



Florida Department of
TRANSPORTATION

Asphalt Conference

Specification Changes

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September 13, 2016

January 2015 Specification Book

- Section 916 – Bituminous Materials
 - Only trackless tacks allowed.
 - Based on field demonstration project and bond strength testing.
 - Department will be monitoring tracking nature and will remove products from the QPL that track "excessively".

July 2015 Specification Book

- Mostly editorial changes.
- Section 916 – Bituminous Materials
 - MSCR added to neat binder requirements
- Section 919 – Pelletized ground tire rubber allowed.

January 2016 Specification Book

- Section 300 – Prime and Tack Coats
 - All tack rates have been increased by 0.01 gal/sy.

Table 300-2
Tack Coat Application Rates

Asphalt Mixture Type	Underlying Pavement Surface	Target Tack Rate (gal/yd ²)	National Avg. (from NCHRP 712)
Base Course, Structural Course, Dense Graded Friction Course	Newly Constructed Asphalt Layers	0.04	0.05-0.07
	Milled Surface or Oxidized and Cracked Pavement	0.07	0.10-0.13
	Concrete Pavement	0.09	0.07-0.10
Open Graded Friction Course	Newly Constructed Asphalt Layers	0.06	n/a
	Milled Surface	0.08	n/a

January 2016 Specification Book

- Section 330 – Hot Mix Asphalt -
General Construction Requirements
 - Segregation density criteria changed to 89.5% Gmm.
(Due to change in test method - vacuum drying).

January 2016 Specification Book

- Section 334 – Superpave Asphalt Concrete
 - Mandatory use of vacuum drying (FM 1-T 166) for roadway cores.
 - Change in Density MPR.

Characteristic	Tolerance
Asphalt Binder Content (%) ⁽¹⁾	Target ±0.55
Passing No. 200 Sieve (%) ⁽¹⁾	Target ±1.50
Air Voids (%) ⁽¹⁾	2.30 – 6.00
Density (minimum % G_{mm}) ⁽²⁾	89.50

⁽¹⁾ Tolerances for sample size of n = 1 from the verified mix design
⁽²⁾ Based on an average of 5 randomly located cores

January 2016 Specification Book

- Section 334 – Superpave Asphalt Concrete

Table 334-6 Between-Laboratory Precision Values	
Property	Maximum Difference
G_{mm}	0.016
G_{mb} (gyratory compacted samples)	0.022
G_{mb} (roadway cores)	0.014
P_b	0.44%
P_{-200}	FM 1-T 030 (Figure 2)
P_{-8}	FM 1-T 030 (Figure 2)

January 2016 Specification Book

- Section 334 – Superpave Asphalt Concrete

Table 334-8
Specification Limits

Quality Characteristic	Specification Limits
Passing No. 200 sieve (percent)	Target \pm 1.0
Asphalt Content (percent)	Target \pm 0.40
Air Voids (percent)	4.00 \pm 1.20
Density, vibratory mode (percent of G_{mm}):	93.00 + 2.00, - 1.20 ⁽¹⁾
Density, static mode ⁽¹⁾ (percent of G_{mm})	92.00 + 3.00, - 1.50 ⁽¹⁾

(1): No vibratory mode in the vertical direction will be allowed. Other vibratory modes will be allowed, if approved by the Engineer.

January 2016 Specification Book

- Section 336 – Asphalt Rubber Binder
 - Deleted

- Section 341 – Asphalt Rubber Membrane Interlayer
 - ARB-20 replaced with PG 76-22 (ARB)

January 2016 Specification Book

- Materials Manual Section 3.4 – Emulsions
 - 100 psi bond strength requirement for tack approval. Previous requirement was 50 psi.

July 2016 Specification Book

- Section 320 – Hot Mix Asphalt - Plant Methods and Equipment.
 - Do not produce the mix by altering the component blend percentage of the RAP or sand by more than plus or minus 5.0% from the job mix formula on the approved mix design. Does not apply to crushed virgin aggregate components during production.

July 2016 Specification Book

- Section 334 – Superpave Asphalt Concrete.
 - The same traffic level and binder type that is used for the mainline traffic lanes may be placed in the shoulder at no additional cost to the Department.
 - Gore areas added to list of areas not requiring density testing.

July 2016 Specification Book

- Section 916 – Bituminous Materials.
 - Binder suppliers required to list the following ingredients if used: Polymer type, Ground Tire Rubber with APL number, Sulfur, PPA, REOB, and any Rejuvenating Agents.

January 2017 Specification Book

- Section 334 – Superpave Asphalt Concrete.
 - Mix design traffic levels have been consolidated to three levels; A's and B's are the same and D's and E's are the same.
 - Substitutions one level higher still allowed, if the contractor desires.

January 2017 Specification Book

- Section 916 – Bituminous Materials.
 - PG 76-22 (PMA) and PG 76-22 (ARB) are considered equivalents and will be the contractor's choice.
 - For projects let prior to January 2017, contractor can switch if desired. Provide \$4.50/ton credit to the Department.
 - The use of waste oil (not REOBs) is prohibited in the modification of any PG binder grade.

July 2017 Specification Book

- PG 76-22 (HP) will replace PG 82-22 (PMA).



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**Balmoral survey;
Your cooperation is appreciated.**



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Thank You !