ACI 318-14 Building Code: Reorganized for Design

In-House Seminar

ONE DAY, 7.5 HOURS (7.5 PDHs/0.75 CEUs)

Who should attend: Structural engineers, specifiers, building officials, contractors, architects, and inspectors interested in quickly understanding how the code has been reorganized and how to quickly find provisions of interest.

Program Content:

The American Concrete Institute has recently published the newest edition of ACI 318, "Building Code Requirements for Structural Concrete (ACI 318-14) and Commentary." This edition represents the first major change in Code organization in over 40 years and has been completely reorganized from a designer's perspective. This seminar will help you get acquainted with the new organization and various technical changes to the code as quickly as possible and demonstrate how you can ensure that your design fully complies with the new code.

Attendees will be guided through the new organization of the code, concentrating on provisions for cast-in-place, non-prestressed concrete member design. The philosophy behind the new organizational structure will be demonstrated through a thorough review of the Code's outline and provisions. All major technical changes and new provisions will be highlighted to keep Code users up-to-date with the latest requirements.

Specific topics covered in the seminar include the following:

overall organizational philosophy of the new code; scope, hierarchy, interpretation, and types of ACI documents; NEW requirements for structural systems, loads, and analysis including the relationship between the structural systems chapter and the rest of the document; one-way slab requirements, with an emphasis on explaining the use of reference chapters through-out each member chapter of the code; beam requirements, with an emphasis on how unique requirements are handled; two-way slab requirements, including an overview of provisions related to non-participating members of structures in seismic design categories D, E, and F; column requirements, including seismic detailing specific to each seismic design category; wall requirements, including boundary element provisions; NEW requirements for the design and detailing of diaphragms; an explanation of the seismic requirements related to each member type; a brief overview of the provisions related to the design of foundations and plain concrete; provisions covering the joints and connections between members; organization of chapters covering material requirements for steel and concrete; an overview of requirements pertaining to strut-and-tie models; and responsibilities of the licensed design professional regarding information provided in contract documents.

Learning Objectives:

- Learn what types of design requirements can be found in the major chapters of ACI 318-14.
- Explain the new technical changes in ACI 318-14.
- Understand the philosophy of the organization of ACI 318-14.
- Identify how different chapters of the new code relate to and reference each other.

ACI is an approved education provider for AIA and ICC.





Instructors:

Two industry experts will present this seminar.

Related Documents:

To expand attendees knowledge, ACI In-House Seminar customers may purchase multiple copies of related documents at 50% off the regular price.

 Building Code Requirements for Structural Concrete and Commentary (ACI 318-14) Seminar lecture notes

Up to 40 copies of the presentation slides included. Additional copies can be purchased.

