

Technical Data of Heat - Setting Dry Mortars

Brand Name	AM 30	AM 40	AM 45	AM 50	AM 60	AM 70
Chemical Composition (wt%):-						
Silica (SiO ₂)	50.0 - 55.0	50.0 - 52.0	40.0 - 44.0	30.0 - 34.0	20.0 - 24.0	10.0 - 14.0
Alumina (Al ₂ O ₃)	30.0 - 35.0	38.0 - 40.0	48.0 - 52.0	58.0 - 62.0	68.0 - 72.0	78.0 - 82.0
Titania, (TiO ₂)	2.6 - 2.8	2.6 - 3.0	2.0 - 2.2	2.1 - 2.3	2.4 - 2.6	2.6 - 2.8
Iron (Fe ₂ O ₃)	≤ 2.0	≤ 1.5	≤ 1.5	≤ 1.6	≤ 1.6	≤ 1.4
Lime (CaO)	≤ 0.40	≤ 0.35	≤ 0.30	≤ 0.30	≤ 0.25	≤ 0.25
Magnesia, (MgO)	≤ 0.20	≤ 0.15	≤ 0.10	≤ 0.10	≤ 0.10	≤ 0.10
Alkalies, (Na ₂ O + K ₂ O)	≤ 0.7	≤ 0.6	≤ 0.5	≤ 0.5	≤ 0.4	≤ 0.5
Loss on Ignition (L.O.I)	4.0 - 5.0	4.0 - 4.5	3.0 - 3.5	3.0 - 3.5	3.0 - 3.4	2.2 - 2.4
Physical & Thermo-Mechanical properties:						
Max. service temp. (°C)Max. service t	1350	1500	1600	1650	1700	1750
Refractoriness, (°C)Refractoriness, (°C)	1640	>1730	>1760	>1800	>1800	>1800>1800
Form,	Dry	Dry	Dry	Dry	Dry	Dry
Type of setting	Heat- setting	Heat- setting	Heat- setting	Heat- setting	Heat- setting	Heat- setting
Type of bond	Ceramic	Ceramic	Ceramic	Ceramic	Ceramic	Ceramic
Grain size distribution (mm), (%)						
over 0.3 mm	< 2	< 2	< 2	< 2	< 2	< 2
0.075 - 0.3 mm	< 28	< 28	< 28	< 28	< 28	< 28
under 0.075 mm	> 70	> 70	> 70	> 70	> 70	> 70
Water required, (%)	25 - 27	25- 27	25- 27	22 - 25	20 - 23	20 - 22