

640 PAVEMENT MARKING

ITEM 643 - POLYESTER

643.01 Description

643.02 Equipment

643.03 Application

643.04 Basis of Payment

643.01 Description. This work shall consist of furnishing and applying polyester pavement markings in accordance with 641, 740.03 and the additional requirements described herein.

643.02 Equipment. Equipment for applying the polyester pavement markings shall be capable of mixing the components in proportions recommended by the manufacturer and applying glass beads at the time of line placement. The equipment shall be of the airless spray type. The marking equipment used shall be capable of applying polyester material at the specified thickness at a speed of not less than 7 MPH (11 km/hr). The Contractor shall provide a calibrated measuring device acceptable to the Engineer to measure the polyester resin in the striper tanks.

643.03 Application. Polyester marking material shall be applied only when the surface is clean and dry and when the pavement and air temperature are above 50°F (10°C). The Contractor shall transfer the entire contents of each material container to the striper tanks. The material shall be thoroughly mixed at all times during application. Polyester marking material, catalyst plus resin, shall be applied uniformly to the surface to be marked at the following rates:

Gallons per Mile (Liters per Kilometer) of Line	Width of Line (Inches) (Millimeters)			
	4 (102)	5 (127)	10 (254)	20 (508)
Solid line	16 (37)	20 (46)	40 (92)	80 (184)
Dashed line	4 (9)	5 (11.5)	10 (23)	20 (46)
Dotted line	5 1/3 (12.3)	6 2/3 (15.4)	13 1/3 (30.8)	16 (37)
For Areas	1 gallon per 100 square feet			
Symbols, Words	(0.4 L/m ²)			

Thinning shall not be permitted.

Glass beads shall be applied to the uncured polyester material in sufficient quantity so that the beads completely fill the polyester film from the film-pavement interface to the top surface of the film to the extent that there are loose beads on the

surface of the uncured line. The rate of application shall not be less than 18 pounds (2.2 kg) of glass beads per gallon (liter) of polyester material applied.

If the polyester material develops tackiness after application resulting in discoloration and darkening of the polyester marking, the Contractor shall cease marking application until the problem is corrected.

If the polyester material does not dry to a no-tracking condition in 45 minutes or less, the Contractor shall cease marking application until the problem is corrected.

New asphaltic concrete shall be placed for a period of not less than two weeks prior to application of polyester pavement markings.

643.04 Basis of Payment. Payment for accepted quantities complete in place will be made at the contract prices, or prices adjusted in accordance with 641.11 for:

Item	Unit	Description
643	Mile (Kilometer)	Edge Line
643	Mile (Kilometer)	Lane Line
643	Mile (Kilometer)	Center Line
643	Linear Foot (Meter)	Channelizing Line
643	Linear Foot (Meter)	Stop Line
643	Linear Foot (Meter)	Crosswalk Line
643	Linear Foot (Meter)	Transverse Line
643	Linear Foot (Meter)	Curb Marking
643	Square Foot (Square Meter)	Island Marking
643	Each	Railroad Symbol Marking
643	Each	School Symbol Marking, ____ Inch (mm)
643	Linear Foot (Meter)	Parking Lot Stall Marking
643	Each	Lane Arrow
643	Each	Word on Pavement, ____ Inch (mm)
643	Linear Foot (Meter)	Dotted Line, ____ Inch (mm)
643	Linear Foot (Meter), Square Foot (Square Meter), or Each	Removal of Pavement Marking
643	Lump Sum	Two-Way Radio Equipment