

Origination Form

Specifications

Submittal Information			
Name:	Mateo Carvajal	Standard Specification Section:	1050404MM9.2V2
Email:	mateo.carvajal@dot.state.fl.us	Special Provision:	
Date:	2026-06-15T14:56:58Z	Associated Specs:	This is submitted for Materials Manual Section 9.2 Volume 2 that goes with Spec 346 changes.

Summary:

The maximum 28-day compressive-strength requirement has been replaced with limits on paste volume. Drying shrinkage testing is required when these paste volume limits are exceeded. These updates are proposed for pavement and bridge mixtures and are used as material acceptance criteria during mix-design approval. They apply only to newly submitted mixes.

Justification:

The current maximum compressive-strength requirement is an indirect and imprecise way to limit excessive cementitious content and control shrinkage cracking, that has impacted construction schedules in a negative manner.

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?

This revision inspires innovation by replacing prescriptive limits that stifle it with performance-based criteria, allowing producers to adapt to rapidly evolving cementitious materials; paste volume and shrinkage are the first step toward performance-engineered mixtures (PEM).

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

Shrinkage equipment between \$2000 - \$4000

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

N/A

How does this change improve efficiency or quality?

Quality improves because the revision controls the variable that actually governs shrinkage (paste volume) instead of using compressive strength as an indirect, imprecise proxy that becomes less predictable as SCM use rises.

Which FDOT offices does the change impact?

SMO and Districts

What is the impact to districts with this change?

Mix design acceptance of pavement and bridge decks mixes

Does the change shift risk and to who?

N/A

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/specifications/default.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.

CONTRACTOR QUALITY CONTROL GENERAL REQUIREMENTS (REV 5-11-26)

SUBARTICLE 105-4.4 is deleted and the following substituted:

105-4.4 Compliance with the Materials Manual:

The Department's Materials Manuals can be viewed at the following URL:

<https://www.fdot.gov/specifications/material-manual>.

Revisions to the Materials Manuals can be found at the following temporary URL:

<https://www.fdot.gov/specifications/history-of-revisions/mm-revisions>.

Producers of Polymer Slurry shall meet the requirements of Section 2.4, Volume II of the Department's Materials Manual.

Producers of Asphalt Emulsion shall meet the requirements of Section 3.4 Volume II of the Department's Materials Manual.

Producers of Asphalt Binder shall meet the requirements of Section 3.5, Volume II of the Department's Materials Manual.

Producers of Flexible Pipe shall meet the requirements of Section 6.1, Volume II of the Department's Materials Manual.

Producers of Precast Concrete Pipe shall meet the requirements of Section 6.2, Volume II of the Department's Materials Manual.

Producers of Precast Concrete Drainage Structures shall meet the requirements of Section 6.3, Volume II of the Department's Materials Manual.

Producers of Precast Prestressed Concrete Products shall meet the requirements of Sections 8.1 and 8.3, Volume II of the Department's Materials Manual.

Producers of Incidental Precast/Prestressed Concrete Products shall meet the requirements of Section 8.2, Volume II of the Department's Materials Manual.

Producers of Precast Prestressed Concrete Products using Self Consolidating Concrete shall meet the requirements of Section 8.4, Volume II of the Department's Materials Manual.

Producers of Precast/Prestressed Concrete Products using Flowing Concrete shall meet the requirements of Section 8.6, Volume II of the Department's Materials Manual.

Producers of Portland Cement Concrete shall meet the requirements of Section 9.2, Volume II of the Department's Materials Manual.

Producers of Paving Concrete produced by Central Mix Plants shall meet the requirements of Section 9.3, Volume II of the Department's Materials Manual.

Specialty Engineers preparing, submitting, and implementing Mass Concrete Control Plans shall meet the requirements of Section 9.4, Volume II of the Department's Materials Manual.

Producers of Structural Steel and Miscellaneous Metal Components shall meet the requirements of Sections 11.1, 11.2, 11.3, 11.4, 11.5 and 11.6, Volume II of the Department's Materials Manual.

Producers of Fiber Reinforced Polymer Composites shall meet the requirements of Section 12.1, Volume II of the Department's Materials Manual.