

ACP

Classification	Chemically Bonded Acid Resisting Mortar (Wet Type)		
Physical Properties	Maximum Service Temperature	°C	1350
	Refractoriness	Orton cone	16
	Grain Size	mm.	0-1
	Approximate Weight Required Per 1000 pcs.,9"		
	Standard Equivalent (Thinly Trowelled Joints)	kg.	220
	Modulus of Rupture After Drying at 110 °C	kg/cm ²	40
	Refractoriness Test :		
Joints When Heated for 5 hrs. at 1350 °C	°C	Not squeezed	
Chemical Composition	Alumina (Al ₂ O ₃)	%	27.0
	Silica (SiO ₂)	%	65.0
	Iron Oxide (Fe ₂ O ₃)	%	1.5

ALC 32

Classification	Alumina-Chrome Mortar		
Physical Properties	Maximum Service Temperature	°C	1650
	Refractoriness	Orton cone	>38
	Approximate Amount Required Per 1000 pcs.,9"		
	Standard Equivalent (Thinly Trowelled Joints)	kg.	230
	Modulus of Rupture After Drying at 110 °C	kg/cm ²	40
	Refractoriness Test :		
	Joints When Heated for 5 hrs. at 1650 °C	°C	Not squeezed
Chemical Composition	Alumina (Al ₂ O ₃)	%	84.0
	Silica (SiO ₂)	%	1.4
	Iron Oxide (Fe ₂ O ₃)	%	0.1
	Chromic Oxide (Cr ₂ O ₃)	%	8.1
	Phosphorous Pentoxide (P ₂ O ₅)	%	6.3

AM 30

Classification	High-Duty Air-Setting Mortar (Dry Type)		
Physical Properties	Maximum Service Temperature	°C	1500
	Refractoriness	Orton cone	28-29
	Grain Size	mm.	0-1
	Approx. Amount of Water for Trowelling Consistency	litres/50 kg	23
	Approximate Amount Required Per 1000 pcs., 9"		
	Standard Equivalent (Thinly Trowelled Joints)	kg.	160
	Modulus of Rupture After Drying at 110 °C	kg/cm ²	20
	Refractoriness Test :		
Joints When Heated for 5 hrs. at 1500 °C	°C	Not squeezed	
Chemical Composition	Alumina (Al ₂ O ₃)	%	38.0
	Silica (SiO ₂)	%	54.0
	Iron Oxide (Fe ₂ O ₃)	%	1.8

AM 30 (W)

Classification	High-Duty Air-Setting Mortar (Wet Type)		
Physical Properties	Maximum Service Temperature	°C	1500
	Refractoriness	Orton cone	28-29
	Grain Size	mm.	0-1
	Approximate Amount Required Per 1000 pcs.,9"		
	Standard Equivalent (Thinly Trowelled Joints)	kg.	215
	Modulus of Rupture After Drying at 110 °C	kg/cm ²	25
	Refractoriness Test :		
Joints When Heated for 5 hrs. at 1500 °C	°C	Not squeezed	
Chemical Composition	Alumina (Al ₂ O ₃)	%	35.0
	Silica (SiO ₂)	%	57.0
	Iron Oxide (Fe ₂ O ₃)	%	1.8

AM 43

Classification	Super-Duty Air-Setting Mortar (Dry Type)		
Physical Properties	Maximum Service Temperature	°C	1600
	Refractoriness	Orton cone	31 ^{1/2} -32
	Grain Size	mm.	0-1
	Approx. Amount of Water for Trowelling Consistency	litres/50 kg	25
	Approximate Weight Required Per 1000 pcs.,9"		
	Standard Equivalent (Thinly Trowelled Joints)	kg.	170
	Modulus of Rupture After Drying at 110 °C	kg/cm ²	20
	Refractoriness Test :		
Joints When Heated for 5 hrs. at 1600 °C	°C	Not squeezed	
Chemical Composition	Alumina (Al ₂ O ₃)	%	44.0
	Silica (SiO ₂)	%	51.0
	Iron Oxide (Fe ₂ O ₃)	%	1.5

AM 43 (W)

Classification	Super-Duty Air-Setting Mortar (Wet Type)		
Physical Properties	Maximum Service Temperature	°C	1600
	Refractoriness	Orton cone	31 ^{1/2} -32
	Grain Size	mm.	0-1
	Approximate Amount Required Per 1000 pcs.,9"		
	Standard Equivalent (Thinly Trowelled Joints)	kg.	210
	Modulus of Rupture After Drying at 110 °C	kg/cm ²	25
	Refractoriness Test :		
Joints When Heated for 5 hrs. at 1600 °C	°C	Not squeezed	
Chemical Composition	Alumina (Al ₂ O ₃)	%	43.5
	Silica (SiO ₂)	%	52.0
	Iron Oxide (Fe ₂ O ₃)	%	1.5

