

ORIGINATION FORM

THE INFORMATION BELOW IS TO BE PROVIDED BY THE ORIGINATOR

Specification: 400-21, 450-12.1, 521, 534, 548

Subject: 400-21, Classification of Cracks in Concrete Structures to be Sealed
450-12.1, Noncomplying Prestressed Products – General
521, Concrete Barriers, Traffic Railing Barriers and Parapets
534, Sound Barriers
548, Retaining Wall Systems

Origination date: 3/4/08

Originator: Steven Plotkin

Office/Phone: 904-360-5501

Problem statement: **400-21**, The current specification was the result of a major rewrite in 2006 and as such was a first generation specification. As a result, many problems with the spec. have been identified by Department staff in the offices of Maintenance, Design, Materials and Construction which have been deemed valid by a Task Team of Department Engineers.

450-12.1, As a result of revisions, the 400-21 spec now applies to all concrete structures and not just cast-in-place structures as before. Therefore, 450-12.1 now needs a statement that tells Contractors to use 400-21 for disposition of cracks for prestressed concrete components after installation.

521, As a result of revisions, the 400-21 spec now applies to all concrete structures and not just cast-in-place structures as before. Therefore, 521 now needs a statement that tells Contractors to use 400-21 for disposition of cracks in precast concrete barriers etc. after installation as well as a statement that tells Contractors to use 450 for disposition of concrete defects prior to installation.

534, As a result of revisions, the 400-21 spec now applies to all concrete structures and not just cast-in-place structures as before. Therefore, 534 now needs a statement that tells Contractors to use 400-21 for disposition of cracks in precast concrete sound barriers after installation as well as a statement that tells Contractors to use 450 for disposition of concrete defects prior to installation.

548, As a result of revisions, the 400-21 spec now applies to all concrete structures and not just cast-in-place structures as before. Therefore, 548 now needs a statement that tells Contractors to use 400-21 for disposition of cracks in precast concrete retaining wall systems after installation as well as a statement that tells Contractors to use 450 for disposition of concrete defects prior to installation.

Proposed solution: The CPAM Chapter 10.3 has been modified to provide guidance to the CEI on implementing the specification change. There will not be any impact on the cost or to the project schedule since the intent of the specification has not been changed.

Information source: The following Department Engineers provided information on this issue: Rafiq Darji, Jonathan Van Hook, Jeffrey Pouliotte, Rod Powers, Ivan Lasa, Ghulam Mujtaba and David Sadler.

Recommended

Usage Note: These revisions shall apply to the standard specifications and shall be included in all projects

Estimated fiscal impact, if implemented:

These revisions have no fiscal impact since they are all related to providing improved guidance and reduced confusion for Contractors with regard to the Department's expectations related to repairing concrete defects. The intent of the revised specifications has not been changed.

Implementation of these changes, if and when approved, will begin with the January 2009 letting.

For Specifications Office Use Only

Begin date: June 12, 2008

File Number: 4501201

Scheduled completion date: September 9, 2008

Implementation team member: Don Roberts

Implementation date: January 2009



Florida Department of Transportation

CHARLIE CRIST
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STEPHANIE KOPELOUSOS
SECRETARY

MEMORANDUM

DATE: June 23, 2008
TO: Specification Review Distribution List
FROM: Rudy Powell, Jr., P.E., State Specifications Engineer
SUBJECT: Proposed Specifications Change: **4501201**

In accordance with Specification Development Procedures, we are sending you a copy of a proposed new specification change for Noncomplying Prestressed Products.

Please share this proposal with others within your responsibility. Review comments are due within four weeks and should be sent to Mail Station 75 or to my attention via e-mail at ST986RP or rudy.powell@dot.state.fl.us. Comments received after July 23, 2008 may not be considered. Your input is encouraged.

RP/dr

Attachment

COMMENTS:

Submitted by: _____

Phone #: _____

NONCOMPLYING PRESTRESSED PRODUCTS – GENERAL.

(REV 6-12-08)

SUBARTICLE 450-12.1 (of the Supplemental Specifications) is deleted and the following substituted:

450-12.1 General: When a precast prestressed concrete product does not comply with the requirements of this Section or is damaged, use the following provisions for evaluating and disposing of deficiencies. *However, when precast prestressed concrete products have been installed, the disposition of concrete cracks shall be in accordance with 400-21.* Apply these provisions in all cases that clearly fall under the circumstances described. Consider situations not covered by these specific circumstances on their individual merits. Consider and apply the following where practical.

The Quality Control Manager will examine all deficiencies to determine the applicable provisions and requirements of this Article and which course of action is appropriate. If the Quality Control Manager determines that a deficiency is a cosmetic or minor defect, appropriate repairs may be executed immediately in accordance with 450-13. Perform and complete cosmetic and minor defect repairs to the satisfaction of the Quality Control Manager. If the Quality Control Manager determines that a deficiency is a major deficiency, requiring an engineering evaluation, submit a repair proposal to the Engineer in accordance with 450-14. Make all repairs that require a repair proposal under the observation of and to the satisfaction of the Quality Control Manager.

The disposition of deficiencies and repair methods provided herein must at no time, and under no circumstances, be used as an excuse for or applied in such a manner so as to relieve the Contractor of his responsibility for Quality Control. The number and type of deficiencies evaluated under this specification will, however, be used in evaluating the Contractor's Quality Control.

The Engineer will require a credit on any product with deficiencies that require engineering evaluation and are attributable to the Contractor, accepted for use in the structure. Bear the costs of repairs and any actions taken to rectify deficiencies at no expense to the Department.