

Evaluation Table:

PEP ID:	
Manufacturer:	
Product Name:	

705 Preformed Pavement Marking – Type III (Temporary, Non-Removable)

ADOT Specifications: Stored Specification 705PVMRK, 3/17/22

Product Property	Specification/ Test Method	Requirement		Results	Pass/ Fail
General	705-1	All markings shall be reflectorized with glass beads or other retroreflective particles uniformly distributed throughout the entire cross section and bonded to the top surface of the material.			
		All marking shall comply with the retroreflectance requirements of Subsection 705-2.05 of the specifications.		See below	
Retroreflectance	705-2.05	Long Line Markings	Retroreflectance (millicandelas/m ² /lux)	Result	
		White	500		
		Yellow	300		
		Arrows, Symbols, Legends, Short Lines	Retroreflectance (millicandelas/m ² /lux)	Result	
		White	350		
		Yellow	200		
General	705-1	When glass beads are used to reflectorize markings, the glass bead properties shall also comply with Subsection 705-2.06 of the specifications.		See below	
Glass Bead Properties: General Requirements	705-2.06 (A)	When glass beads are used to achieve retroreflectivity, the beads shall be manufactured from glass of a composition designed to be highly resistant to traffic wear and to the effects of weathering.			

Product Property	Specification/ Test Method	Requirement		Results	Pass/ Fail
Glass Bead Properties: Roundness	705-2.06 (B)(1) ASTM D1155	The roundness of the glass beads shall be determined in accordance with the requirements of ASTM D1155. A minimum of 75 percent of the beads shall be waterwhite true spheres free from imperfections of all types including air inclusions, film, scratches, clusters, and surface scoring.			
Glass Bead Properties: Refractive Index	705-2.06 (B)(2) ASTM C1648	The glass beads used with the preformed pavement marking material shall have a minimum refractive index of 1.50 when tested by a liquid immersion method (Becke Line Method or equivalent, as specified in ASTM C1648) at a temperature of 25 ± 5° C.			
Glass Bead Properties: Gradation	705-2.06 (B)(3) AASHTO M 247	The gradation of the glass beads shall conform to AASHTO M 247 Type 1 or Type 3.			
Glass Bead Properties: Heavy Metal Concentration	705-2.06 (B)(4) EPA Methods 3052, 6010B	Heavy metal concentration in glass beads shall be as specified in the following table, when tested by an independent laboratory, using EPA Method 3052 and EPA Method 6010B.		See Below	
		Heavy Metal	Concentration	Result	
		Arsenic	<75 ppm		
		Antimony	<75 ppm		
		Lead	<100 ppm		
Preformed Pavement Markings – Type III (Temporary – Nonremovable)	705-2.03	Type III preformed pavement markings shall be a retroreflective layer on a conformable metallic backing intended for marking applications where removal is not a requirement.			
Preformed Pavement Markings – Type III (Temporary – Nonremovable)	705-2.03	The marking material shall be white or yellow conforming to standard highway colors.			

Product Property	Specification/ Test Method	Requirement	Results	Pass/ Fail
Preformed Pavement Markings – Type III (Temporary – Nonremovable)	705-2.03	The markings shall be precoated with a pressure sensitive adhesive capable of adhering to roadway surfaces under climatic and traffic conditions normally encountered in the construction work zone when applied in accordance with the manufacturer’s instructions and without the use of heat, solvents or other additional adhesives.		
Preformed Pavement Markings – Type III (Temporary – Nonremovable)	705-2.03	Newly applied markings shall be capable of being immediately exposed to traffic without pickup or distortion by vehicles.		
Preformed Pavement Markings – Type III (Temporary – Nonremovable)	705-2.03	The markings shall be weather resistant and through normal traffic wear shall show no appreciable fading, lifting, shrinkage, tearing, loss of skid resistance, roll back, or other signs of poor adhesion throughout the useful life of the marking.		