

4001704 - CONCRETE STRUCTURES - PROTECTION OF CONCRETE
COMMENTS FROM INDUSTRY REVIEW

Keith Waugh
Leware Construction Company
352-787-1616
kwaugh@lewarecc.com

Comments:

The revised spec reads “compressive strength of 5,500 psi for cylinders”. While most culverts are 5,500 psi, the majority of bridge decks are 4,500 psi. Specification should read “compressive strength of 100% of the minimum 28-day compressive strength shown in the plans”.

Response:

Response: Agree. Change made.

Larry F. Kelley, PE, District 3 Secretary
by

Jennifer Williams
Office of the District Secretary
Florida Department of Transportation
Office (850) 415-9592, Fax (850) 415-9761
jennifer.williams@dot.state.fl.us

Comments:

We have retrieved the referenced document from the [State Specifications Office's Industry Review intranet website](#). Pursuant to request, we have reviewed the document, entitled “Concrete Structures - Protection of Concrete” and offer the following comments for your consideration.

Consider removing the flexural beam testing from the specification since it is such an unreliable and error prone test.

Thank you for the opportunity to provide input. If you have any questions or need additional information, please do not hesitate to contact me, at (850) 415-9200.

Response: The purpose is to allow for the option of performing beams or cylinders. No change made.

Tom Andres
(850) 414-4269

Comment:

The concrete may not obtain the necessary 5,500 psi compressive strength when Class II

concrete (4,500 psi) is specified in the plans. I recommend that the section be reworded to say “...or the minimum required 28 day compressive strength as shown in the plans, concrete bridge decks...”

Response: Agree. Change made.

Daniel F. Haldi, CET, CPM
District Concrete Technologist
Email: daniel.haldi@dot.state.fl.us
Phone: (386) 740 - 3516
Fax: (386) 736 - 5178

Comments:

400-17.4 Alternate Procedure: As an alternate procedure, in lieu of the time delay periods set forth in 400-17.1 and 400-17.3, test beams or cylinders may be cast from representative concrete and cured identically with the concrete in the corresponding structural component. *Make the test beams AND CYLINDERS in accordance with ASTM C 31 and test them beams and cylinders in accordance with ASTM C 78 and C 39 respectively.* When the test results indicate a minimum flexural strength of 550 psi *for beams* or *indicate* a minimum required compressive strength *of 5,500 psi for cylinders*, concrete bridge decks and culverts may be opened to traffic or the superstructure and beams may be placed on caps.

Hope this satisfies your needs. Doing it this way will greatly expand specification review and write (then read) times, but interpretation may probably be reduced.

Response: The intent is to allow either beams or cylinders, not to require both. No change made.
