

# Agenda

*Presented by Jarrod C. Burns, M.S., P.E.*

## Distinguishing between Construction Defects and Failures

- Defining defects
  - Causes of defects: problems with design, materials and/or construction
- Defining failures
  - Causes of failures: deterioration, unintended use, "Acts of God"

## Examining Common Defects and Failures

- Analyzing defects and failures for methodology and causality
- Site selection and engineering
- Building design
- Foundation design and construction
- Design and construction of floors, walls and roofing
- Exploring defects and failures in mechanical and electrical systems

## Adopting Practices that Reduce Defects and Failures

- Reviewing proposed use and preparing construction documents
- Complying with building codes and standards
- Choosing materials and construction techniques
  - Investigating new materials and construction techniques
- Monitoring construction
- Correcting problems before project completion
- Building commissioning, operation and maintenance

## Preventing and Resolving Disputes Generated by Defects and Failures

- Identifying parties with potential liability
- Understanding theories of liability
- Identifying defenses to liability
  - Timeliness, contractual defenses, crossclaims and counterclaims
- Participating in conflict resolution procedures
  - Mediation, arbitration, litigation
- Reviewing types of damages and how they are calculated
- Insurance coverage issues

**Preventing and Addressing  
Construction Defects and Failures**  
Arlington, TX - Friday, March 15, 2019

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## Learning Objectives

### You'll be able to:

**Understand** common causes of construction defects and failures.

**Explore** common defects and failures of foundations, floors, walls and roofs.

**Discuss** defects and failures in mechanical and electrical systems.

**Review** construction materials and monitor the construction process to reduce defects and failures.

**Resolve** disputes generated by defects and failures.



## Preventing and Addressing Construction Defects and Failures

Arlington, TX - Friday, March 15, 2019



**Understand** the differences between construction defects and failures

**Identify** common defects and failures

**Examine** building codes and standards

**Review** proposed uses of structures and monitor construction

**Explore** materials and construction techniques

**Resolve** disputes generated by defects and failures

### Continuing Education Credits

#### Professional Engineers

6.5 PDHs

#### Architects

6.5 HSW CEPHS/CE Hours

6.5 AIA HSW Learning Units

#### Contractors

Non-Credit Continuing Ed.



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# Faculty

**Jarrold C. Burns, M.S., P.E.**  
Mr. Burns founded BSC Forensic Services, LLC, in Houston, Texas, in 2011. BSC specializes in services including structural evaluations, cladding assessments, fire damage assessments, subrogation and expert testimony. Mr. Burns’ unique background in education, business, engineering and teaching provides BSC with a solid platform for a sustainable forensic engineering practice.

Mr. Burns began performing full-time forensic engineering services in 2010 for a nationally-recognized forensic services company based in Atlanta, Georgia. During this time he was responsible for training and quality control of forensic engineers serving clients in Texas, Louisiana, Mississippi, Arkansas and Oklahoma. Mr. Burns has personally performed hundreds of forensic investigations for scopes such as wind damage, foundation movement, fire damage, water damage, construction deficiencies and flooring damage, among many others. His experience has also included work as a project manager for a civil engineering firm in Houston and Dallas, Texas, and as an adjunct instructor in the Civil Engineering Department at the University of Houston.

Mr. Burns holds a B.S. degree in Civil Engineering from the University of Arkansas and an M.S. degree in Civil Engineering from the University of Texas at Arlington.

## Here’s what past attendees had to say about the program and presenter Jarrod Burns:

“Very informative. Well organized.” – *Civil Engineer*

“Very good.” – *Architect*

# Seminar Information

**The Bob Duncan Center**  
2800 South Center Street  
Arlington, TX 76014  
(817) 465-6661

**Tuition**  
**\$279** for individual registration  
**\$259** for three or more registrations.  
**Included with your registration:** Complimentary continental breakfast and printed seminar manual.

**How to Register**

- Visit us online at [www.halfmoonseminars.org](http://www.halfmoonseminars.org)
- Mail-in or fax the attached form to 715-835-6066
- Call customer service at 715-835-5900

**Cancellations:** Cancel at least 48 hours before the start of the seminar, and receive a full tuition refund, minus a \$39 service charge for each registrant. Cancellations within 48 hours will receive a credit toward another seminar or the self-study package. You may also send another person to take your place.

**Continuing Education Credit Information**

This seminar is open to the public and offers 6.5 PDHs to professional engineers and 6.5 HSW continuing education hours (CEPHs) to architects in all states. Educators and courses are not subject to pre-approval in Texas.

The American Institute of Architects has approved this event for 6.5 HSW Learning Units (Sponsor No. J885). Only full attendance can be reported to the AIA/CES.

HalfMoon Education is an approved continuing education sponsor for engineers in Florida, Indiana (License No. CE21700059), Maryland, New Jersey (Approval No. 24GP00000700), New York (NYSED Sponsor No. 35), North Carolina, and North Dakota. HalfMoon Education is deemed an approved continuing education sponsor for New York architects.

