

2215 - TRAFFIC LINE PAINT

SECTION 2215

TRAFFIC LINE PAINT

2215.1 DESCRIPTION

This specification covers traffic line paint and glass beads suitable for use as retroreflective pavement markings on portland cement concrete or asphalt pavement.

2215.2 REQUIREMENTS

a. Paint. Use white or yellow paint that is specifically manufactured for use as traffic markings. The paint must comply with volatile organic compound (VOC) requirements, be lead and other toxic heavy metal free, and exhibit the following qualities:

- (1) Dry-Opacity: A contrast ratio of not less than 0.96 when the paint is applied with a 0.012 inch film applicator.
- (2) Daylight Reflectance: Daylight Reflectance of the white paint not less than 80% relative to magnesium oxide.
- (3) Color: Yellow color must meet the following minimum chromaticity coordinates:

| COLOR | 1 | | 2 | | 3 | | 4 | |
|--------|-------|-------|-------|-------|-------|-------|-------|-------|
| | X | Y | X | Y | X | Y | X | Y |
| Yellow | 0.475 | 0.450 | 0.490 | 0.433 | 0.520 | 0.450 | 0.495 | 0.475 |

- (4) Bead Embedment: At least 90% of the glass beads must be embedded between 50 and 70%.

b. Glass Beads for Traffic Line Paint: Provide regular beads that are specifically manufactured to be compatible with the paint being used, and which comply with AASHTO M 247, Type I. Beads are to be coated with a moisture resistant coating and an adhesion promoting coating that is compatible with the paint being used.

c. Verification Sampling and Testing.

- (1) The Engineer will take 2 one-quart samples of each color of paint used on each project. Forward the sample to MRC for verification testing.
- (2) The Engineer will take 2 one-quart samples of glass beads used on each project. Forward the sample to MRC for verification testing.

2215.3 TEST METHODS

a. Paint.

- (1) Dry Opacity. ASTM D 2805.
- (2) Daylight Reflectance. ASTM E 1347.
- (3) Bead Embedment. Apply paint to a Leneta plain white paper chart at a wet film thickness of 0.012 inch followed immediately by an application of glass beads (AASHTO M 247, Type I) dropped onto the surface of the paint. After drying for at least 24 hours observe the amount of bead embedment with a 30-power microscope.

b. Glass Beads. AASHTO M 247, plus

- (1) Moisture Resistance. KTMR-8, "Moisture Resistance of Glass Beads for Traffic Markings."

2215.4 PREQUALIFICATION

None Required.

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2215.5 BASIS OF ACCEPTANCE

Acceptance of traffic line paint and glass beads will be made on the basis of Type D certifications as specified in **DIVISION 2600**, and visual inspection of performance and consistency on the job site.