

**2216 - POLYMER-MODIFIED CEMENTITIOUS PAVEMENT MARKING MATERIAL**

**SECTION 2216**

**POLYMER-MODIFIED CEMENTITIOUS PAVEMENT MARKING MATERIAL**

**2216.1 DESCRIPTION**

This specification covers plural component, polymer-modified cementitious materials suitable for use as retroreflecting pavement markings integrated into portland cement concrete. Glass beads are pre-mixed into the material provided, and also dropped at a specified rate on the surface of the liquid material immediately after it is applied to the pavement. Upon curing, it produces an adherent retroreflective marking of specified thickness and width, capable of resisting deformation by traffic.

**2216.2 REQUIREMENTS**

a. Provide the material in white and yellow. The yellow must meet the following minimum chromaticity coordinates:

TABLE 2216-1: 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

b. Provide material that is a homogeneous blend of polymer-modified cementitious material, pigments, glass beads, and fillers.

**c. Glass Beads for Drop-on Application (double drop system).**

(1) For the first drop, provide large beads that are compatible with the cementitious material, and comply with AASHTO M 247 except with this gradation:

TABLE 2216-2: GLASS BEADS					
Percent Passing - Square Mesh Sieves					
No. 10	No. 12	No. 14	No. 16	No. 18	No. 20
100	95-100	80-95	10-40	0-5	0-2

(2) For the second drop, provide beads that are specifically manufactured to be compatible with the cementitious system, and comply with AASHTO M 247, Type 1.

(3) Coat both types of beads with a moisture resistant coating and an adhesion promoting coating that is compatible with the cementitious system.

d. Provide application equipment as recommended or approved by the marking manufacturer.

e. **Verification testing.** Verification samples are not required for the cementitious material. The Engineer will take 2 one-quart samples of glass beads used on the project. Forward all samples to MRC for testing.

**2216.3 TEST METHODS**

None required.

**2216.4 PREQUALIFICATION**

a. Successful performance on a KDOT test project.

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### 2216.5 BASIS OF ACCEPTANCE

#### a. Cementitious Material

- (1) Material will be accepted on the basis of product name and manufacturer.
- (2) Receipt and approval of a Type C Certification as specified in **DIVISION 2600** for each lot of material used.
- (3) Visual observation of performance on the project.

**b. Glass Beads for Drop-on Application.** Receipt and approval of a Type D Certification as specified in **DIVISION 2600**.