

PAVEMENT MARKING MATERIALS.

(REV 3-8-19) (FY 2023-24)

SUBARTICLE 971-8.1 is deleted and the following substituted:

971-8.1 General: Two reactive component materials intended for use under this Specification shall include, but not be limited to, MMA (methyl methacrylate), epoxies, polyesters and urethanes. The manufacturer shall have the option of formulating the material according to his own specifications. However, the criteria outlined in this Specification and Section 709 shall apply regardless of the type of formulation used. The material shall be free from all skins, dirt and foreign objects. This application is intended for weigh stations usage only.

SUBARTICLE 971-8.2 is deleted and the following substituted:

971-8.2 Composition: The binder portion shall be a blend of acrylic polymers and monomers, prime pigment and filler pigment, with or without intermix glass beads and/or aggregate, depending on application method.

| Component | Test Method | Criteria |
|--|-------------|-----------------------|
| TiO ₂ , Type II Rutile (white material only) | ASTM D476 | minimum 10% by weight |
| Volatile Organic Content, (VOC) | ASTM D3960 | maximum 150 g/L |

SUBARTICLE 971-8.3 is deleted and the following substituted:

971-8.3 Physical Requirements: Test laboratory samples in accordance with ASTM and also meet the following criteria:

| Property | Test Method | Minimum | Maximum |
|----------------------|--------------------------------------|------------------|---------|
| Adhesion to Concrete | ASTM D4541, ASTM D7234 or ACI 503 | Concrete Failure | - |
| Hardness | ASTM D7735, Type D | 55 | - |
| Abrasion Resistance | ASTM D4060 | Pass | - |

971-8.3.1 Set To Bear Traffic Time: The material shall set to bear traffic in not more than thirty minutes.

971-8.3.2 Abrasion Resistance: Test four samples using a Taber Abrader. The material shall be applied to specimen plates using a drawdown blade having a clearance of 15 mils. Clean with a soft brush and weigh each sample. Abrade samples for 1,000 cycles with a combined load of 500 g (arm plus auxiliary weight) on each arm and CS-10 wheels. Clean the samples with a soft brush and weigh again. The average weight loss for the four plates shall not exceed 60 mg per plate.

971-8.3.3 Retroreflectivity: The white and yellow pavement markings shall attain an initial retroreflectance of not less than $300 \text{ mcd/lx}\cdot\text{m}^2$ and not less than $200 \text{ mcd/lx}\cdot\text{m}^2$, respectively. The retroreflectance of the white and yellow pavement markings at the end of the three year period shall not be less than $150 \text{ mcd/lx}\cdot\text{m}^2$.

SUBARTICLE 971-8.5 is deleted and the following substituted:

971-8.5 Packaging and Labeling: The two reactive component material shall be placed in 5 gallon pails or in 50 gallon drums. No more than 4 gallons shall be placed in the 5 gallon pails and no more than 50 gallons shall be placed in any drum to allow for expansion during transport and storage. Clearly mark the containers with the volume of materials in units of gallons and the product name.