Alamo.*

