



**LARGEST
UNIT IN
WESTERN
INDIA**

About Us...

We at Crown Ceramics have got very spacious manufacturing plants with all the modern equipment and latest facilities for manufacturing of different types of refractory material and ceramics. While following good manufacturing practises we also follow the guidelines of ISO (International Organisation of Standardisation) so that our customers get the best quality material at the right time.

With 4 tunnel Kilns working all round the year we are manufacturing 2500 tons of refractory and ceramics per day. We always keep our inventory up and steady with products relating to our regular clients and also regular products, a stock is always maintained to supply constantly for six to nine months so that any manufacturing set-backs won't hinder the smooth working and supply of materials.

Crown Ceramics are the biggest refractory manufacturer of western India, while catering the domestic market in India itself we also export to countries like Middle-East, Africa, Gulf Countries, Emirate countries, South America, Europe etcetera. We not only follow the Indian standards of production and testing but we also follow the ASTM (American Testing Standard) and BSI (British Standards Institution) so that our customers can be 100 % satisfied with our service.

We cater to many industries, the key industries that we work with are the lime and cement industries, forging units, heat treatment plant, steel plants, coke plants, sugar industries, glass factories, etcetera.

Infrastructure...

Our Products and System Solutions :

Our refractory products withstand the most extreme thermal, mechanical and chemical stress, which occurs in all industrial high-temperature processes exceeding 1,200° C up to 1,800° C. They are indispensable to all production processes of the basic industries and optimise the value added in the production process of our customers.



Fire Bricks

High Alumina Bricks

- We manufacture and export Fire Clay & High Alumina Bricks. Alumina is an excellent engineering ceramic, offering excellent electrical insulation properties together with high hardness and good wear resistance but relatively low strength and fracture toughness. It is also an electrically insulating material, with a high electrical resistivity, increasing with purity.
- The technical data pertains to machine pressed standard bricks in compliance with the testing standard. These data are typical approximate guide value. Not to be construed as a binding specification.
- Size tolerance $\pm 1\%$ or 1.5mm whichever is greater.
- Bricks with properties of higher values available where applications require the same.

The Different types of High Alumina Bricks have been mentioned further with different laboratory details.

Fire Bricks

High Alumina Bricks

Sr No.	Product	Al ₂ O ₃ % min	Fe ₂ O ₃ % max	PCE O.C.	B.D. Gm/cc	AP% Max.	CCS Kg/cm ²	R.U.L Ta°C min	PLC% max AT/2hrs	Characteristics & Users
1	Crown-30	30	2.5	30	2	25	200	1300	1350±1.0	General purpose medium heat duty bricks
2	Crown-40	40	2.5	32	2.05	25	200	1400	1400±1.0	General purpose high heat duty bricks
3	Crown-HG	36	2.5	31	2	24	200	1400	1400±0.5	Fireclay blocks / bricks glass melting furnace
4	Crown-42D	43	2	32	2.25	19	400	1430	1400±0.5	General purpose coke oven, blast furnace
5	Crown-45	45	2.5	34	2.25	23	300	1450	1450±1.0	Super duty bricks for general purpose
6	Crown-45D	45	1.5	33	2.3	20	450	1470	1480±0.5	General purpose coke oven, blast furnace
7	Crown-50B	50	2.5	35	2.3	22	350	1430	1450±1.0	Suitable for burning zone of cement rotary kiln, ladle lining
8	Crown-60B	60	3	36	2.5	23	350	1430	1600±1.0	Suitable for burning zone of cement rotary kiln, ladle lining
9	Crown-62D	62	1.2	-	2.55	16	650	1580	1600±0.3	Blast furnace, coke oven, calcination & ceramic industry
10	Crown-70B	70	3	36	2.65	23	400	1470	1600±0.3	Suitable for burning zone of cement rotary kiln, ladle lining
11	Crown-70L	70	2.5	36	2.65	22	450	1450	1600±0.3	Suitable for burning zone of cement rotary kiln, ladle lining
12	Crown-70SD	70	1.5	37	2.65	22	450	1550	1600±0.5	Dense, suitable for reducing atmosphere of rotary kiln and glass industries
13	Crown-80B	80	3.5	36	2.75	23	400	1500	1600±1.0	Special application in refineries petrochemicals etc.
14	Crown-80SD	80	1.6	37	2.75	19	700	1580	1600±1.0	Special application in refineries petrochemicals, Steel ladles etc.
15	Crown-SMT	56	1.5	36	2.35	21	450	1500	1500±0.5	For glass tank furnace, blast furnace, stove checkers.
16	Crown-90S	90	1	-	3	16	900	1720	1700±0.1	Blast furnace hearth



Fire Bricks

Acid Proof / Acid Resistant Bricks

- We manufacture Acid Resistant Bricks, which are brown/Grey in colour for IS-4860 and white in colour for IS-4457 standard. The colour of the bricks does not have impact on the performance of the bricks. These bricks have good density and low water absorption and low porosity. Very high cold crushing strength, High resistance to strong acids (except hydrofluoric acid) and partial resistance to alkalis are the important technical parameters of these bricks. These bricks are used in various industrial applications like Chemical Storage Tanks, Absorption towers, Process Tanks, Flooring, vessels, Chimney lining etc. in Chemical, Dyes and Intermediates, Alkalies, Fertilizers, Petrochemicals, Paper, Power and Steel Plants, and many more.
- The Different types of Acid Proof Bricks have been mentioned further with different laboratory details.

