

Specification Update 2022 (Materials)



Wayne Rilko Bituminous Engineer Flexible Pavement Committee Meeting

February 16, 2022



January 2022 Section 300

Tack Coat Application Rates

Tack Coat Application Rates			
Asphalt Mixture Type	Underlying Pavement Surface	Target Tack Rate (gal/yd ²) ¹	
Base Course,	Newly Constructed Asphalt Layers	0.06	
Structural Course,	Milled Asphalt Pavement Surface,		
Dense-Graded Friction Course,	Oxidized and Cracked Asphalt Pavement,	0.09	
Open-Graded Friction Course	Concrete Pavement		
Note 1: Target tack application rates greater than those s	specified may be used upon approval of the Engineer.	1	



Major Specification Changes January 2022 Section 300

Prime Coat, Tack Coat, and Equipment

A trailer-mounted pressure distributor can be used for nonmainline applications, if approved by the Engineer.

A copy of the Bill of Lading representing the prime coat or tack coat material in the distributor tank must be in the truck or available at all times.

What is actually in the tank?

Shipment and production data.



January 2022 Section 334

Mix Designs for only three traffic levels.

No TL-A or TL-D.

Gyratory Compaction Requirements		
Traffic Level	N _{design} Number of Gyrations	
A	50	
В	65	
С	75	
Ð	100-	
E	100	



January 2022 Section 916 Tack Sampling

- Sample tack from the distributor, once per project per product. Tested by the Department.
- Failing test results:
 - $\,\circ\,$ Not to be used on Department projects.
 - May require three 6" diameter roadway cores from the day of production.
 - $\,\circ\,$ Tested for bond strength.
 - \circ Individual bond strength results less than 80 psi will require removal and replacement.
 - May result in bond strength testing in additional areas with failing tack material.



July 2022 (approved) Section 300

Curing and Time of Application: <u>When using a distributor,</u> apply tack coat sufficiently in advance of placing the mix to permit drying but not so far in advance that it might lose its adhesiveness as a result of being covered with dust or other foreign material. <u>When using a spray paver, the</u> <u>requirements above do not apply.</u>



July 2022 (approved) Section 330

<u>Maximum temperature of 355°F for any load of mixture</u> <u>containing PG 76-22 PMA or High Polymer binder, regardless</u>

of the target mixing or compaction temperatures.



July 2022 (approved) Section 334

Defective Material

Any additional PC samples obtained in the same work shift after an IV sample has been obtained shall include enough material for three complete sets of tests (PC, IV and IV check samples) in the event the Contractor requests using the PC test results for engineering analysis or delineation. These additional PC samples must compare with verified IV test results as determined by the comparison process of 334-5.7.1 in order to be used for engineering analysis or delineation.



July 2022 (approved) Section 337

Fiber and Hydrated Lime Supply Systems: Provide flow indicators or sensing devices, interlocked with plant controls so that the mixture production will be interrupted an alarm will be activated if fiber or lime introduction fails. <u>Stop</u> production of the asphalt mixture. Resume production once the supply system is operating correctly.



July 2022 (approved) Section 337

Up to a 1.05 Pay Factor for small quantities of open-graded friction course (FC-5).

See next slide.



Small Quantity Pay Table for FC-5		
Pay Factor	1-Test Deviation	2-Test Average Deviation
Asphalt Binder Content (%)		
1.05	0.00-0.25	0.00-0.18
1.00	0.26-0.50	0.19-0.35
0.90	0.51-0.60	0.36-0.42
0.80	>0.60	>0.42
3/8 inch Sieve (%)		
1.05	0.00-3.25	0.00-2.30
1.00	3.26-6.50	2.31-4.60
0.90	6.51-7.50	4.61-5.30
0.80	>7.50	>5.30
No. 4 Sieve (%)		
1.05	0.00-2.50	0.00-1.77
1.00	2.51-5.00	1.78-3.54
0.90	5.01-6.00	3.55-4.24
0.80	>6.00	>4.24
No. 8 Sieve (%)		
1.05	0.00-1.50	0.00-1.06
1.00	1.51-3.00	1.07-2.12
0.90	3.01-3.50	2.13-2.47
0.80	>3.50	>2.47



July 2023 (for discussion)

334-5.1.2 Acceptance Testing Exceptions: Density testing for acceptance will not be performed on widening strips or shoulders with a width of 5 feet or less.



July 2023 (suggest 35 days)

320-3.2.4 Monthly Electronic Weigh System Comparison Checks: Check the accuracy of the electronic weighing system at the commencement of production and thereafter at least every 30 days.

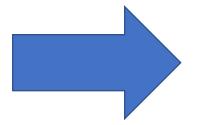
320-3.2 Electronic Weigh Systems: Equip the asphalt plant with an electronic weigh system..., and meets monthly comparison checks with certified truck scales.



Major Change

Specifications Annual Publication Transition

Semiannual (January and July)







Major Change

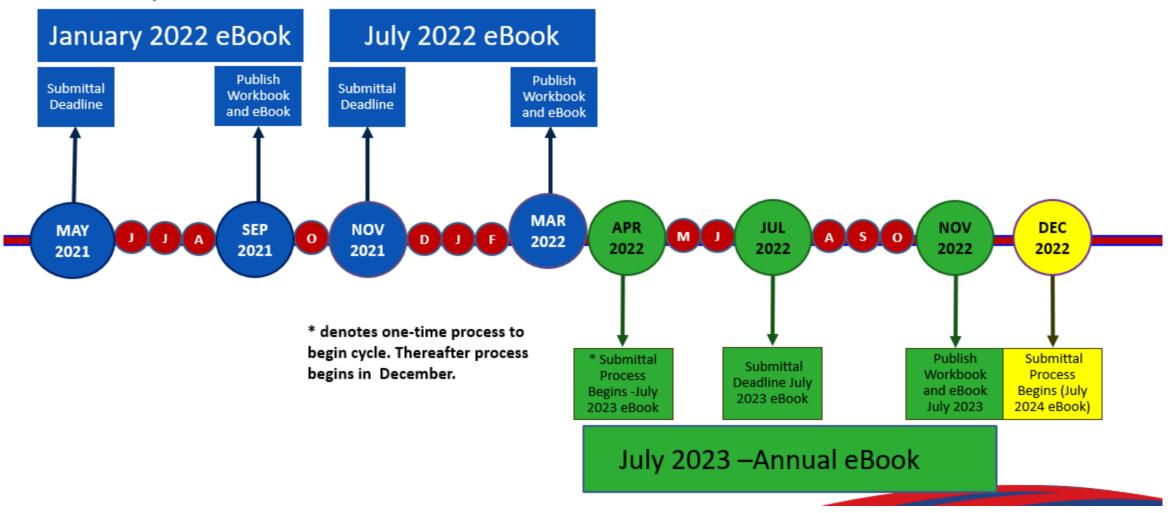
Specifications Annual Publication Transition

Florida is the only state to publish specifications semiannually

Frequency of Publishing a New Spec Book (In theory if not reality)	Every 6 months – 1 Annually – 7 2 years – 1 3-5 years – 18 6-8 years – 5 9-11 years – 3 More than 11 years – 2 Varies Substantially/Not Specified – 9
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Semiannual to Annual





Major Change

Revisions

•Mandatory Revisions (i.e., Statute change, safety issue, cost savings, etc.) will keep the same process and will be implemented as necessary.

•Critical changes that are approved by FHWA mid-cycle and are not considered Mandatory Revisions but are deemed essential can be implemented on projects sooner.