

SECTION 32 17 23 PAVEMENT MARKINGS

PART 1 GENERAL

1.01 REFERENCES

A. The following is a list of standards which may be referenced in this section:

1. American Association of State Highway and Transportation Officials (AASHTO):
 - a. M237, Standard Specification for Epoxy Resin Adhesives for Bonding Traffic Markers to Hardened Portland Cement and Asphalt Concrete.
 - b. M247, Standard Specification for Glass Beads Used in Traffic Paint.
 - c. M248, Standard Specification for Ready-Mixed White and Yellow Traffic Paints.
 - d. M249, Standard Specification for White and Yellow Reflective Thermoplastic Striping Material (Solid Form).
2. ASTM International (ASTM): D4280, Standard Specification Extended Life Type, Nonplowable, Prismatic, Raised, Retroreflective Pavement Markers.
3. Federal Specifications (FS):
 - a. A-A-2886A, Paint, Traffic, Solvent Based.
 - b. TT-B-1325C, Beads (Glass Spheres); Retroreflective.

1.02 SUBMITTALS

A. Action Submittals:

1. Shop Drawings:
 - a. Product Data:
 - 1) Paint.
 - 2) Reflective markers.
 - 3) Epoxies, resins, and primers to be used.

PART 2 PRODUCTS

2.01 PAINT

- A. Physical Characteristics: White color.
- B. Functional Characteristics: Homogeneous, easily stirred to smooth consistency, with no hard settlement or other objectionable characteristics during storage period of 6 months.

- C. Performance Characteristics: Traffic paint in accordance with AASHTO M248, Type S.

PART 3 EXECUTION

3.01 SURFACE PREPARATION

A. Cleaning:

1. Thoroughly clean surfaces to be marked before application of pavement marking material.
2. Remove dust, dirt, and other granular surface deposits by sweeping, blowing with compressed air, rinsing with water or a combination of these methods.
3. Completely remove rubber deposits, surface laitance, existing paint markings, and other coatings adhering to pavement with scrapers, wire brushes, sandblasting, approved chemicals, or mechanical abrasion.
4. Surfaces shall be completely free of dirt and ice, and dry of water at the time of application of materials specified herein.
5. Oil-Soaked Areas: After cleaning, seal with cut shellac to prevent bleeding through the new paint.
6. Reclean surfaces when the Work has been stopped due to rain.

- B. Pretreatment for Early Painting: Where painting is required prior to 30 days after paving rigid pavements, pretreat with an aqueous solution containing 3 percent phosphoric acid and 2 percent zinc chloride.

- C. New Asphalt Pavement: Allow a minimum pavement cure time of 30 days before applying paint.

1. The 30-day wait time may be reduced by Contracting Officer upon request.

3.02 PAINT APPLICATION

A. General:

1. Thoroughly mix pigment and vehicle together prior to application, and keep thoroughly agitated during application.
2. Do not add thinner.
3. Apply only when air and pavement temperatures are above 40 degrees F and less than 95 degrees F. Maintain paint temperature within these same limits.
4. Apply only when surface is dry.
5. Do not apply when conditions are windy to the point of causing overspray or fuzzy line edges.
6. Provide guidelines and templates to control paint application.

7. Take special precautions in marking numbers, letters, and symbols.
8. Sharply outline edges of markings and apply without running or spattering.

B. Rate of Application:

1. Reflective Markings: Apply evenly, 105 square feet plus or minus 5 square feet per gallon.
2. Nonreflective Markings: Apply paint evenly to pavement surface at a rate of 105 square feet plus or minus 5 square feet per gallon.
3. On new pavement or new asphalt surface treatments, apply two coats of paint at a uniform rate of 210 square feet per gallon.

C. Drying:

1. Provide maximum drying time to prevent undue softening of bitumen and pickup, displacement, or discoloration by traffic.
2. If drying is abnormally slow, discontinue painting operations until cause is determined and corrected.

D. Protection:

1. Protect markings from traffic until paint is thoroughly dry.
2. Protect surfaces from disfiguration by paint spatters, splashes, spills, or drips.

E. Cleanup: Remove paint spatters, splashes, spills, or drips from the Work and staging areas including areas outside the immediate Work area where spills occur.

END OF SECTION

