9310203 METAL ACCESSORY MATERIALS FOR CONCRETE PAVEMENT AND CONCRETE STRUCTURES COMMENTS FROM INTERNAL/INDUSTRY REVIEW

Name: Karem Byram Work Phone: 850-414-4353 (850) 414-4353

Comments:(12-17-19, Internal): This specification change affects the APL. Please explain further why this coating is being changed and how it will affect the existing APL products.

Response: This is the one we discussed during our teleconference on 10/22/19. The specification for red alkyd paint has been withdrawn for environmental reasons and there is no replacement. The APL product list for dowel bar assemblies would need to transition from SSPC Paint 25. As discussed during the phone call, SMO has contacted dowel bar assembly manufacturers that are currently on the APL and they are able to supply in accordance with the specified epoxy coating standards.

Action: When this goes into effect (signed by FHWA) the existing APL products will all need to be requalified before the Workbook is in effect, or a limitation for use will be placed on the non-requalified products. This will have to be coordinated through my office and documented PATH. You will need to contact my office when the spec has been signed by FHWA so Product Evaluation can start the process. By starting at the signature date, we have the best chance of getting the existing requalification's completed before the spec change goes into effect with the workbook, thereby ensuring that there are APL products available for projects being let.

Action: No change needed.

Name: Ananth Prasad Work Phone: 850-942-1404 ext 4 aprasad@ftba.com

Comments:(12-17-19, Internal): In my view using epoxy-coating on bars, which is marginally more expensive, is a needless extra cost in Florida. Even the FAA doesn't require epoxy-coating at airports south of Jacksonville, probably because they only require at airports that use glycol for de-icing.

Response: Due to the concerns noted in response to comment 2, ASTM A775 epoxy coating is being proposed as replacement to the alkyd paint based on availability and ability to provide similar performance as a barrier-type corrosion protection for dowel bars.

Action: No change needed.

Name: Ananth Prasad Work Phone: 850-942-1404 ext 4 aprasad@ftba.com

Comments:(12-17-19, Internal)

The main concern is that this does not jive with Spec 350-12.4. If FDOT is going to address the coating of dowel bars in two places it should mirror, but why address in two places?

Response: 350 is also being revised. The following is a snapshot of revisions currently being processed. The intent is for parallel implementation with the proposed revisions to 931.

350-1213.3 Transverse Joints:

350-13.3.1 Load-Transfer Devices: Provide dowel load-transfer devices in all transverse joints. Firmly hold dowel bars in a position parallel to the surface in the longitudinal direction of the pavement and the centerline of the slab depth, by approved steel supports and spacers, of a type shown in the Plans. The Engineer may approve the use of dowel bar supports or assemblies other than those specifically detailed in the Plans. Allow the dowels to be free to move in one slab as the concrete contracts and expands. Use dowel bars coated in accordance with 931-2.3. Paint each dowel with one coat of zinc rich primer or red oxide alkyd based primer meeting the requirements of SSPC Paint 25 Type I or Type II.

Action: Spec 350 is currently being revised.

Name: Ananth Prasad Work Phone: 850-942-1404 ext 4 aprasad@ftba.com

Comments:(12-17-19, Internal) Also I'm not sure what's driving the addition of epoxy-coating to the spec, even though the wording is saying that you can use either epoxy or alkyd primer paint.

Response: The referenced changes to 350 (above) and 931 (below) were driven by the withdrawal by SSPC (without replacement) of the referenced paint standards for red oxide alkyd primer (SSPC Paint 25 and SSPC Paint 104) and subsequent lack of availability of products that would meet the standards. With the proposed revisions to both specifications, the options will be either ASTM A775 epoxy or SSPC Paint 20 zinc-rich coating.

931-2.3 Dowel Bars: Dowel bars shall be plain steel bars conforming to the requirements of ASTM A615 for any grade of steel shown. They shall be of the length, size and spacing as shown in the Plans. When coated dowel bars are specified, coat with epoxy meeting the requirements of ASTM A775 by a producer with Epoxy Coating Certification from the Concrete Reinforcing Steel Institute, or one coat of zinc-rich primer meeting the requirements of SSPC Paint 20.

The Contractor shall submit to the Engineer a certified test report from the manufacturer of the dowel bars confirming that the requirements of this Section are met. The certified test report shall conform to the requirements of Section 6 and include metallurgical mill analysis, grade, length and size. Each certification shall cover only one LOT for dowel bars.

931-3.6 Materials: The wire for the welded assembly shall be in accordance with all applicable requirements of ASTM A1064.

After fabrication of dowel bar assemblies, apply coating in accordance with the requirements of 931-2.3.one coat of alkyd primer meeting the material requirements of SSPC Paint 104. Apply the primer in accordance with the manufacturer's recommendations.

Action: No change needed.

Name: Ananth Prasad Work Phone: 850-942-1404 ext 4

aprasad@ftba.com

Comments:(12-17-19, Internal): In my view using epoxy-coating on bars, which is marginally more expensive, is a needless extra cost in Florida. Even the FAA doesn't require epoxy-coating at airports south of Jacksonville, probably because they only require at airports that use glycol for de-icing.

Response: Due to the concerns noted in response to comment 2, ASTM A775 epoxy coating is being proposed as replacement to the alkyd paint based on availability and ability to provide similar performance as a barrier-type corrosion protection for dowel bars.

Action: No change needed.

Name: Chris Rich Work Phone: 270-242-2571 crich@mid-park.com

Comments:(12-17-19, Industry)

RCP (APL # 931-000-007) currently coats Dowel Bar Assemblies with a Sherwin Williams Rust Inhibitive Primer formulated to SSPC Paint #25 & Pain #15. Can this product be added sections 931-2.3 Dowel Bars & 931-3.6 Materials under 9310203 Metal Accessory Materials for Concrete Pavement and Concrete Structures? We currently coat the entire assembly not just the dowels. Product Information Sheets and SDS can be provided upon request.

Response: SSPC-Paint 25 has been withdrawn by the issuing organization. Coatings that meet the requirements of SSPC-Paint 15 are not acceptable as permanent corrosion protection for dowel bars and dowel assemblies. SSPC-Paint 15 specifies "Steel Joist Shop Primer/Metal Building Primers" intended for temporary applications.