

Reorganizing ACI 318 – What Does that Mean to Concrete Contractors?

ACI 318 “Building Code Requirements for Structural Concrete and Commentary” represents minimum requirements to ensure safety, serviceability, and durability. It isn’t an all-encompassing instruction manual meant to cover all circumstances and situations encountered in design. The role of Committee 318 is to determine what minimum provisions are needed to assure public safety and performance. The engineer remains responsible for the design.

Traditionally, the provisions in ACI 318 has been organized around a behavior-based format to structural design. The future Code, possibly ACI 318-14, will be changed to a member-based format. A member-based design format includes, in a single location, key aspects for the design of a specific member type (for example, beams). Thus, strength, structural integrity, serviceability, maximum and minimum reinforcement requirements, and specific reinforcement details are combined in a logical sequence.

But how does the ACI 318 member-based reorganization affect contractors? While much of the Code will have chapters on member and system design, there will finally be one dedicated location for information for the contractor on materials and construction. Currently, many specifiers reference ACI 318 in their project specifications in an attempt to make contractors responsible for provisions of ACI 318. First, ACI 318 recommends that this never be done, but when done, the specifier requires the contractor to view all the provisions of ACI 318 and determine which may apply to construction. Contractors are often confused as to which provisions apply to them.

With all the materials and construction requirements in one location, contractors will be able to easily identify what the specifier believes they are responsible for. But a more important benefit is that with all the provisions in one location, they will be under a spotlight. A spotlight that has never been shone on the construction provisions in the Code. Thus concrete contractors will be able to make comments and recommendations for changes to the construction provision in the Code.

Currently, Terry Holland a concrete materials consultant, leads ACI 318 subcommittee A, that has a role in developing the new chapter on materials and construction. ASCC representatives including Dean Browning, Pankow Foundation, and myself, are providing comments on this new chapter. Many ASCC members have experienced some provisions of ACI 318, either favorably or unfavorably. It helps to get all this knowledge together as we prepare a new chapter. Please contact me at bsuprenant@asconline.org to provide input for this important future to concrete construction. Other updates on the new chapter and the ACI 318 reorganization will be provided as the committee continues its work.