AM 70

Classification	Air-Setting High-Alumina Mortar (Dry Type)		
Physical Properties	Maximum Service Temperature	°C	1650
	Refractoriness	Orton cone	36-37
	Grain Size	mm.	0-1
	Approx. Amount of Water for Trowelling Consistency	litres/50 kg	23
	Approximate Amount Required Per 1000 pcs.,9"		
	Standard Equivalent (Thinly Trowelled Joints)	kg.	210
	Modulus of Rupture After Drying at 110 °C	kg/cm ²	25
	Refractoriness Test :		
Joints When Heated for 5 hrs. at 1650 °C	°C	Not squeezed	
Chemical Composition	Alumina (Al ₂ O ₃)	%	68.5
	Silica (SiO ₂)	%	27.5
	Iron Oxide (Fe ₂ O ₃)	%	2.0

AM 70 (W)

Classification	Air-Setting High-Alumina Mortar (Wet Type)		
Physical Properties	Maximum Service Temperature	°C	1650
	Refractoriness	Orton cone	36-37
	Grain Size	mm.	0-1
	Approximate Weight Required Per 1000 pcs., 9"		
	Standard Equivalent (Thinly Trowelled Joints)	kg.	230
	Modulus of Rupture After Drying at 110 °C	kg/cm ²	25
	Refractoriness Test :		
Joints When Heated for 5 hrs. at 1650 °C	°C	Not squeezed	
Chemical Composition	Alumina (Al ₂ O ₃)	%	65.0
	Silica (SiO ₂)	%	27.0
	Iron Oxide (Fe ₂ O ₃)	%	2.0

HM 30

Classification	High-Duty Heat-Setting Mortar		
Physical Properties	Maximum Service Temperature	°C	1500
	Refractoriness	Orton cone	30
	Grain Size	mm.	0-1
	Approx. Amount of Water for Trowelling Consistency	litres/50 kg	23
	Approximate Amount Required Per 1000 pcs.,9"		
	Standard Equivalent (Thinly Trowelled Joints)	kg.	180
	Refractoriness Test :		
Joints When Heated for 5 hrs. at 1500 °C	°C	Not squeezed	
Chemical Composition	Alumina (Al ₂ O ₃)	%	30.5
	Silica (SiO ₂)	%	61.5
	Iron Oxide (Fe ₂ O ₃)	%	2.0

HM 43

Classification	Super-Duty Heat-Setting Mortar		
Physical Properties	Maximum Service Temperature	°C	1600
	Refractoriness	Orton cone	32
	Grain Size	mm.	0-1
	Approx. Amount of Water for Trowelling Consistency	litres/50 kg	25
	Approximate Amount Required Per 1000 pcs.,9"		
	Standard Equivalent (Thinly Trowelled Joints)	kg.	170
	Refractoriness Test :		
Joints When Heated for 5 hrs. at 1600 °C	°C	Not squeezed	
Chemical Composition	Alumina (Al ₂ O ₃)	%	44.0
	Silica (SiO ₂)	%	50.0
	Iron Oxide (Fe ₂ O ₃)	%	2.0

HM 70

Classification	Heat-Setting High-Alumina Mortar		
Physical Properties	Maximum Service Temperature	°C	1650
	Refractoriness	Orton cone	37
	Grain Size	mm.	0-1
	Approx. Amount of Water for Trowelling Consistency	litres/50 kg	18
	Approximate Amount Required Per 1000 pcs., 9"		
	Standard Equivalent (Thinly Trowelled Joints)	kg.	190
	Refractoriness Test :		
Joints When Heated for 5 hrs. at 1650 °C	°C	Not squeezed	
Chemical Composition	Alumina (Al ₂ O ₃)	%	68.5
	Silica (SiO ₂)	%	28.0
	Iron Oxide (Fe ₂ O ₃)	%	2.0

HM 90

Classification	Heat-Setting High-Alumina Mortar		
Physical Properties	Maximum Service Temperature	°C	1725
	Refractoriness	Orton cone	>38
	Grain Size	mm.	0-1
	Approx. Amount of Water for Trowelling Consistency	litres/50 kg	11
	Approximate Weight Required Per 1000 pcs.,9"		
	Standard Equivalent (Thinly Trowelled Joints)	kg.	220
	Refractoriness Test :		
	Joints When Heated for 5 hrs. at 1725 °C	°C	Not squeezed
Chemical Composition	Alumina (Al ₂ O ₃)	%	89.0
	Silica (SiO ₂)	%	10.0
	Iron Oxide (Fe ₂ O ₃)	%	0.5

