

Table 1-1: Technical Specifications of Pure Bitumen Based on Viscosity at 60°C (AASHTO-M226)

Viscosity					Test
AR-160	AR-80	AR-40	AR-20	AR-10	
16000 \pm 4000	8000 \pm 2000	4000 \pm 1000	2000 \pm 500	1000 \pm 250	Viscosity at 60 C
550	400	275	200	140	Viscosity at 135 C
20	20	25	40	65	Penetration at 25 C, 100 grams, five seconds
52	50	45	40	–	Penetration at 25 C, 100 grams, five seconds. minimum
75	75	75	100 **	100 **	Ductility at 25 C, 5cm/min
Test on Primary Bitumen					
238	232	227	219	205	Flash point, Cleveland open cup
99/0	99/0	99/0	99/0	99/0	Solubility in trichloroethylene

*AASHTO T240 may be used but as a comparing method.

** If the ductility is less than 100 at 25 oC, the material will be accepted if its ductility at 15.6 oC is more than 100 cm at a pull rate of 5 cm/min.

Table 1-2: Technical Specifications of Pure Bitumen Based on Viscosity at 60°C (AASHTO-M226)

Viscosity						Test
AC-40	AC-30	AC-20	AC-10	AC-5	AC-2/5	
4000 ₊₈₀₀	3000 ₊₆₀₀	2000 ₊₄₀₀	1000 ₊₂₀₀	500 ₊₁₀₀	250 ₊₅₀	Viscosity at 60 C
400	350	300	250	175	125	Viscosity at 135 C
40	50	60	80	140	220	Penetration at 25 C, 100 grams, five seconds
232	232	232	219	177	163	Flash point, Cleveland open cup
99/0	99/0	99/0	99/0	99/0	99/0	Solubility in trichloroethylene
Test on the residue of thin bitumen layer						
0/5	0/5	0/5	0/5	1/0		Heating loss
16000	12000	8000	4000	2000	1000	Viscosity at 60 C
25	40	50	75	100	100 ⁽¹⁾	Ductility at 25 C, 5cm/min
Stain Test						
Negative						Naphtha Solvent
Negative						Naphtha-Xylene Solvent, Xylene Percentage
Negative						Naphtha-Xylene Solvent, Xylene Percentage

(1) If the ductility is less than 100 at 25 °C, the material will be accepted if its ductility at 15.6 °C is more than 100 cm at a pull rate of 5 cm/min.