This seminar offers a non-credit continuing education opportunity to contractors. It has not been approved by any state contractor licensing entity for continuing education approval.

Attendance will be monitored, and attendance certificates will be available after the seminar for most individuals who complete the entire event. Attendance certificates not available at the seminar will be mailed to participants within fifteen business days.

# Additional Learning

- Webinar Series**
- Foundation Damage and Repair**
- **Structure Loads, Soil Mechanics, Bearing Capacity and Geo-Environmental Hazards**  
Thurs., March 28, 2019, 11:00 AM - 12:30 PM CDT
  - **Foundation-Wall Design and Construction**  
Thurs., March 28, 2019, 1:00 - 2:30 PM CDT
  - **Assessment of Foundation-Slab Damage & Repair Alternative**  
Fri., March 29, 2019, 11:00 AM - 12:30 PM CDT
  - **Assessment of Foundation-Retaining Wall Damage & Repair Alternatives**  
Fri., March 29, 2019, 1:00 - 2:30 PM CDT

- HEC-RAS Webinar Series**
- **Hydraulic Principles and Applications**  
Tues., April 2, 2019, 11:00 AM - 1:00 PM CDT
  - **Working with the HEC-RAS User Interface**  
Tues., April 2, 2019, 1:30 - 3:00 PM CDT
  - **Water Surface Profiling**  
Wed., April 3, 2019, 11:00 AM - 1:00 PM CDT
  - **Steady Flow Surface Profile Demonstrations**  
Wed., April 3, 2019, 1:30 - 3:30 PM CDT

- Wood Construction**
- **Design Specifications, Building Codes and Design Values**  
Thurs., April 4, 2019, 11:00 AM - 12:30 PM CDT
  - **Structural Sawn Lumber, Composite Lumber and Laminated Timber**  
Thurs., April 4, 2019, 1:00 - 2:30 PM CDT
  - **Prefabricated Wood I-Joists Trusses**  
Fri., April 5, 2019, 11:00 AM - 12:30 PM CDT
  - **Connectors and Fire Protection Design**  
Fri., April 5, 2019, 1:00 - 2:30 PM CDT

For more information visit:  
[www.halfmoonseminars.org/webinars/](http://www.halfmoonseminars.org/webinars/)

**Can’t Attend? Order the Manual and Audio from the Live Seminar as a Self-Study Package!**  
An audio recording of this seminar is available for \$289. Allow four weeks from the seminar date for delivery. Please refer to specific state licensing rules or certification requirements to determine if this learning method is eligible for continuing education credit.

# Registration

## Preventing and Addressing Construction Defects and Failures

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| How to Register                                                                          |  | Registrant Information                                                                                                                                              |  |
|------------------------------------------------------------------------------------------|--|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| <b>Online:</b><br><a href="http://www.halfmoonseminars.org">www.halfmoonseminars.org</a> |  | Name: _____                                                                                                                                                         |  |
| <b>Phone:</b><br>715-835-5900                                                            |  | Company/Firm: _____                                                                                                                                                 |  |
| <b>Fax:</b><br>715-835-6066                                                              |  | Address: _____                                                                                                                                                      |  |
| <b>Code:</b>                                                                             |  | City: _____ State: _____ Zip _____                                                                                                                                  |  |
| <b>Mail:</b><br>HalfMoon Education Inc.,<br>PO Box 278, Altoona, WI<br>54720-0278        |  | Occupation: _____                                                                                                                                                   |  |
| <b>Complete the entire form.</b> Attach duplicates if necessary.                         |  | Email: _____                                                                                                                                                        |  |
|                                                                                          |  | Phone: _____                                                                                                                                                        |  |
|                                                                                          |  | <b>Additional Registrants:</b>                                                                                                                                      |  |
|                                                                                          |  | Name: _____                                                                                                                                                         |  |
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|                                                                                          |  | Phone: _____                                                                                                                                                        |  |
|                                                                                          |  | Email address is required for credit card receipt, program changes, and notification of upcoming seminars and products. Your email will not be sold or transferred. |  |
|                                                                                          |  | ( )  I need special accommodations. Please contact me.                                                                                                              |  |

**Tuition**

( ) **I will be attending the live seminar.** Single Registrant - **\$279.00**. Three or more registrants from the same company registering at the same time - **\$259.00** each.

( ) **I am not attending.** Please send me the self-study package for **\$289.00**.

☐ Downloadable MP3 Audio/PDF Manual

☐ CD/Manual Package

(S&H included. Please allow five weeks from seminar date for delivery)

**Checks:** Make payable to HalfMoon Education Inc.

**Credit Card:** *Mastercard, Visa, American Express, or Discover*

Credit Card Number: \_\_\_\_\_

Expiration Date: \_\_\_\_\_ CVV2 Code: \_\_\_\_\_

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