

Concrete Containment Structures: Repair or Replace?

Presented by Kim Basham

August 9, 2018

8:00 - 4:30 pm CST

Asmark Agricenter Bloomington, IL

Morning program:

- Introductions
- **Troubleshooting Concrete Cracks: Understanding and Minimizing Cracking**

Session objectives:

- ✓ Analyze the causes of structural cracks, the mapping and measuring cracks
- ✓ Identify the causes of nonstructural cracks that occur before hardening
(i.e. *plastic shrinkage and plastic settlement*)
- ✓ Determine causes of nonstructural cracks that occur after hardening
(i.e. *shrinkage, corrosion of embedded materials, reaction, thermal contraction*)
- ✓ Discussion on how to minimize various types of cracks.

Lunch is provided

Afternoon program:

- **Repairing Concrete Cracks: Evaluation and Selection of Repair Methods**

Session objectives:

- ✓ Evaluate how to choose the best repair procedure for active and dormant cracks
- ✓ Summarize repair techniques for routing and sealing cracks
- ✓ Identify repair method options based on unique criteria from case studies
- ✓ Discuss repair methods such as stitching, grouting, drypacking, gravity filling, epoxy injection and surface treatments

- **Wrap-up Discussion**

Session objectives:

- ✓ Importance of surface preparation to successful repairs
- ✓ Reasonable life expectancy of repairs
- ✓ Importance of utilizing good engineering and construction practices
- ✓ Discuss - recap how to determine whether to repair or replace

Dr. Kim Basham, PhD, PE, FCI is a Senior Structural Engineer with an extensive history of experience. He specializes in structural analysis, concrete design, mix designs, concrete specifications and preconstruction, formwork, shoring and reshoring, temporary structures, mass concrete placements, concrete forensic investigations, structural evaluations, condition surveys, destructive and nondestructive testing, concrete repair, concrete construction techniques, concrete technology and research. Dr. Basham has served as Chair of the World of Concrete Education Advisory Committee. This committee is made up of industry experts who represent the concrete industry as a whole. Each year they prepare a unparalleled educational program covering new techniques and current issues. He currently serves as a technical consultant for the World of Concrete Education Program and also gives multiple presentations each year. For more info logon to: www.kbengllc.com

Sponsored by Asmark Institute as an Inspire event. Participation is free but pre-registration is required.