

**THERMOPLASTIC PAVEMENT MARKINGS – FOR MAINTENANCE WITH REMOVAL AND HOT SPRAY**  
**(REV 3-29-22) (7-22)**

ARTICLE 711-1 is deleted and the following substituted:

**711-1 Description.**

Remove existing pavement markings and apply new thermoplastic pavement markings, apply refurbishment on existing thermoplastic pavement markings, or apply hot spray thermoplastic on existing longitudinal pavement markings in accordance with the Contract Documents.

When the thickness of the existing markings and the minimum thickness of either refurbishment or hot spray will exceed the maximum pavement marking thickness, completely remove existing pavement markings and replace with hot-applied standard thermoplastic markings in accordance with Section 711.

SUBARTICLE 711-2 is deleted and the following substituted:

**711-2 Materials.**

Use only materials listed on the Department’s Approved Product List (APL) meeting the following requirements.

Hot-Applied Standard and Refurbishment Thermoplastic ....	
.....	971-1 and 971-5
Preformed Thermoplastic.....	971-1 and 971-6
Hot-Applied High Friction Thermoplastic	971-1 and 971-10
Hot Spray Thermoplastic .....	971-11
Glass Spheres .....	971-1 and 971-2

The Engineer will take random samples of all material in accordance with the Department’s Sampling, Testing and Reporting Guide schedule.

SUBARTICLE 711-4.1 is expanded by the following new Subarticle:

**711-4.1.3 Hot Spray Thermoplastic:** Apply hot spray thermoplastic pavement markings as an overlay to completely cover the full width of the existing thermoplastic pavement markings. Perform work as directed in the Work Documents, in accordance with the manufacturer’s recommendations.

SUBARTICLE 711-4.2 is expanded by the following new Subarticle:

**711-4.2.5 Hot Spray Thickness:** Apply a minimum of 0.04 inch or 40 mils of thermoplastic hot spray material.

Measure to verify thickness of thermoplastic hot spray pavement markings applied to ensure minimum thickness of application met. Use duct tape or aluminum panels to

acquire samples of the Pavement Marking Materials (PMM). Measure the thickness of the PMM with a micrometer or alternate dry film thickness measuring device. Take a minimum of three (3) measurements each day that hot spray work is performed, with at least one measurement taken at the beginning of the application to verify the application meets specification requirements. Provide documentation of measurements to the Engineer upon request.

SUBARTICLE 711-4.3 is expanded by the following new Subarticle:

**711-4.3.5 Hot-Spray Retroreflectivity:**

Apply white and yellow hot spray thermoplastic material pavement markings to attain an initial retroreflectivity of not less than 300 mcd/lx·m<sup>2</sup> and not less than 250 mcd/lx·m<sup>2</sup>, respectively for all longitudinal 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 FM 5-541.

SUBARTICLE 711-4.4 is expanded by the following new Subarticle:

**711-4.4.4 Hot-Spray Glass Spheres:** For hot spray thermoplastic markings, apply glass spheres at the rates provided in the manufacturer's installation instructions as required by the APL.

SUBARTICLE 711-9.2 is deleted and the following substituted:

**711-9.2 Removal of Existing Thermoplastic Markings:** The quantity for removal of existing thermoplastic pavement markings to be paid will be the area, in square feet, acceptably removed. Payment for removal of thermoplastic pavement markings will be made for locations where the existing pavement surface is to remain, and existing thermoplastic pavement markings are removed and replaced in accordance with the Work Documents.