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APPROVED:
Division Administrator

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By: _____
FEDERAL HIGHWAY ADMINISTRATION

SECTION 627 THERMOPLASTIC PAVEMENT MARKINGS

General

Delete section 627.4.4 entirely and replace with the following:

627.4.4 Application of the Thermoplastic Pavement Marking Material

1. Except when directed or approved by the RCE, place all longitudinal markings with a truck-mounted applicator in conformance with the requirements of Subsection 627.3. Such an exception may occur where the length of a particular marking is too short or the curvature too great to permit efficient use of the truck-mounted liner. Transverse markings may be applied with a portable unit.
2. Ensure that the markings are straight or uniform in curvature and conform uniformly to tangents, curves, and transitions. Make certain that symbols are of the dimensions shown in the *SCDOT Standard Drawings*. Ensure that markings are of the dimensions and are placed as shown on the *Pavement Marking Plans* or as directed by the RCE. Provide sufficient control points to serve as guides for the application of markings at no additional expense to the Department.
3. Ensure that the finished line pavement markings are free from waviness and lateral deviation does not exceed 2 inches in 15 feet. Any greater deviation is sufficient cause for removal and correction of such markings at no additional expense to the Department. Remove and correct symbol pavement markings not meeting the dimensional requirements shown in the *SCDOT Standard Drawings*. Protect the pavement markings until dry by placing guarding or warning devices as necessary. If a vehicle crosses the wet marking, remove the pavement marking and any tracking lines made by the moving vehicle and apply new markings at no additional expense to the Department.
4. Place pavement markings only when the pavement is dry as determined by visual inspection or other approved method and the pavement temperature is 50ºF or greater. No work is allowed when any moisture is visible on the pavement surface or pavement is wet. Provide each work crew with a hand-held infrared non-contact thermometer with a temperature range of 0ºF to 1000ºF to verify the minimum surface temperature. Measure pavement temperature away from heat generating equipment.
5. In Districts 2, 3, and 4, do not apply thermoplastic pavement markings between December 15 and March 15 unless approved by the RCE. Additionally, the RCE may disallow application on any day when the weather is cold and/or rainy and there is some question as to whether the surface temperature will be above 50ºF for a period adequate to obtain quality pavement markings. Application may also be disallowed on any day when, in the opinion of the RCE, moisture conditions are not satisfactory for obtaining quality pavement markings.
6. Ensure that new asphalt concrete surfaces are in place a minimum of 7 days before application of thermoplastic pavement markings. Remove the curing compound on new Portland cement concrete surfaces before application of pavement markings.
7. Have on hand an adequate number of personnel experienced in the handling and application of this type of material to ensure that the work is done properly. Run the marking machine only in the direction of normal traffic flow during marking operations.
8. Perform work only during daylight hours unless specified otherwise. Ensure that all markings are sufficiently dry before sunset to permit crossing by traffic. Remove all protective devices before sunset to allow free movement of traffic at night.
9. Apply the thermoplastic pavement marking material at a temperature between 390ºF and 420ºF that provides the best adhesion to the pavement as recommended by the manufacturer. Heat the material uniformly throughout, and ensure that it has a uniform disbursement of binder, pigment, and glass beads when applied to the surface of the pavement.

10. Apply extruded lines 12 inches or less in width with a die that equals the width of the line. Extruded lines greater than 12 inches may be applied with two dies whose combined width is equal to the width of the line.