



 Tunneling and Underground Committee Presents

# Shotcrete Short Course

November 12-13, 2025 | Georgetown, Kentucky



## 2025 Course Program

[dfi-events.org/shotcrete25](https://dfi-events.org/shotcrete25)

**Short Course Committee**

Renée Fippin, P.E., G.E., Delve Underground  
Bob Stier, Drill Tech Drilling & Shoring  
David Klug, David R. Klug & Associates  
Christopher Love, Minova USA

**Deep Foundations Institute:**

Theresa Engler, Executive Director  
Angie Gibble, Director of Events  
Matthew R. Glisson, P.E., Director of Technical Activities  
Jaime Cettina, Professional Development Coordinator  
Angelina Servin, Events Coordinator

**Short Course Details\***

**Registration Hours**

Tuesday, November 12..... 8:00 a.m. - 4:30 p.m.  
Wednesday, November 13 ..... 8:00 a.m. - 12:00 p.m.

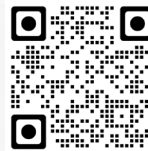
**Online Course Proceedings**

Approximately three weeks after the event, a web link and access instructions for the proceedings will be sent to the email address on file for each attendee. For further information, please contact [events@dfi.org](mailto:events@dfi.org) or visit the Registration Desk.

**Professional Development Hours (PDHs)**

Professional Development Hours (PDHs) will be provided after the completion of each session evaluation through the conference module or DFI's app. Attendees are responsible for determining whether or not these PDHs are accepted by their respective licensing board.

**DOWNLOAD THE APP!**



*\*Subject to Change*

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## Day One | Wednesday, November 12, 2025\*

All Plenary Sessions will be located in the Bluegrass Pavilion at the Marriott Lexington Griffin Gate Golf Resort & Spa

7:00 a.m. - 8:00 a.m.	<b>Networking Breakfast   Speaker &amp; Moderator Technical Rehearsal</b>
8:00 a.m. - 10:15 a.m.	<b>Opening Plenary</b> <i>Moderator: Renée Fippin, P.E., G.E.   Delve Underground</i>
8:00 a.m. - 8:15 a.m.	<b>Introduction</b>
8:15 a.m. - 8:30 a.m.	<b>Safety Moment – Shotcrete</b>   <i>Paul Madsen   Kiewit Infrastructure Company</i>
8:30 a.m. - 9:00 a.m.	<b>Mix Designs for Shotcrete Applications</b> <i>John Zhang, Ph.D.   LZhang Consulting &amp; Testing</i>
9:00 a.m. - 9:30 a.m.	<b>Shotcrete Standards</b>   <i>Charles Hanskat, P.E.   American Shotcrete Association</i>
9:30 a.m. - 10:15 a.m.	<b>Shotcrete Applications and Procedures</b> <i>Christoph Goss, Ph.D., P.E., PMP   Schnabel Engineering</i>
10:15 a.m. - 10:35 a.m.	<b>Networking Break</b>
10:35 a.m. - 11:50 a.m.	<b>Plenary Session 2</b> <i>Moderator: Paul Madsen   Kiewit Infrastructure Company</i>
10:35 a.m. - 11:05 a.m.	<b>Shotcrete Against PVC Membrane</b> <i>Pamela Moran, P.E.   Schneider Moran</i>
11:05 a.m. - 11:50 a.m.	<b>Shotcrete Reinforcement</b> <i>Joshua Lee, P.E.   Bekaert Corporation</i>
11:50 a.m. - 12:50 p.m.	<b>Networking Lunch</b>
12:50 p.m. - 2:50 p.m.	<b>Plenary Session 3</b> <i>Moderator: Renée Fippin, P.E., G.E.   Delve Underground</i>
12:50 p.m. - 1:35 p.m.	<b>Shotcrete for Concrete Repair</b>   <i>Kevin Robertson   Sika</i>
1:35 p.m. - 2:05 p.m.	<b>Preconstruction Testing – Design</b> <i>John Zhang, Ph.D.   LZhang Consulting &amp; Testing</i>
2:05 p.m. - 2:50 p.m.	<b>Preconstruction Testing – Construction &amp; Case History</b> <i>Paul Madsen   Kiewit Infrastructure Company</i>
2:50 p.m. - 3:10 p.m.	<b>Networking Break</b>
3:10 p.m. - 5:10 p.m.	<b>Plenary Session 4</b> <i>Moderator: Paul Madsen   Kiewit Infrastructure Company</i>
3:10 p.m. - 3:55 p.m.	<b>Basics of Fiber Reinforced Shotcrete Design (Fiber and Steel)</b> <i>Joshua Lee, P.E.   Bekaert Corporation</i>
3:55 p.m. - 4:40 p.m.	<b>Shotcrete Equipment</b> <i>James Shea   Reed Concrete Pumps &amp; Shotcrete Equipment</i>
4:40 p.m. - 5:10 p.m.	<b>Panel Discussion – Designer Concerns for Shotcrete Installations</b> <i>Matt Bauer   Frontier Kemper Constructors and Daniel Ebin   Delve Underground</i>
6:00 p.m. - 8:00 p.m.	<b>Offsite Networking Dinner</b>

