9320103 NONMETALLIC ACCESSORY MATERIALS FOR CONCRETE PAVEMENT AND CONCRETE STRUCTURES
COMMENTS FROM INTERNAL/INDUSTRY REVIEW

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Comments: (2-25-15)
1) Tack-free Time: Sealant Type C – From 60 minutes to 180 minutes and, Sealant Type D – From 30 - 60 minutes to 20 – 60 minutes. The proposed changes are reasonable for these types of sealant.

Response: Thank you for your comment.

2) Specific Gravity: Sealant Type C – From 1.26 – 1 to 1.1 - 1.5. The original specification is too narrow. However, 1.5 on the high end of the proposed change seems unrealistically high for this type of sealant. Specific gravity in the 1.1 to 1.4 range is reasonable.

Response: The proposed change is intended to widen the currently too narrow range. An upper limit of 1.5 as opposed to 1.4 will allow the inclusion of more potential products. No changes made.

3) Elongation: Sealant Type C – From 1400% to 800%. The proposed change is reasonable for this type of sealant.

Response: Thank you for your comment.

4) Bond to Concrete Briquets: Sealant Type C – From 35 psi minimum (includes bond to asphalt) to 35 psi (bond to concrete and asphalt briquets). The test specimen design is not suitable for self-leveling, flowable sealants. Eliminating the AASHTO T132 call out in this specification is recommended for both the Type B and the Type C sealants. At a minimum, clarification is needed in several areas: a. Is the Type C sealant to be tested between two concrete briquets, between two asphalt briquets, between two concrete briquets and/or between a concrete briquet and an asphalt briquet? b. If asphalt briquets are to be used, what is the mix design and briquet fabrication procedure? c. If asphalt briquets are to be used, how are they to be aged and conditioned for the testing? d. The briquets for Type B and C sealants are referred to as “concrete” in the table of requirements. If concrete briquets are to be used rather than cement mortar briquets referred to in AASHTO T132, what concrete specification should be used? Note the briquets are referred to as “Portland Cement Mortar” in the footnote to the table of requirements.

Response: Changes made for clarification and to require bonding to cement mortar briquets only.

5) Requirement Table Footnote: The procedure needs to be reviewed and changed. Wet saws are used to cut briquets thus the drying step should be done after the briquets are sawed. A more suitable sequence would be: a) cure briquets, b) saw cut, c) clean, d) oven dry and then e) bond the halves with sealant. A nominal bond line thickness should also be noted.

Response: Agree. Changes made.

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Comments: (3-5-15)
Has FLDOT tested for the requirements listed for Type C or requested data from manufacturers? There are two requirements that you may want to consider looking at more closely to see if there are a sufficient number of manufacturers to meet both requirements. They are the T-132 test and D412 Tensile. The Tensile stress at 150% extension has a requirement of 15 psi maximum. It may be worth checking to see how many manufacturers can meet this requirement as well as the T -132 requirement. The second test is T-132.
Again, has testing been performed to determine how many products may be able to achieve this? Our experience has found results to be variable with asphalt and the results tend to be very close to the 35 psi requirement. Conversely, we have found concrete to provide more consistent results that easily exceed the 35 psi requirement. Thank you for your consideration.
Response: Manufacturer's product data sheets were reviewed. Changes made for clarification and to require bonding to cement mortar briquets only.

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