Mortars

Product Description
Thermal Ceramics refractory mortars were developed to match Thermal Ceramics dense and insulating firebricks in various thermal, chemical, and physical service conditions.

Available in wet and dry grades, mortars will provide the convenience you want with the performance you need for practically every high temperature refractory application.

Features

- Matched for use with each Thermal Ceramics firebrick and insulating firebrick
- Both heat setting and air setting grades are available
- Temperature use limits up to 3200□F (1760°C)

Smoothset™ is a lower cost, tacky, 2800°F (1538°C) mortar. Excellent for built-up shapes.

Airset™ is a tacky 3000°F (1649°C) mortar excellent for built-up shapes of IFB or super duty Firebricks.

Airset 3000 EG is a lower cost 3000°F (1649°C) mortar with dipping consistency.

K-Bond™ mortar is an extra smooth and creamy consistency. It has a long shelf life and is good for mortaring IFB and Firebrick linings.

Mul-Set™ F is a high alumina mortar suited for high temperature IFB linings.

Coastal 90™ and Coastal 90 AS™ are a wet and dry version of extra high alumina mortar. They are ideal for 90% alumina brick constructions.

Mortars

	High-Temp	Smoothset Wet	Smoothset Dry	Air-Set Wet	Air-Set Dry	Air-Set 3000 EG Wet
Properties						
Manufacturing location	US	US	US	US	US	US
Material Class	Crystalline Silica					
Material Grade	Dry, heat setting	Wet, air setting	Dry, heat setting	Wet, air setting	Dry, heat setting	Wet, air setting
Classification Temperature, °F	3000	2850	2900	3000	3000	3000
Classification Temperature, °C	1649	1566	1593	1649	1649	1649
Quantity required lb/1000 brick	220-250	250-320	180-240	360-400	275-300	250-320
Lb required to brush coat 100 sq ft	26	22	20	22	20	22
Kg required to brush coat 9 sq m	57	49	44	49	44	49
Shelf life, months	12	6	12	6	12	6
Brick type	IFB	IFB	IFB	IFB / Firebrick	IFB / Firebrick	IFB
Water %, recommended						
trowel	26	-	29	-	31	-
dip	44	-	50	-	52	-
Chemical Analysis, % weight basis after firing						
Alumina, Al_2O_3	45	36	38	46	45	44
Silica, SiO_2	50	57	58	47	48	50
Ferric Oxide, Fe_2O_3	1.3	0.9	1	0.8	1.1	0.8
Titanium Oxide, TiO_2	2.2	1.7	1.9	1.7	1.9	1.9
Calcium Oxide, CaO	0.2	0.2	0.2	0.1	0.2	0.1
Magnesium Oxide, MgO	0.1	0.1	0.1	0.1	0.1	0.1
Alkalies as Na_2O and K_2O	0.6	4	2.8	2.1	2.2	2.6
Boron Oxide, B_2O_3	0.7	-	-	-	-	-

Mortars

	K-Bond Wet	K-Bond Dry	Mul-Set F Wet	Mul-Set F Dry	Coastal 90	Coastal 90 AS
Properties						
Manufacturing location	US	US	US	US	US	US
Material Class	Crystalline Silica					
Material Grade	Wet, air setting	Dry, heat setting	Wet, air setting	Dry, heat setting	Wet, air setting	Dry, heat setting
Classification Temperature, °F	3000	3000	3200	3200	3250	3300
Classification Temperature, °C	1649	1649	1760	1760	1788	1816
Quantity required lb/1000 brick	300-360	220-280	300-350	200-300	240-320	450-550
Lb required to brush coat 100 sq ft	136-163	98-127	136-159	91-136	109-145	204-249
Kg required to brush coat 9 sq m	22	20	22	20	-	-
Shelf life, months	49	44	49	44	-	-
Brick type	6	12	6	12	6	12
Water %, recommended						
trowel	-	-	20	-	22	-
dip	-	-	33	-	37	-
Chemical Analysis, % weight basis after firing						
Alumina, Al_2O_3	46	47	65	66	88	88
Silica, SiO_2	48	48	29	28	9	9
Ferric Oxide, Fe_2O_3	0.9	0.9	1.2	1.2	0.3	0.2
Titanium Oxide, TiO_2	1.6	1.1	3.1	3.1	0.3	0.1
Calcium Oxide, CaO	0.1	0.5	0.1	0.1	trace	trace
Magnesium Oxide, MgO	0.1	0.4	0.1	0.1	0.1	0.1
Alkalies as Na_2O and K_2O	2.8	2.1	3.0	3.0	2.2	2.2
Boron Oxide, B_2O_3	46	47	65	66	88	88