Origination Form

Specifications

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Date:	2025-05-27T13:43:24Z	**Associated Specs:**	None

Summary:

350-13.5.1.1 and 350-13.5.2 have been revised to require new and existing concrete pavement joints be cleaned according to joint sealant manufacturer instructions rather than prescriptive directions.

Justification:

Required concrete pavement joints to be cleaned according to joint sealant manufacturer instructions.

Do the changes affect other types of specifications?

Neither

List Specifications Affected:

Other Affected Documents/Offices	Contacted	Yes/No
Other Standard Plans		No
Florida Design Manual		No
Structures Manual		No
Basis of Estimates Manual		No
Approved Product List		No
Construction Office		No
Maintenance Office		No
Materials Manual		No
Traffic Engineering Manual		No

Are changes in line with promoting and making progress on improving safety, enhancing mobility, inspiring innovation, and fostering talent; explain how?

This update removes prescriptive directions and requires contractors follow manufacturer instructions on joint cleaning prior to applying concrete pavement joint sealant.

What financial impact does the change have; project costs, pay item structure, or consultant fees?

No financial impact.

What impact does the change have on production or construction schedules?

No impact

How does this change improve efficiency or quality?

Contractors will follow the manufacturer's joint clean recommendations rather than prescriptive directions that may not be appropriate for specific joint sealants.

Which FDOT offices does the change impact?

Construction and Materials

What is the impact to districts with this change?

No impact

Does the change shift risk and to who?

Risk is shifted from the Department since prescriptive directions are replaced with manufacturer's instructions

Provide summary and resolution of any outstanding comments from the districts or industry.

Comments and Responses are available on the Track the Status of Revisions hyperlink located on the Specifications landing page: https://www.fdot.gov/programmanagement/Specs.shtm

What is the communication plan?

Through the established specification revision process (e.g., Internal and Industry Review)

What is the schedule for implementation?

The Standard Specifications eBook and Workbook are effective July 1st every year.

CEMENT CONCRETE PAVEMENT
(REV 5-27-25)

ARTICLE 350-2 is deleted and the following substituted:

350-2 Materials.

Meet the following requirements except as modified herein:

Concrete .....Section 346
~~Grinding Concrete Pavement .....Section 352~~
Curing ~~Materials~~Compound*..... ~~Section~~ 925-2
~~Embedded Items~~Metal Materials for Joints .... ~~Section~~ 931-2
Metal Dowel Bar Assemblies* 931-3
Joint Materials*~~Seal~~..... ~~Section~~ 932-1
*Use products listed on the Department's Approved Product List (APL).

Provide concrete with a minimum 28-day compressive strength of 3,000 psi and maximum water to cementitious materials ratio of 0.50.

For concrete pavement placed using the slip-form method of construction, utilize concrete with a target slump of 1.5 inches plus or minus 1 inch. For concrete pavement placed by hand in constructed forms, utilize concrete with a target slump of 3 inches plus or minus 1.5 inches. Air content testing for concrete pavement mixes is not required.

SUBARTICLE 350-11.2 is deleted and the following substituted:

350-11.2 Edging: After applying the final finish, but before the concrete has become nonplastic, carefully round the edges to a 1/84 inch radius on each side of transverse expansion joints and construction joints and along any structure extending into the pavement. Produce a well-defined and continuous radius, and obtain a smooth, dense mortar finish. Completely remove all concrete from the top of the joint that will obstruct the preformed joint filler installation.

SUBARTICLE 350-12.2 is deleted and the following substituted:

350-12.2 White-Pigmented Curing Compound: Uniformly apply a Type 2 (White) ~~white-pigmented~~ curing compound meeting the requirements of Section 925 to the surfaces to be cured, including the edges of slip-form produced paving, in a single coat of continuous film, at the minimum rate of 1 gallon per 200 square feet.

During application, thoroughly mix the compound in accordance with the manufacturer's recommendation.

Do not apply curing compound during periods of rainfall. Do not apply curing compound to the inside faces of joints to be sealed. Should the film become damaged from any cause within the required curing period, repair the damaged portions immediately with additional compound. If using forms, upon their removal, immediately coat the sides of the slabs exposed to provide a curing treatment equal to that provided for the surface.

SUBARTICLE 350-13.3.2 is deleted and the following substituted:

350-13.3.2 Transverse Construction Joints: Construct transverse construction joints at the end of all pours and at other locations where the paving operations are stopped for 30 minutes or longer. Do not place construction joints within 7 1/2 feet of any other transverse joint or within 7 1/2 feet of either end of a section of pavement. If sufficient concrete has not been placed to form a slab at least 7 1/2 feet long, remove the excess concrete, back to the last preceding joint. Form the joints in place, in a plane perpendicular to the profile and centerline of the pavement. Saw or form construction joints, in a manner similar to contraction joints, so that a groove will be formed for holding the joint seal er~~ing compound~~.

Check all joints with a straightedge before the concrete has become non-plastic. Make corrections as necessary if one side of the joint is higher than the other, or the entire joint is higher or lower than the adjacent slabs.

SUBARTICLE 350-13.5 is deleted and the following substituted:

350-13.5 Cleaning Joints and Cracks:

350-13.5.1 Cleaning Joints in New Pavement:

350-13.5.1.1 Sawed Joints: ~~Immediately after the final saw cut,~~ C~~c~~ompletely remove the resulting residue from the joint and the immediate area by flushing with a pressure washer and by using other tools as necessary.

1. After flushing, blow out the joints with compressed air.
2. Patch all spalled edges with an epoxy compound.
3. Immediately prior to joint sealer installation, clean the joints ~~using compressed air to remove all traces of debris and dust within and on the joint surfaces~~ according to the joint sealant manufacturer's instructions.

350-13.5.1.2 Non-Sawed Joints: Thoroughly clean joints which require joint sealer~~ing~~ of all foreign material for the full depth of the joint sealer installation.

With the exception of residue removal due to sawing, meet the cleaning requirements as specified for sawed joints.

350-13.5.2 Cleaning Joints in Existing Pavement: Remove all existing joint-sealing material and foreign material for the full depth of the new joint seal by sawing, wire brushing, sandblasting, or other methods approved by the Engineer.

Remove any existing sealant or parting strip material below the bond breaker tape or backer rod bond breaker and replace it with additional backer rod bond breaker. When conditions require removal and replacement with additional backer rod bond breaker below the new joint sealer, obtain the Engineer's approval of the type of backer rod bond breaker and its installation procedure. Perform cleaning by any method or combination of methods, as detailed in the Plans.

~~Flush the joint with a pressurized jet of water, and use other tools as necessary, to remove loose remnants and debris.~~

~~After flushing, blow out the joints with compressed air. After the flushed joints have dried, sandblast the joint faces to thoroughly remove all foreign material. Perform sandblasting in two passes, once for each face.~~

~~Patch all spalled edges with an epoxy compound.~~

~~Immediately prior to joint seal installation, clean the joints using compressed air to remove all traces of debris and dust within and on the joint surfaces.~~ Prior to joint sealing, clean the joints in accordance with 350-13.5.1.1.

350-13.5.3 Cleaning Random Cracks in Existing Pavement: Do not begin cleaning random cracks in existing pavement until all other concrete pavement repairs have progressed to the point where those operations will not adversely affect the installation of the new seal.

Cut the random cracks to be repaired and sealed into grooved joints to the depth and width detailed in the Plans. Clean the joints in accordance with 350-13.5.2.