HM SK 30

Classification	High-Duty Heat-Setting Mortar		
Physical Properties	Maximum Service Temperature	°C	1450
	Refractoriness	Orton cone	29-30
	Approximate Amount of Water		
	for Trowelling Consistency	litres/50 kg	23
	Approximate Weight Required		
	Per 1000 pcs., 9" Standard Equivalent		
	(Thinly Trowelled Joints)	kg.	160
	Refractoriness Test :		
Joints When Heated for 5 hrs. at 1450 °C	°C	Not squeezed	
Chemical Composition	Alumina (Al ₂ O ₃)	%	30.5
	Silica (SiO ₂)	%	61.5
	Iron Oxide (Fe ₂ O ₃)	%	2.0

HM SK 32

Classification	High-Duty Heat-Setting Mortar		
Physical Properties	Maximum Service Temperature	°C	1500
	Refractoriness	Orton cone	30-31
	Approximate Amount of Water		
	for Trowelling Consistency	litres/50 kg	23
	Approximate Weight Required		
	Per 1000 pcs., 9" Standard Equivalent		
	(Thinly Trowelled Joints)	kg.	170
	Refractoriness Test :		
Joints When Heated for 5 hrs. at 1500 °C	°C	Not squeezed	
Chemical Composition	Alumina (Al ₂ O ₃)	%	37.0
	Silica (SiO ₂)	%	57.0
	Iron Oxide (Fe ₂ O ₃)	%	2.0

HM SK 34

Classification	Super-Duty Heat-Setting Mortar		
Physical Properties	Maximum Service Temperature	°C	1600
	Refractoriness	Orton cone	31 ^{1/2} -32
	Approximate Amount of Water		
	for Trowelling Consistency	litres/50 kg	23
	Approximate Weight Required		
	Per 1000 pcs.,9" Standard Equivalent		
	(Thinly Trowelled Joints)	kg.	170
	Refractoriness Test :		
Joints When Heated for 5 hrs. at 1600 °C	°C	Not squeezed	
Chemical Composition	Alumina (Al ₂ O ₃)	%	42.0
	Silica (SiO ₂)	%	53.0
	Iron Oxide (Fe ₂ O ₃)	%	2.0

HM SK 36

Classification	High-Alumina Heat-Setting Mortar		
Physical Properties	Maximum Service Temperature	°C	1650
	Refractoriness	Orton cone	34-35
	Approximate Amount of Water		
	for Trowelling Consistency	litres/50 kg	23
	Approximate Weight Required		
	Per 1000 pcs. ,9" Standard Equivalent		
	(Thinly Trowelled Joints)	kg.	180
	Refractoriness Test :		
Joints When Heated for 5 hrs. at 1650 °C	°C	Not squeezed	
Chemical Composition	Alumina (Al ₂ O ₃)	%	59.5
	Silica (SiO ₂)	%	34.5
	Iron Oxide (Fe ₂ O ₃)	%	2.0

LITE MORTAR

Classification	Super-Duty Air-Setting Mortar (Dry Type)		
Physical Properties	Refractoriness	Orton cone	34
	Approx. Amount of Water for Trowelling Consistency	litres/50 kg	12
	Approximate Weight Required Per 1000 pcs.,9"		
	Standard Equivalent(Thinly Trowelled Joints)	kg.	170
	Modulus of Rupture After Drying at 110 °C	kg/cm ²	45
	Refractoriness Test :		
	Joints When Heated for 5 hrs. at 1650 °C	Not squeezed	
Chemical Composition	Alumina (Al ₂ O ₃)	%	48.0
	Silica (SiO ₂)	%	46.0
	Iron Oxide (Fe ₂ O ₃)	%	1.3

M AM 80

Classification	Air-Setting Magnesite Mortar (Dry Type)		
Physical Properties	Maximum Service Temperature	°C	1600
	Refractoriness	Orton cone	>38
	Grain Size	mm.	0-1
	Approx. Amount of Water for Trowelling Consistency	litres/50 kg	13
	Approximate Weight Required Per 1000 pcs., 9"		
	Standard Equivalent (Thinly Trowelled Joints)	kg.	175
	Modulus of Rupture After Drying at 110 °C	kg/cm ²	20
	Refractoriness Test: MORTAR Dose Not Squeeze or		
Chemical Composition	Flow from Joints When Heated for 5 hrs. at	°C	1600
	Alumina (Al ₂ O ₃)	%	2.3
	Silica (SiO ₂)	%	11.5
	Iron Oxide (Fe ₂ O ₃)	%	2.0
	Magnesite (MgO)	%	79.5

