

Evaluation Table

706 Raised Pavement Markers

706 Adhesive for Raised Pavement Markers, Bituminous - Standard

ADOT Standard Specification: 706

ADOT Stored Specification: 706REFPMR

Additional Specification: ASTM D4280

Responsible Section: Traffic Group

Material Property	Specification/ Test Method	Requirement
Surface Type Application	ASTM D4280	The adhesive shall be suitable for bonding the above markers to portland cement concrete, asphaltic concrete, and chip-sealed road surfaces.
Temperature Application	ASTM D4280	The adhesive shall be applicable when road surface and marker temperatures are in the range from 40 to 160 °F (4.4 to 71 °C).
Classification	ASTM D4280	<i>Type I</i> —A hot-melt asphalt adhesive without polymer, fibers, or GTR (ground tire rubber) modification.
Packaging	ASTM D4280	The adhesive shall be packaged in self-releasing cardboard containers.
Packaging	ASTM D4280	The containers shall be divided into compartments that provide finished pieces with dimensions not exceeding 10 by 7.5 by 4 in. (254 by 191 by 102 mm).
Labeling	ASTM D4280	The label for the container shall clearly show the manufacturer, quantity, lot or batch number, and an indication that the material is asphalt adhesive for pavement markers.

Material Property	Specification/ Test Method	Requirement
Softening Point, °F (°C)	ASTM D4280 ASTM D36	Type I: 200 - 264 (93 - 129)
Penetration at 77 °F, 3.5 oz, 5s, in (25 °C, 100 g, 5s, mm × 10–1)	ASTM D4280 ASTM D5	Type I: 0.04 - 0.07 (10 - 18)
Penetration at 140 °F, 3.5 oz, 5s, in (60 °C, 100 g, 5 s, mm × 10–1)	ASTM D4280 ASTM D5	Type I: 0.18 - 0.25 (45 - 65)
Viscosity at 400 °F (204 °C), #27 spindle, 20 rpm, lbf-sec/ft (Pa·s)	ASTM D4280 ASTM D4402	Type I: 0.06 - 0.16 (3.0 – 7.5)
Flow at 158 °F, in. (70 °C, mm)	ASTM D4280 ASTM D5329	Type I: 0.2 (5.1) max
Heat Stability Flow at 158 °F, in. (70 °C, mm)	ASTM D4280 ASTM D5329	Type I: 0.2 (5.1) max
Flash Point, °F (°C)	ASTM D4280 ASTM D92	Type I: 550 (288) min
Specific Gravity at 77 °F (25 °C)	ASTM D4280 ASTM D71	Type I: 1.6 - 1.85