Fire Bricks

Acid Proof / Acid Resistant Bricks

Product	Chemical							Physical		
	SiO ₂ %	Al ₂ O ₃ %min	Fe ₂ O ₃ %max	TiO ₂ %	CaO+MgO %	Na ₂ O+K ₂ O%	Water Absorption % max.	C.C.S kg/cm ² %	Flexural straenth kg/cm ²	Acid resi stance % loss inwt.
Crown - AP Class I	68.2	24	1.8	2.1	0.5	3.4	2	700	100	0.8
Crown - AP Class II	68.2	24	1.8	2.1	0.5	3.4	4	500	75	0.75

Raw Material

- Sodium silicate base powder & solution
- Potassium silicate base powder & solution
- Furan resin powder & syrup
- Bitumin 90/15 grade & primer
- Mastik powder (A.R)



Castables

Whytheat A 90% Alumina Dense Castable

We manufacture and supply high quality Whytheat A 90% Alumina Dense Castable. These are generally used to form strong joints and are applied extensively in building material, metallurgy, and petrochemical industries. Our Castables are very cost effective.

Product Type	Whytheat A
Nature Of Bond	Hydraulic
Installation	Vibrations Casting
General Properties	
Max. service Temperature	1700° c
Maximum Grain Size	5mm
Water Required For Casting	8.10-10.0%
Chemical Analysis %	Typical value
Al ₂ O ₃	85-90
Fe ₂ O ₃	0.8-1.5
CaO	5.5-06.5
Physical Properties	
Bulk Density	g/cc
Afer Drying At 110c/24 Hrs	2.65 -2.80
CCS, kg/cm ² After Drying At 110°C/24hrs	600 - 700
After Heating At 1100° C/3 hrs	300- 400
After Heating At 1550°C/3hrs	650 - 800
% Retained On max. Size	0 - 5
Thermal Properties	
Refractoriness, Orton / °C	0.02032967
PLC%	
after heating at 1100° C / 3 hrs	-0.40 to + 0.20
after heating at 1550°C / 3 hrs	-1.00 to 2.50
packaging	25 kg bags
storage life	6 months
delivery state	dry

Castables

Whytheat K 60% Alumina Dense Castable

We offer Whytheat K 60% Alumina Dense Castable, which has an alumina content of 60% can be used for service temperatures upto 1600°C. This castable also has a low iron content and can resist carbon monoxide attack. It can be used in various industries like: blast furnaces, foundries, boiler industry stoker arches, soak pit covers, forge furnaces, tunnel kilns, heat treatment furnace car tops as well as electro-phosphorus furnaces.

Product Type	Whytheat K
Nature Of Bond	Hydraulic
Installation	Vibrations Casting
General Properties	
Max. service Temperature	1600° c
Maximum Grain Size	5mm
Water Required For Casting	10.6-11.8
Chemical Analysis %	Typical value
Al ₂ O ₃	56-60
Fe ₂ O ₃	1.00-1.25
CaO	4.00-4.70
Physical Properties	
Bulk Density	g/cc
After Drying At 110°C/24 Hrs	2.15-2.25
CCS, kg/cm ² After Drying At 110°C/24hrs	350-430
After Heating At 1100° C/3 hrs	180-280
After Heating At 1550°C/3hrs	350-500
% Retained On max. Size	0 - 5
Thermal Properties	
Refractoriness, Orton / °C	0.018419489
PLC%	
after heating at 1100° C / 3 hrs	-0.40 to + 0.20
after heating at 1550°C / 3 hrs	-1.20 to -2.40
packaging	25 kg bags
storage life	6 months
delivery state	dry

Castables

Firecrete (Super) 70%

Alumina Castable

We are engaged in providing high quality Firecrete (Super) 70% Alumina Castable to our clients. These castables are useful for forming strong joints and is used extensively in building material, metallurgy and petrochemical industries.

