



Florida Department of Transportation

CHARLIE CRIST
GOVERNOR

605 Suwannee Street
Tallahassee, FL 32399-0450

STEPHANIE KOPELOUSOS
SECRETARY

June 22, 2009

Monica Gourdine
Program Operations Engineer
Federal Highway Administration
545 John Knox Road, Suite 200
Tallahassee, Florida 32303

Re: Office of Design, Specifications
Section 709
Proposed Specification: 7090201 Traffic Stripes and Markings – Two Reactive
Components

Dear Ms. Gourdine:

We are submitting, for your approval, two copies of the above referenced Supplemental Specification.

These changes were proposed by Chester Henson of the State Roadway Design Office remove references to FM 5-579 as it has been moved into FM 5-541 and to clarify the retroreflectivity requirements during the observation period.

Please review and transmit your comments, if any, within four weeks. Comments should be sent via Email to ST986RP or rudy.powell@dot.state.fl.us.

If you have any questions relating to this specification change, please call Rudy Powell, State Specifications Engineer at 414-4110.

Sincerely,

Rudy Powell, Jr., P.E.
State Specifications Engineer

RP/dt

Attachment

cc: Gregory Jones, Chief Civil Litigation
Florida Transportation Builders' Assoc.
State Construction Engineer

**TRAFFIC STRIPES AND MARKINGS – TWO REACTIVE COMPONENTS.
(REV 5-1-09)**

SUBARTICLE 709-2.1 (page 793) is deleted and the following substituted:

709-2.1 Two Reactive Components: Use only Two Reactive Component materials listed on the Qualified Products List (QPL), and meet the requirements of 971-1 and 971-98. The Engineer will take random samples of the materials in accordance with the Department's Sampling, Testing and Reporting Guide schedule.

SUBARTICLE 709-4.1 (pages 793 - 794) is deleted and the following substituted:

709-4.1 General: Remove existing pavement markings, such that scars or traces of removed markings will not conflict with new stripes and markings by a method approved by the Engineer.

Before applying traffic stripes and markings, remove any material by a method approved by the Engineer that would adversely affect the bond of the traffic stripes.

Offset longitudinal lines at least 2 inches from construction joints of portland cement concrete pavement.

Apply traffic stripes or markings only to dry surfaces, and when the ambient air and surface temperature is at least 40°F and rising. Do not apply pavement markings when winds are sufficient to cause spray dust.

Apply striping to the same tolerances in dimensions and in alignment specified in 710-5. When applying traffic stripes and marking over existing markings, ensure that not more than 2 inches on either end and not more than 1 inch on either side of the existing line is visible.

Apply the Two Reactive Component product to the pavement in accordance with the manufacturer's instructions or as directed by the Engineer.

Conduct field tests in accordance with FM 5-541 ~~and 5-579~~. Remove and replace traffic stripes and markings not meeting the requirements of this Section at no additional cost to the Department.

Apply all final pavement markings prior to opening the road to traffic.

SUBARTICLE 709-4.3 (page 794) is deleted and the following substituted:

709-4.3 Retroreflectivity: Apply white and yellow traffic stripes and markings that will attain an initial retroreflectivity of not less than 450 mcd/lx·m² and not less than 350 mcd/lx·m², respectively for all longitudinal and transverse lines.

Measure, record and certify on Department approved form and submit to the Engineer, the retroreflectivity of white and yellow pavement markings in accordance with Florida Method FM-5-~~579~~541.

The Department reserves the right to test the markings within 3 days of receipt of the Contractor's certification. Failure to afford the Department opportunity to

test the markings will result in non-payment. The test readings should be representative of the Contractor's striping performance. If the retroreflectivity values measure below values shown above, the striping will be removed and reapplied at the Contractor's expense.

ARTICLE 709-7 (page 795) is deleted and the following substituted:

709-7 Observation Period.

Pavement markings are subject to a 180 day observation period under normal traffic. The observation period shall begin with the satisfactory completion and acceptance of the work. The pavement markings shall show no signs of failure due to blistering, excessive cracking, chipping, discoloration, poor adhesion to the pavement, loss of reflectivity or vehicular damage. *The retroreflectivity shall meet the initial requirements of 709-4.3.* The Department reserves the right to check the color and retroreflectivity any time prior to the end of the observation period.

Replace, at no additional expense to the Department, any pavement markings that do not perform satisfactorily under traffic during the 180 day observation period.

**TRAFFIC STRIPES AND MARKINGS – TWO REACTIVE COMPONENTS.
(REV 5-1-09)**

SUBARTICLE 709-2.1 (page 793) is deleted and the following substituted:

709-2.1 Two Reactive Components: Use only Two Reactive Component materials listed on the Qualified Products List (QPL), and meet the requirements of 971-1 and 971-8. The Engineer will take random samples of the materials in accordance with the Department's Sampling, Testing and Reporting Guide schedule.

SUBARTICLE 709-4.1 (pages 793 - 794) is deleted and the following substituted:

709-4.1 General: Remove existing pavement markings, such that scars or traces of removed markings will not conflict with new stripes and markings by a method approved by the Engineer.

Before applying traffic stripes and markings, remove any material by a method approved by the Engineer that would adversely affect the bond of the traffic stripes.

Offset longitudinal lines at least 2 inches from construction joints of portland cement concrete pavement.

Apply traffic stripes or markings only to dry surfaces, and when the ambient air and surface temperature is at least 40°F and rising. Do not apply pavement markings when winds are sufficient to cause spray dust.

Apply striping to the same tolerances in dimensions and in alignment specified in 710-5. When applying traffic stripes and marking over existing markings, ensure that not more than 2 inches on either end and not more than 1 inch on either side of the existing line is visible.

Apply the Two Reactive Component product to the pavement in accordance with the manufacturer's instructions or as directed by the Engineer.

Conduct field tests in accordance with FM 5-541. Remove and replace traffic stripes and markings not meeting the requirements of this Section at no additional cost to the Department.

Apply all final pavement markings prior to opening the road to traffic.

SUBARTICLE 709-4.3 (page 794) is deleted and the following substituted:

709-4.3 Retroreflectivity: Apply white and yellow traffic stripes and markings that will attain an initial retroreflectivity of not less than $450 \text{ mcd/lx}\cdot\text{m}^2$ and not less than $350 \text{ mcd/lx}\cdot\text{m}^2$, respectively for all longitudinal and transverse lines.

Measure, record and certify on Department approved form and submit to the Engineer, the retroreflectivity of white and yellow pavement markings in accordance with Florida Method FM-5-541.

The Department reserves the right to test the markings within 3 days of receipt of the Contractor's certification. Failure to afford the Department opportunity to

test the markings will result in non-payment. The test readings should be representative of the Contractor's striping performance. If the retroreflectivity values measure below values shown above, the striping will be removed and reapplied at the Contractor's expense.

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Replace, at no additional expense to the Department, any pavement markings that do not perform satisfactorily under traffic during the 180 day observation period.