

ORIGINATION FORM

THE INFORMATION BELOW IS TO BE PROVIDED BY THE ORIGINATOR

Specification: *Specification Number, ex. 343-1.2400-15.2.6.4*

Subject: *Name of Section, Article or Subarticle Application*

Origination date: *November 7, 2008*

Originator: *Paul Vinik*

Office/Phone: *352-955-6649*

Problem statement: ~~A brief statement of the perceived problem that we are trying to solve (including data that quantifies the magnitude of the problem when possible)~~ *Debate has arisen regarding whether the intent of the spec was to have contractors apply the coating at the manufacturer's suggested application rate, or whether to apply at 50 ft²/gallon as specified.*

Proposed solution: ~~Include identification of documents that would provide direction on implementing the change. Benefit/cost analysis where appropriate. Also include impacts to those affected by the implementation such as cost, impact to project schedules, supplemental agreements, etc.~~ *The language stating that the coating be applied per the manufacturer's recommendations has been removed.*

Information source: ~~Any contacts through industry, or Department staff who may have information, or who provided information on the issue.~~ *Rafiq Darji (SCO – 850-414-4195) Steve Plotkin (SCO – 904-360-5501)*

Recommended Usage Note: *All jobs*

Estimated fiscal impact, if implemented: *No change*

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

For State Specifications Office Use Only

Begin date: November 13, 2008

File Number: 4001502

Scheduled completion date: February 10, 2009

Implementation date: July 2009

Implementation team member: Frances Thomas

Usage Note: All jobs

Notes:



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M E M O R A N D U M

DATE: December 2, 2008

TO: Specification Review Distribution List

FROM: Rudy Powell, Jr., P.E., State Specifications Engineer

SUBJECT: Proposed Specification: 4001502 Concrete Structures – Finishing Concrete

In accordance with Specification Development Procedures, we are sending you a copy of a proposed specification change.

This change was proposed by Paul Vinik of the State Materials Office to clarify that the application of the coating is to be according to the rate stated in the spec and not according to the manufacturer's recommendations.

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 December 30, 2008 may not be considered. Your input is encouraged.

RP/ft
Attachment

CONCRETE STRUCTURES – FINISHING CONCRETE.
(REV 11-7-08)

ARTICLE 400-15.2.6 (pages) is deleted and the following substituted:

400-15.2.6 Class 5 Applied Finish Coating:

400-15.2.6.1 General: Place an applied finish coating upon all concrete surfaces where the plans indicate Class 5 Applied Finish Coating. Apply the finish coating after completion of the general surface work specified for all exposed concrete surfaces. Select an Applied Finish Coating from the Departments Qualified Products List meeting the requirements of Section 975.

400-15.2.6.2 Material: For the coating material, use a commercial product designed specifically for this purpose. Use only coating material that is manufactured by one manufacturer and delivered to the job site in sealed containers bearing the manufacturer's original labels. Submit a copy of the manufacturer's printed instructions to the Engineer.

400-15.2.6.3 Surface Preparation: Prepare the surface prior to the application of an applied finish coating by providing a surface finish in accordance with the requirements of 400-15.1. The Engineer will not require surface voids that are 1/4 inch or less in width and depth to be grouted prior to application of the finish coating. Fill surface void larger than 1/4 inch in width and depth an approved high strength, non metallic, non shrink grout meeting the requirements of Section 934, mixed and applied in accordance with the manufacturer's recommendations. Apply the grout by filling the surface voids using burlap pads, float sponges, or other acceptable methods. As soon as the grout has taken its initial set, brush the surface to remove all loose grout, leaving the surface smooth and free of any voids. Ensure that the surface to be coated is free from efflorescence, flaking coatings, curing compound, dirt, oil, and other substances deleterious to the applied finish coating. Prior to application of the finish coating onto precast or cast-in-place concrete surfaces, test the concrete surface at 30 foot intervals for the presence of curing compound using one or two drops of muriatic acid placed on the concrete surface. If curing compound is present, there will be no reaction between the acid and the concrete. If there is no reaction, remove the compound by pressure washing the concrete surfaces. Prepare the surfaces in accordance with the manufacturer's recommendations, and ensure that they are in a condition consistent with the manufacturer's requirements.

400-15.2.6.4 Application: Apply the finish coating ~~in a manner~~ *utilizing a method* recommended by the manufacturer. When applying the finish coating by spraying, supply heavy duty spray equipment capable of maintaining a constant pressure necessary for proper application. Mix, ~~apply,~~ and cure all coating materials in accordance with the manufacturer's printed instructions. Apply the finished coating at a rate of 50 ±10 ft²/gal.

400-15.2.6.5 Finished Product: Produce a texture of the completed finish coat that is generally similar to that of rubbed concrete. Ensure that the completed finished coating is tightly bonded to the structure and presents a uniform appearance and texture. If necessary, apply additional coats to produce the desired surface texture and uniformity.

Upon failure to adhere positively to the structure without chipping, flaking, or peeling, or to attain the desired surface appearance, remove coatings entirely from the structure, and reapply the finish coating after surface preparation until achieving the desired finished product. Do not allow the average thickness of the completed finish coating to exceed 1/8 inch.

400-15.2.6.6 Material Tests and Certification: Before any portion of any shipment of finish coating is applied on the project, furnish the Engineer with a certificate from the manufacturer attesting that the commercial product furnished conforms to the same formula as that previously subjected to the tests specified in Section 975. In addition, submit the following product analysis, obtained from the manufacturer, for each batch of the material used:

- (a) Weight per gallon.
- (b) Consistency (Krebs Units).
- (c) Weight percent pigment.
- (d) Weight percent vehicle solids.
- (e) Infra-red spectra of vehicle solution.