



## *Florida Department of Transportation*

**JEB BUSH**  
GOVERNOR

605 Suwannee Street  
Tallahassee, FL 32399-0450

**DENVER J. STUTLER, JR.**  
SECRETARY

July 19, 2005

Mr. Donald Davis  
Program Operations Engineer  
Federal Highway Administration  
545 John Knox Road  
Tallahassee, Florida 32303

Re: Office of Design, Specifications  
Section 400  
Proposed Specification: 4000900

Dear Mr. Davis:

We are submitting, for your approval, two copies of a proposed Supplemental Specification for Concrete Structures.

This change was proposed by Steve Plotkin of the State Construction Office to specify crack control groove and coating requirements.

Please review and transmit your comments, if any, within two weeks. Comments should be sent via Email to SP965DB or [duane.brautigam@dot.state.fl.us](mailto:duane.brautigam@dot.state.fl.us).

If you have any questions relating to this specification change, please call Duane F. Brautigam, State Specifications Engineer at 414-4110.

Sincerely,

Signature on file

Duane F. Brautigam, P.E.  
State Specifications Engineer

DFB/jf

Attachment

cc: General Counsel  
Florida Transportation Builders' Assoc.  
State Construction Engineer

**CONCRETE STRUCTURES.  
(REV 6-17-05)**

SUBARTICLE 400-9.7 (Page 349) is deleted and the following substituted:

**400-9.7 Crack Control Grooves**~~Joints in Concrete Bridge Decks: When the plans provide an option for or require joints in concrete decks to be made with a saw cut, make the cut in accordance with plan details and no later than the day following concrete placement~~

*When the plans require crack control grooves in the top surface of decks, either install a tooled "V" groove prior to initial concrete set or saw a groove using an early entry dry cut saw. When using an early entry dry cut saw, operate in accordance with the manufacturer's recommendations. Commence sawing as soon as the concrete has hardened enough to permit standing on the surface without leaving visible tracks or impressions and before uncontrolled concrete cracks occur.*

SUBARTICLE 400-16.6 (Page 360) is deleted and the following substituted:

~~**400-16.6 Traffic Barriers, Railings, Parapets and End Post:** When construction is by the slip form method, maintain surface moisture and begin curing before the loss of water sheen but no more than 30 minutes after extruding. Apply membrane curing compound as defined in this Section or apply an approved coating which acts as a curing compound and Class 5 coating.~~

**400-16.6 Traffic Barriers, Railings, Parapets and End Post:** *Ensure concrete is cured in accordance with 400-16.2(b). When construction is by the slip form method, coat all concrete surfaces with a curing compound that meets the requirements of 925-2, either within 30 minutes of extrusion or before the loss of water sheen, whichever occurs first. Ensure a curing compound coating period of not less than seven days after application. Prior to each concrete placement, submit to the Engineer the method that will be used to periodically measure the rate of application in gallons/sq ft [liters/per m<sup>3</sup>]. Also, prior to each placement, submit to the Engineer the anticipated quantity of curing compound in gallons [liters] that will be used to meet the coverage rate specified in 400-16.2 along with the corresponding square footage [square meters] of barriers, railings, parapets and end posts to be coated with that quantity. Compute the actual quantity of curing compound that is applied during each concrete placement and submit the quantity to the Engineer. Applied Finish Coatings, that are on the Qualified Products List and that are flagged as permitted for use as a curing compound, may be used in lieu of a curing compound; If an Applied Finish Coating is used in lieu of a curing compound, have a backup system that is in full compliance with 400-16.2(b) available at all times to ensure that an effective alternative system will be immediately available if the Applied Finish Coating cannot be applied within 30 minutes of extrusion or before the loss of water sheen.*

**CONCRETE STRUCTURES.  
(REV 6-17-05)**

SUBARTICLE 400-9.7 (Page 349) is deleted and the following substituted:

**400-9.7 Crack Control Grooves in Concrete Bridge Decks:** When the plans require crack control grooves in the top surface of decks, either install a tooled "V" groove prior to initial concrete set or saw a groove using an early entry dry cut saw. When using an early entry dry cut saw, operate in accordance with the manufacturer's recommendations. Commence sawing as soon as the concrete has hardened enough to permit standing on the surface without leaving visible tracks or impressions and before uncontrolled concrete cracks occur.

SUBARTICLE 400-16.6 (Page 360) is deleted and the following substituted:

**400-16.6 Traffic Barriers, Railings, Parapets and End Post:** Ensure concrete is cured in accordance with 400-16.2(b). When construction is by the slip form method, coat all concrete surfaces with a curing compound that meets the requirements of 925-2, either within 30 minutes of extrusion or before the loss of water sheen, whichever occurs first. Ensure a curing compound coating period of not less than seven days after application. Prior to each concrete placement, submit to the Engineer the method that will be used to periodically measure the rate of application in gallons/sq ft [liters/per m<sup>3</sup>]. Also, prior to each placement, submit to the Engineer the anticipated quantity of curing compound in gallons [liters] that will be used to meet the coverage rate specified in 400-16.2 along with the corresponding square footage [square meters] of barriers, railings, parapets and end posts to be coated with that quantity. Compute the actual quantity of curing compound that is applied during each concrete placement and submit the quantity to the Engineer. Applied Finish Coatings, that are on the Qualified Products List and that are flagged as permitted for use as a curing compound, may be used in lieu of a curing compound; If an Applied Finish Coating is used in lieu of a curing compound, have a backup system that is in full compliance with 400-16.2(b) available at all times to ensure that an effective alternative system will be immediately available if the Applied Finish Coating cannot be applied within 30 minutes of extrusion or before the loss of water sheen.