



STANDARD SPECIFICATION OF PENETRATION BITUMEN GRADE 40/50

This type of bitumen is created during the process of oxidation in a vacuum bottom (The bitumen production feedstock that is derived from a distillation tower residue in vacuum oil refineries) at bitumen production units. The penetration point (kind of test to indicate the hardness of bitumen becomes **40/50**).

Property/Unit	Specification	Method
Density, 25 °C, (Kg/m ³)	1.010/1.060	ASTM D70
Penetration, 25 °C, (mm/10)	40 – 50	ASTM D5
Softening Point (°C)	52 – 60	ASTM D36
Ductility, 25 °C, (cm/s)	>100	ASTM D113
Loss on heating (wt%)	0.2 max	ASTM D6
Drop-in penetration after heating (%)	20 max	ASTM D6 & ASTM D5
Flash point (°C)	>250 °C	ASTM D92
Solubility in SC2 (wt%)	>99.5	ASTM D4
Spot test	Negative	*A.A.S.H.O.T 102

USAGE

Bitumen penetration grade **40/50** is standard penetration grade bitumen. It is used as paving grade bitumen suitable for road construction and for the production of asphalt pavements with superior properties. This grade of bitumen manufactured from fractional/vacuum distillation of crude oil.