

ORIGINATION FORM
Proposed Revisions to the Specifications

Date:

Specification Section:

Originator:

Articles/Subarticles:

Telephone:

email:

Why does the existing language need to be changed?

Summary of the changes:

Are these changes applicable to all Department jobs? Yes No

If not, what are the restrictions?

Will these changes result in an increase or decrease in project costs? Yes No

If yes, what is the estimated change in costs?

With who have you discussed these changes?

What other offices will be impacted by these changes?

Will this revision necessitate changes to the following: BOE PPM SDG CPAM

Design Standards **List Affected Index Nos.**

Other manual?

Are all references to external publications current? Yes No

If not, what references need to be updated (please include changes in the redline)?

Will this revision necessitate any of the following:

Design Bulletin

Construction Bulletin

Estimates Bulletin

Contact the State Specifications Office for assistance in completing this form.

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M E M O R A N D U M

DATE: February 18, 2015

TO: Specification Review Distribution List

FROM: Daniel Scheer, P.E., State Specifications Engineer

SUBJECT: Proposed Specification: **9320103 Nonmetallic Accessory Materials for Concrete Pavement and Concrete Structures.**

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

The changes are proposed by Nikita Reed of the State Materials Office to adjust the physical requirements for tack free time, specific gravity, and elongation.

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 online at <http://www2.dot.state.fl.us/SpecificationsEstimates/Development/IndustryReview.aspx>. Comments received after **March 18, 2015**, may not be considered. Your input is encouraged.

DS/ot
Attachment

NONMETALLIC ACCESSORY MATERIALS FOR CONCRETE PAVEMENT AND CONCRETE STRUCTURES.

(REV 2-~~45~~-15)

SUBARTICLE 932-1.3.2 is deleted and the following substituted:

932-1.3.2 Physical Requirements:

Silicone Sealant Type	Test Method	Type A	Type B	Type C	Type D
Flow	ASTM D5893	No Flow			
Slump (maximum)	ASTM D2202	0.3 inches			
Extrusion rate (minimum)	ASTM C1183, Procedure A	20 ml/min	20 ml/min	20 ml/min	20 ml/min
Tack-free time at 77 ± 3°F and 45 to 55% Relative Humidity	ASTM C679	90 minutes maximum	180 minutes, maximum	60 -180 minutes, maximum	30 -20 – 60 minutes
Specific gravity	ASTM D792, Method A	1.1 to 1.515	1.10 to 1.40	1. 26 -1 to 1. 34 5	1.26 to 1.34
Durometer hardness, Shore A (Cured seven days at 77 ± 3°F and 50 ± 5% Relative Humidity)	ASTM D2240	10-25			
Durometer hardness, Shore 00 (Cured 21 days at 77 ± 3°F and 50 ± 5% Relative Humidity)	ASTM D2240		40-80	20-80	
Tensile	ASTM D412 (Die C)	45 psi	40 psi	15 psi	

Silicone Sealant Type	Test Method	Type A	Type B	Type C	Type D
stress (maximum) at 150% elongation					
Elongation (Cured seven days at $77 \pm 3^\circ\text{F}$ and $50 \pm 5\%$ Relative Humidity)	ASTM D412 (Die C)	800% minimum			600% minimum
Elongation (Cured 21 days at $77 \pm 3^\circ\text{F}$ and $50 \pm 5\%$ Relative Humidity)	ASTM D412 (Die C)		800% minimum	1400 800% minimum	
Ozone and Ultraviolet Resistance	ASTM C793	No chalking, cracking or bond loss after 5,000 hours, minimum.			
Bond to concrete mortar briquets (primed if required) (Cured seven days at $77 \pm 3^\circ\text{F}$ and $50 \pm 5\%$ Relative Humidity)	AASHTO T132	50 psi minimum			
Bond to concrete briquets (Cured 21 days at $77 \pm 3^\circ\text{F}$ and $50 \pm 5\%$ Relative Humidity)	AASHTO T132		40 psi minimum	35 psi minimum (includes bond to <i>concrete and asphalt briquets</i>)	

Silicone Sealant Type	Test Method	Type A	Type B	Type C	Type D
Humidity)					
Movement Capability	ASTM C719	No adhesive or cohesive failure and adhesion, 10 cycles at -50 to +100%			No adhesive or cohesive failure and adhesion, 10 cycles at +100/-50 %

Portland Cement Mortar: Briquet^{tes} shall be molded and cured 28 days minimum in accordance with AASHTO T132. Cured briquet^{tes} shall be dried at 230°, plus or minus 5°F, sawed in half and bonded together with a thin section of sealant. After cure of sealant, briquet^{tes} shall be tested in accordance with AASHTO T132.