M HM 90

Classification	Heat-Setting Magnesite Mortar (Dry Type)		
Physical Properties	Maximum Service Temperature	°C	1725
	Refractoriness	Orton cone	>38
	Grain Size	mm.	0-1
	Approx. Amount of Water for Trowelling Consistency	litres/50 kg	11.5
	Approximate Weight Required Per 1000 pcs.,9"		
	Standard Equivalent (Thinly Trowelled Joints)	kg.	220
	Refractoriness Test: MORTAR Dose Not Squeeze or		
	Flow from Joints When Heated for 5 hrs. at	°C	1725
Chemical Composition	Alumina (Al ₂ O ₃)	%	0.8
	Silica (SiO ₂)	%	4.5
	Iron Oxide (Fe ₂ O ₃)	%	2.0
	Magnesite (MgO)	%	90.5

M HM 95

Classification	Heat-Setting Magnesite Mortar (Dry Type)		
Physical Properties	Maximum Service Temperature	°C	1725
	Refractoriness	Orton cone	>38
	Grain Size	mm.	0-1
	Approx. Amount of Water for Trowelling Consistency	litres/50 kg	11
	Approximate Weight Required Per 1000 pcs.,9"		
	Standard Equivalent (Thinly Trowelled Joints)	kg.	220
	Refractoriness Test: MORTAR Dose Not Squeeze or		
	Flow from Joints When Heated for 5 hrs. at	°C	1725
Chemical Composition	Alumina (Al ₂ O ₃)	%	0.1
	Silica (SiO ₂)	%	2.7
	Iron Oxide (Fe ₂ O ₃)	%	1.0
	Magnesite (MgO)	%	95.0

MORTAR APK 990

Classification	Sodium Free Acid Resistant Mortar (Separated Binder Solution)		
Physical Properties	Mixing Ratio, by Weight		2.6
	Maximum Service Temperature	°C	1000
	Bulk Density	kg/cm ³	1950
	Water Absorption	%	9
	Compressive Strength after 1 day	kg/cm ²	200
	Compressive Strength after 28 days	kg/cm ²	300
	Bending Strength	kg/cm ²	35
	Acid Solubility (DIN 51102' part 1)	%	1.8
Chemical Composition	Alumina (Al ₂ O ₃)	%	0.2
	Silica (SiO ₂)	%	78.0
	Iron Oxide (Fe ₂ O ₃)	%	0.1
	Zirconia Dioxide (ZrO ₂)	%	13.0

PM 80 (W)

Classification	Phosphate-Bonded High-Alumina Mortar (Wet Type)		
Physical Properties	Maximum Service Temperature	°C	1650
	Refractoriness	Orton cone	38
	Grain Size	mm.	0-1
	Approximate Weight Required Per 1000 pcs.,9"		
	Standard Equivalent(Thinly Trowelled Joints)	kg.	225
	Modulus of Rupture After Drying at 110 °C	kg/cm ²	40
	Refractoriness Test :		
Joints When Heated for 5 hrs. at 1650 °C	°C	Not squeezed	
Chemical Composition	Alumina (Al ₂ O ₃)	%	77.0
	Silica (SiO ₂)	%	10.0
	Iron Oxide (Fe ₂ O ₃)	%	2.0
	Phosphorous Pentoxide (P ₂ O ₅)	%	10.0

PM SK 38 (W)

Classification	Phosphate-Bonded High-Alumina Mortar (Wet Type)		
Physical Properties	Maximum Service Temperature	°C	1650
	Refractoriness	Orton cone	38
	Grain Size	mm.	0-1
	Approximate Weight Required Per 1000 pcs.,9"		
	Standard Equivalent(Thinly Trowelled Joints)	kg.	225
	Modulus of Rupture After Drying at 110 °C	kg/cm ²	35
	Refractoriness Test :		
	Joints When Heated for 5 hrs. at 1650 °C	°C	Not squeezed
Chemical Composition	Alumina (Al ₂ O ₃)	%	77.0
	Silica (SiO ₂)	%	10.0
	Iron Oxide (Fe ₂ O ₃)	%	2.0
	Phosphorous Pentoxide (P ₂ O ₅)	%	10.0