

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: **5340900**

In accordance with Specification Development Procedures, we are sending you a copy of a proposed new specification change for Sound Barriers – Repair and Rejection.

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 #: _____

**SOUND BARRIERS – REPAIRS AND REJECTION.
(REV 6-12-08)**

ARTICLE 534-9 (Page 607) is deleted and the following substituted:

534-9 Repairs and Rejection.

For precast concrete sound barrier components that have not been installed, evaluate cracks, spalls and other deficiencies in accordance with 450-12. Repair deficiencies in accordance with 450-13 or the plant's approved repair methods that are included as part of the QCP. Ensure that the original performance and durability of repaired sound barrier components are maintained. Use materials for concrete repair that will meet or exceed the strength requirement for the class of concrete used. Materials meeting the requirements of Section 930 may be substituted for non-shrink grout when required by 450-13. Precast concrete sound barrier components are subject to rejection if they fail to conform to any of the Specification requirements after repair. For precast concrete sound barrier components that have been installed, the disposition of concrete cracks shall be in accordance with 400-21.

534-109 Method of Measurement.

The quantity to be paid for will be the plan quantity, in square feet, measured in place, completed and accepted, of the area bounded by the top of the top panel and the bottom of the bottom panel without deductions for openings in the panels, and the beginning to end limits shown in the control drawings. The pay area for anti-graffiti coating will be the plan quantity, in square feet, measured in place, completed and accepted, of the wall without allowances for striations or openings.

ARTICLE 534-10 (Page 608) is deleted and the following substituted:

~~534-1110~~ Basis of Payment.

Price and payment will be full compensation for all work specified in this Section, including but not limited to: furnishing all materials, labor, panels, special panels, posts, collars, reinforcing steel, foundations, drain holes, fire hose access holes, grating, neoprene pads, equipment, alignment pins, etc. necessary to construct the sound barriers. Include in this price, the cost of any charges for power stoppages, sound barrier wall realignments, special erection methods, etc. required to construct the wall.

Payment will be made under:

Item No. 534- 72- Sound Barrier - per square foot.