

## ORIGINATION FORM

### THE INFORMATION BELOW IS TO BE PROVIDED BY THE ORIGINATOR

(The person who receives or originates the issue and needs to forward the issue for action.)

Modify Specification 709.  
Section/File number

New Section \_\_\_\_\_.  
Section number

**Subject:** Traffic Stripes and Markings  
Two Reactive Components

**Origination date:** November 2, 2010

**Originator:** Chester Henson  
**Office/Phone:** Roadway Design / (850) 414-4117  
**Email address/** chester.henson@dot.state.fl.us  
**Userid:** rd960ch

**Problem statement:** The current specification does not require field certification of the thickness of the pavement marking. It was found that too many projects were being accepted where the pavement marking thickness did not meet the specification requirements.

**Information source:** The requirements were coordinated with specifications and construction.

**Background data:** By requiring the certification, more emphasis is placed on inspection of the thickness in the field.

**Recommended  
Usage Note:**

**Estimated fiscal  
impact, if  
implemented:** No financial impact.

**Desired  
implementation  
date:** Beginning with the July 2011 letting.



## *Florida Department of Transportation*

CHARLIE CRIST  
GOVERNOR

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STEPHANIE KOPELOUSOS  
SECRETARY

### MEMORANDUM

**DATE:** November 16, 2010

**TO:** Specification Review Distribution List

**FROM:** Rudy Powell, Jr., P.E., State Specifications Engineer

**SUBJECT:** Proposed Specification: 7090400 Traffic Stripes and Markings – Two Reactive Components.

In accordance with Specification Development Procedures, we are sending you a copy of a proposed specification change.

This change was proposed by Chester Henson of the State Roadway Design Office to require the certification of proper thickness of pavement marking prior to acceptance.

Please share this proposal with others within your responsibility. Review comments are due within four weeks and should be sent to Mail Station 75 or to my attention via email at SP965RP or rudy.powell@dot.state.fl.us. Comments received after **December 14, 2010** may not be considered. Your input is encouraged.

RP/cah  
Attachment

**TRAFFIC STRIPES AND MARKINGS – TWO REACTIVE COMPONENTS.  
(REV 11-4-10)**

ARTICLE 709-4 (of the Supplemental Specification) is deleted and the following substituted:

**709-4 Application.**

**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. *Take test readings representative of the striping performance.* 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.

**709-4.2 Thickness:** Apply traffic stripes and markings to attain a minimum wet film thickness in accordance with the manufacturer's recommendations as identified on the QPL system.

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

**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·m<sup>2</sup> and not less than 350 mcd/lx·m<sup>2</sup>, respectively for all longitudinal and transverse lines.

Measure, record and certify on the 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.~~

**709-4.4 Color:** Use materials that meet the requirements of 971-1.

**709-4.5 Reflective elements:** Apply reflective elements to all white and yellow traffic stripes or markings, at the rates determined by the manufacturer's recommendations as identified on the QPL system.

ARTICLE 709-9 thru 709-10 (of the Supplemental Specification) is deleted and the following substituted:

**709-9 Submittals.**

*701-9.1 Submittal Instructions: Prepare a certification of quantities, using the Department's current approved form, for each project in the Contract. Submit the certification of quantities and daily worksheets to the Engineer. The Department will not pay for any disputed items until the Engineer approves the certification of quantities.*

*701-9.2 Contractor's Certification of Quantities: Request payment by submitting a certification of quantities no later than Twelve O clock noon Monday after the estimate cut-off date or as directed by the Engineer, based on the amount of work done or completed. Ensure the certification of quantities consists of the following:*

*(a) Contract Number, FPID Number, Certification Number, Certification Date and the period that the certification represents.*

*(b) The basis for arriving at the amount of the progress certification, less payments previously made and less any amount previously retained or withheld. The basis will include a detailed breakdown provided on the certification of items of payment.*

**709-9.10 Method of Measurement.**

The quantities to be paid for under this Section will be as follows:

(a) The length, in net miles, of 6 inch Solid Traffic Stripe, authorized and acceptably applied.

(b) The total traversed distance in gross miles of 10-30- or 3-9- skip line. The actual applied line is 25% of the traverse, distance for 1:3 ratio. This equates to 1,320 feet of marking per mile of single line.

(c) The net length, in feet, of all other types of lines and stripes, authorized and acceptably applied.

(d) The area, in square feet, of Remove Existing Pavement Markings, acceptably removed.

**709-10.1 Basis of Payment.**

Prices and payments will be full compensation for all work specified in this Section, including, all cleaning and preparing of surfaces, furnishing of all materials, application, curing and protection of all items, protection of traffic, furnishing of all tools, machines and equipment, and all incidentals necessary to complete the work. Final payment will be withheld until all deficiencies are corrected.

Payment will be made under:

Item No. 709	Two Reactive Components
	Traffic Stripes, Solid – per net mile.
	Traffic Stripes, Solid – per foot.
	Traffic Stripes, Skip – per gross mile.
	Traffic Stripe – Two Reactive Components, Remove – per square foot.

