

Specification Section 415

Subarticle 415-5

ORIGINATION

Date: 6-24-2024

Name: Ben Goldsberry

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COMMENTARY

The change to cube dimensions equal to the Plan concrete cover will provide more stability and prevent toppling of the blocks. This change was coordinated through the FTBA/FDOT Structures Committee.

INDUSTRY COMMENTS AND RESPONSES

BLACK = Comment **BLUE** = Specifications Response **GREEN** = Change Made to Specification

Name: Andrew Pinkham

Date: 8-1-2024

COMMENT: The Prestressed industry has been faced with this same scenario, and for a time, were forced to use spacer blocks that were the same mix design as the final element regardless of mix design. This became a traceability nightmare for producers to track blocks using mix design XX for elements also using mix design XX. The requirements were broadened to permit the same CLASS of concrete or higher, and if a highly reactive pozzolan is added, the same mix design must be used for the blocks. It seems very unusual to permit the use of blocks that meet a strength, but not a durability requirement for CIP applications, but not for prestress. This is an accelerated path to corrosion. 450.8.2.6 is one such reference that prestressers are required to meet.

RESPONSE: Agree that the language should be updated to ensure the concrete blocks meet the durability requirements of the structure they are being cast into.

ACTION TAKEN: 415-5.2 will be revised. Concrete blocks will be required to have a concrete class equal to or greater than the concrete in which they are to be placed. When the concrete mix design requires highly reactive pozzolans or minimum surface resistivity, the concrete blocks will be required to have same mix design.

Name: John Bosnoian

Date: 8-13-2024

COMMENT: Recommend adding a statement to stagger rows of concrete blocks, by say 2', to prevent a cracking path, especially in the maximum positive moment area for bottom of caps / footings. Additionally, typically concrete blocks are cured with curing compound, recommend either restricting the curing compound application method or place the side with curing compound applied on the exposed side of the component, to prevent a bond breaker.

RESPONSE: Agree with the recommendation to stagger the concrete blocks. For the curing compound, 415-5.2 already has a requirement to moist-cure the concrete blocks for at least three days.

ACTION TAKEN: 415-5.5, 5.7, 5.8, and 5.9 will be revised to require that the blocks be staggered with an offset of 12 inches or greater. This mirrors the language in Section 450-8.2.6 for precast products.