

Polymer modified bitumen (PMB)

EN 14023 Specification

Standard designation of bituminous binder - PMB X/Y-Z, where:

- X – lower penetration limit at 25°C [0.1 mm] acc. to EN 1426,
- Y – upper penetration limit at 25°C [0.1 mm] acc. to EN 1426,
- Z – lower softening point (R&B) limit [°C] as per EN 1427.

PARAMETER	UNIT	PMB 35/55-55	PMB 25/55-60	PMB 25/55-65	PMB 45/80-55	PMB 45/80-65
Penetration at 25°C	0,1 mm	35-55	25-55	25-55	45-80	45-80
Softening point	°C	≥55	≥60	≥65	≥55	≥65
Force ductility, 50 mm/min	J/cm ²	≥2 ατ 5°X	≥2 ατ 5°X	≥2 ατ 5°X	≥2 ατ 5°X	≥2 ατ 5°X
Change of mass	%	≤0,3	≤0,3	≤0,3	≤0,3	≤0,3
Retained penetration	%	≥60	≥60	≥60	≥60	≥60
Increase in softening point	°C	≤8	≤8	≤8	≤8	≤8
Flash point	°C	≥235	≥235	≥235	≥235	≥235
Elastic recovery at 25 °C	%	≥80	≥80	≥80	≥80	≥80
Fraass Breaking point	°C	≤-15	≤-15	≤-15	≤-15	≤-18

PARAMETER	UNIT	PMB 65/105-60	PMB 40/100-65	PMB 40/100-70	PMB 65/105-75	PMB 40/100-75	PMB 40/100-80	PMB 75/130-75
Penetration at 25°C	0,1 mm	65-105	40-100	40-100	65-105	40-100	40-100	75-130
Softening point	°C	≥60	≥65	≥70	≥75	≥75	≥80	≥75
Force ductility, 50 mm/min	J/cm ²	≥2 ατ 5°X	≥2 ατ 5°X	≥3 ατ 5°X	≥3 ατ 5°X	≥3 ατ 5°X	≥3 ατ 5°X	≥2 ατ 5°X
Change of mass	%	≤0,3	≤0,3	≤0,3	≤0,3	≤0,3	≤0,3	≤0,3
Retained penetration	%	≥60	≥60	≥60	≥60	≥60	≥60	≥60
Increase in softening point	°C	≤8	≤8	≤8	≤8	≤8	≤8	≤8
Flash point	°C	≥235	≥235	≥235	≥235	≥235	≥235	≥235
Elastic recovery at 25 °C	%	≥80	≥80	≥80	≥80	≥80	≥80	≥80
Fraass Breaking point	°C	≤-20	≤-18	≤-15	≤-15	≤-15	≤-15	≤-20

PARAMETER	UNIT	PMB 75/130-55	PMB 75/130-70	PMB 40/100-48	PMB 65/105-48
Penetration at 25°C	0,1 mm	75-130	75-130	40-100	65-105
Softening point	°C	≥55	≥70	≥48	≥48
Force ductility, 50 mm/min	J/cm ²	≥3 ατ 10°X	≥3 ατ 5°X	≥1 ατ 10°X	≥1 ατ 5°X
Change of mass	%	≤0,3	≤0,3	≤0,5	≤0,5
Retained penetration	%	≥60	≥60	≥55	≥55
Increase in softening point	°C	≤8	≤8	-	-
Flash point	°C	≥220	≥235	≥220	≥220
Elastic recovery at 25 °C	%	≥80	≥80	≥50	≥50
Fraass Breaking point	°C	≤-22	≤-22	≤-15	≤-15