

# Origination Form

## Specifications

<b>Name:</b>	Richard Hewitt	<b>Specification Number:</b>	4.3 & 4.4
<b>Email:</b>	richard.hewitt@dot.state.fl.us	<b>Associated Specs:</b>	None.
<b>Date:</b>	2024-05-08T18:08:42Z	<b>Verified:</b>	VERIFIED

### Summary:

Changing method by which density target is established. Spec change sets Density Target by using 85% of the Gmm (Maximum Specific Gravity) of the RAP Material.

### Justification:

Current method of establishing density target based on 95% of Modified Proctor Test results in relative density in the 70% range. Establishing density target based on 85% of RAP Gmm (RAP Maximum Specific Gravity) ensure a higher density target is established and does so without need to run Modified Proctor Tests.

### Do the changes affect other types of specifications?

Neither

### List Specifications Affected:

Other Affected Documents/Offices	Contacted	Yes/No
Other Standard Plans		No
Florida Design Manual		No
Structures Manual		No
Basis of Estimates Manual		No
Approved Product List		No
Construction Office		No
Maintenance Office		No

Materials Manual		No
Traffic Engineering Manual		No

**Are changes in line with promoting and making progress on improving safety, enhancing mobility, inspiring innovation, and fostering talent; explain how?**

Helps improve quality by establishing a more appropriate density target.

**What financial impact does the change have; project costs, pay item structure, or consultant fees?**

No impact anticipated.

**What impact does the change have on production or construction schedules?**

No change anticipated.

**How does this change improve efficiency or quality?**

Improves quality by ensuring adequate density of RAP Base is achieved. Current use of 95% of Modified Proctor Test results in relative density in 70% range and this is likely reason why RAP Base has had mixed history of success with some projects rutting and creeping when loaded with traffic.

**Which FDOT offices does the change impact?**

Construction and Materials

**What is the impact to districts with this change?**

Should simplify operations at would eliminate need to perform Modified Proctor Testing to determine density target for field use. Rather contractor can use existing RAP Gmm test data to determine field density target.

**Does the change shift risk and to who?**

No shift in risk.

**Provide summary and resolution of any outstanding comments from the districts or industry.**

Comments and Responses are available on the Track the Status of Revisions hyperlink located on the Specifications landing page: <https://www.fdot.gov/programmanagement/Specs.shtm>

**What is the communication plan?**

Through the established specification revision process (e.g., Internal and Industry Review)

**What is the schedule for implementation?**

The Standard Specifications eBook and Workbook are effective July 1st every year.

**RECLAIMED ASPHALT PAVEMENT BASE.**  
**(REV 5-8-24)**

ARTICLE 283-4 is deleted and the following substituted:

**283-4 Compacting and Finishing Base.**

**283-4.1 General:** Meet the requirements of 200-6.1:

**283-4.1.1 Single-Course Base:** Construct as specified in 200-6.1.1.

**283-4.1.2 Multiple-Course Base:** Construct as specified in 200-6.1.2.

**283-4.2 Moisture Content:** Meet the requirements of 200-6.2.

**283-4.3 Density Requirements:** Compact the material to a density of not less than ~~95% of maximum density~~ 85% of the RAP  $G_{mm}$  as determined by FM 1-T180209. Multiply the 85% of the RAP  $G_{mm}$  value by unit weight of water (62.4 lb/ft<sup>3</sup>) to obtain dry density target in units of lb/ft<sup>3</sup> for project construction acceptance. Where the width of the base construction is not sufficient to permit use of standard base compaction equipment, perform compaction using vibratory compactors, trench rollers, or other special equipment which will provide the density requirements specified herein.

**283-4.4 Density Tests:** Meet the requirements of 200-7 with the exception of 200-7.2.1. Within the entire limits of the width and depth of the base, obtain a minimum density in any LOT of ~~95% of the maximum density~~ 85% of  $G_{mm}$  of RAP times 62.4 lbs/ft<sup>3</sup>. RAP  $G_{mm}$  is as determined by FM 1-T180209.

**283-4.5 Thickness Requirements:** Meets the thickness requirements of 285-6.