

ASPHALT CEMENT

1.0 ASPHALT CEMENT - GENERAL

1.1 Description

- .1 This section specifies requirements for asphalt cement to be used in producing hot mix asphalt concrete paving mixtures.
- .2 The work includes supply of asphalt cement to the storage tanks of hot mix asphalt concrete producers.

1.2 Related Work

- .1 Hot Mix Asphalt Concrete - Section 05140

1.3 Samples

- .1 At least four (4) weeks prior to commencing work submit to the Engineer one 5L container of asphalt cement proposed for use. Submit asphalt cement samples in new metal containers.
- .2 Identify name of supplier of asphalt cement.
- .3 Provide access for Engineer to sample material actually incorporated in the work as required.

1.4 Materials Certification

- .1 At least two (2) weeks prior to commencing work submit current temperature-viscosity chart for asphalt cement showing Kinematic Viscosity in mm /sec. over a temperature range 105 C to 175 C.
- .2 Upon request submit manufacturer's test data and certification that asphalt cement meets requirements of this section.

1.5 Delivery and Storage

- .1 Provide approved storage, heating tanks and pumping facilities for asphalt cement.
- .2 Provide, upon request, freight and way bills for asphalt cement shipments received.

1.6 Measurement for Payment

- .1 Supply of asphalt cement is incidental to the unit contract price for the supply of hot mix asphalt concrete.

2.0 PRODUCTS

2.1 Materials

- .1 Asphalt Cement:
 - .1 Asphalt Cement shall be prepared by the refining of petroleum and shall not foam when heated to 177 C.
 - .2 The tolerance allowed by ASTM for testing precision will be applied from acceptance of asphalt cement.
 - .3 Asphalt cement shall meet the following requirements:

Requirements	ASTM Test Method	Values
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Kinematic Viscosity at 135 C, mm/sec	D2170	200-300
Absolute Viscosity at 60 C, 300 mm, hg Vacuum, Pa.S	D2171	60-100
Penetration at 0 C, 200 g, 60 sec; dmm	D5	30 min.
Flash Point (Cleveland Open Cup), C	D92	201 min.
Thin Film Oven Test Penetration After Test at 25 C, 100 g, 5 sec.; % of Original	D5	50 min.
Ductility at 25 C and 5 cm/min.; cm	D113	100 min.
Solubility in Trichorethylene, % by Mass	D2042	99.5 min.