ACI CUSTOM SEMINAR TOPIC

Troubleshooting Concrete Forming and Shoring

ONE DAY, 7.5 HOURS

Minimize problems during construction process

Program Content:

- **Forming systems**
  - Wood wall forms
  - Panel forms
  - Gang forms
  - Column forms
  - Column-hung forms
  - Flying table forms
  - Tunnel forms
  - Shoring and scaffolding
  - Specialty systems
- **Forming economics**
  - Design repetition
  - Dimensional standards
  - Dimensional consistency
  - Slopes for drains
  - Beam sizes, spandrel beams, beam-column intersections
  - Column shapes and sizes
  - PCA preliminary design guides
- **Loads and pressures**
  - Lateral pressures
  - Vertical loads
  - Lateral loads
  - Shoring loads
- **Form removal and reshoring**
  - Form removal specifications and requirements
  - Calculation techniques
  - Stripping and reshoring techniques
  - Reshoring example problem
- **Tolerances and finishes**
  - Wall finishes (smooth form, rough form, rubbed finishes)
  - Vertical alignment and relative alignment
  - Balcony drainage issues
  - Tolerance compatibility issues
- **Formed surface defects**
  - Definitions and specifications
  - Honeycomb
  - Air voids in formed surfaces
  - Form streaking
  - Aggregate transparency
  - Subsidence cracking
  - Color variation
  - Sand streaking
  - Layer lines
  - Form offsets
  - Cold joints
- **Advanced topics**
  (some of the following topics will be included)
  - One-sided forming
  - Bracing to slabs on grade and elevated slabs
  - Forming overhangs (balconies)
  - Overhanging access forms for materials and equipment
  - Strength rating of used materials
  - Wall pour size and joint location
  - Shrinkage trips
  - SCC formwork basics
  - Mudsill settlement
  - Formwork failures
  - Form liners
  - Free fall and concrete splatter on reinforcing steel
- **Questions and answers**

Who should attend:

Contractors and engineers

Instructors:

Kim Basham, Larry Erps, Jeffrey C. Erson, H. Rolfe Jennings, and Pericles C. Stivaros.

Seminar handouts:

Guide to Formwork for Concrete (ACI 347)
Guide for Shoring/Reshoring of Concrete Multistory Buildings (ACI 347.2R)
Specifications for Tolerances for Concrete Construction and Materials and Commentary (ACI 117)
Identification and Control of Visible Effects of Consolidation on Formed Concrete Surfaces (ACI 309.2R)
Guide to Cast-in-Place Architectural Concrete Practice (ACI 303R)
Other related articles from *Concrete International* magazine
Course notes

American Concrete Institute
Always advancing

+1.248.848.3754

WWW.CONCRETESEMINARS.COM