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## Day Two | Thursday, November 13, 2025

All Plenary Sessions will be located in the Bluegrass Pavilion at the Marriott Lexington Griffin Gate Golf Resort & Spa

**7:00 a.m. - 8:00 a.m.      Networking Breakfast | Speaker & Moderator Technical Rehearsal**

**8:00 a.m. - 9:40 a.m.      Plenary Session 5**  
*Moderator: Renée Fippin, P.E., G.E. | Delve Underground*

**8:00 a.m. - 8:40 a.m.      Construction Acceptance**  
*John Zhang | LZhang Consulting & Testing*

**8:40 a.m. - 9:10 a.m.      Case History – Railroad Rehab (Roseville Tunnel)**  
*Daniel Ebin, P.E. | Delve Underground*

**9:10 a.m. - 9:40 a.m.      Tunnel Shotcrete Monitoring, Scanning & Profiling**  
*Jerome Steinkuehler | Dibit Measuring Technique USA*

**9:40 a.m. - 9:55 a.m.      Networking Break**

**9:55 a.m. - 11:45 a.m.      Plenary Session 6**  
*Moderator: Bob Stier | Drill Tech Drilling & Shoring*

**9:55 a.m. - 10:35 a.m.      Shotcrete Admixtures**  
*John Zhang, Ph.D. | LZhang Consulting & Testing*

**10:35 a.m. - 11:05 a.m.      Wet vs. Dry Mix**  
*Dennis Bittner | QUIKRETE*

**11:05 a.m. - 11:45 a.m.      Dry Mix Shotcrete Application in Shaft Construction**  
*Matt Bauer | Frontier Kemper Constructors*

**11:45 a.m. - 12:45 p.m.      Networking Lunch**

**12:45 p.m. - 1:50 p.m.      Closing Plenary**  
*Moderators: Renée Fippin, P.E., G.E. | Delve Underground and  
Bob Stier | Drill Tech Drilling & Shoring*

**12:45 p.m. - 1:15 p.m.      Case History Shotcrete Tunnel Final Liner**  
*Bob Stier | Drill Tech Drilling & Shoring*

**1:15 p.m. - 1:45 p.m.      Case History Frozen Ground / China Town / Cross Passages**  
*Norbert Fuegenschuh | Beton- und Monierbau USA*

**1:45 p.m. - 1:50 p.m.      Closing Remarks**

**2:30 p.m. - 4:45 p.m.      Demonstrations | Located at Minova USA, Georgetown, KY**

**Wet Mix vs. Dry Mix  
Shotcrete Against PVC Membrane**

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