Product Type	Firecrete (Super)
Nature Of Bond	Hydraulic
Installation	Vibrations Casting
General Properties	
Max. service Temperature	1450° c
Maximum Grain Size	5mm
Water Required For Casting	10-11%
Chemical Analysis %	Typical value
Al ₂ O ₃	70.2
Fe ₂ O ₃	5.1
CaO	5.45
Physical Properties	
Bulk Density	g/cc
Afer Drying At 110c/24 Hrs	2.55
CCS, kg/cm ² After Drying At 110°C/24hrs	380
After Heating At 1100° C/3 hrs	250
After Heating At 1550°C/3hrs	430
% Retained On max. Size	0.8
Thermal Properties	
Refractoriness, Orton / °C	0.018419489
PLC%	
after heating at 1100° C / 3 hrs	-0.12
after heating at 1550°C / 3 hrs	-0.7
packaging	25 kg bags
storage life	9 months
delivery state	dry

Cement/Binders

High Alumina Binders (Calundum)

Product	Calundum
Type	Medium Purity 48% Alumina Cement
Packaging	25 Kg
Storage Life	9 Month
Delivery Stage	Dry

Chemical Analysis %

	Typical Value	Specification
Lol	0.5	-
Sio ₂	5.6	-
Fe ₂ O ₃	0.2	5.00max
TiO ₂	6.6	-
CaO	32.8	-
Al ₂ O ₃	49	48.00min
MgO	1	-

Physical Properties

CCS Kg /cm2 Of 1:3 Vibrated Mortar Using Standard Graded Sand	Typical Value	Specification
After 1 Day	400	380 Min
After 3 Day	470	450 Min
Specific Surface area, cm2/gm	3450	3400 Min
Setting Time, Min		
Initial	40	30 Min
Final	150	400 Max

Thermal Properties :

	Typical Value	Specification
Refractoriness, Orton /°sC	14/1398	13/14(1349/1398) min

Mortar

Product	Setting	Grading (mm)	Al ₂ O ₃ (%min)	Application
Crown - 70K	Air	0 - 0.2	70	Jointing Mortar For Plate & Nozzle
Crown - 95K	Air	0 - 0.2	90	Jointing Mortar For Plate & Nozzle
Crown - 95H	Air	0 - 4	94	Ramming Mass For Fixing Well Block

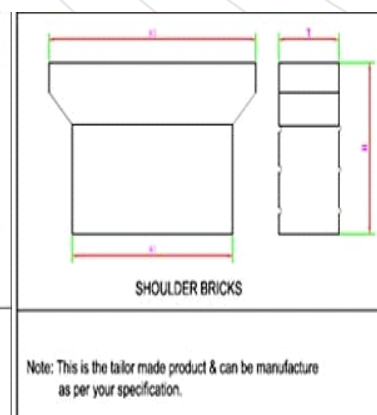
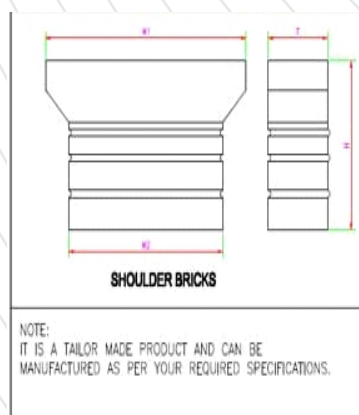
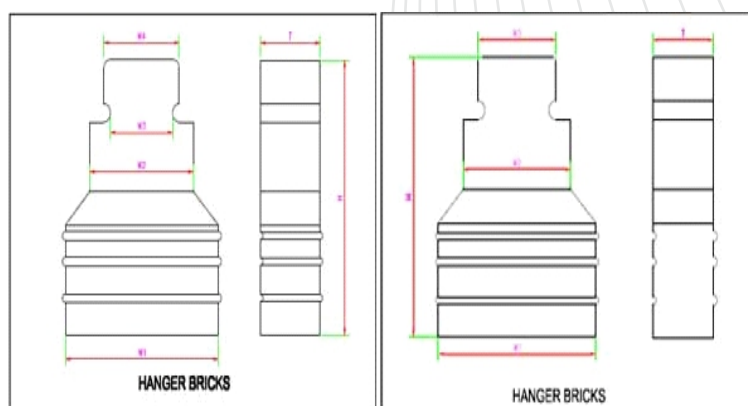


M O R T A R

Shoulder and Hanger Bricks

We manufacture High Alumina Hanger and Shoulder Bricks for reheating furnace roof. All known as roof sets. These bricks are easy to install and easy to maintain in longer run and make life of your roof easy.

Product	Al ₂ O ₃ % Min	Fe ₂ O ₃	PCE O.C. GM/cc min	B.D	A.P % Max.	Kg/cm ² ccs	RUL TA C MIN	PLC % MAX AT / 2 hrs
Crown - 40	40	2.2	32	2.1	23	250	1400	1400±1.0
Crown - 50b	50	2.5	35	2.3	22	350	1430	1450±1.0
Crown - 70b	70	3	36	2.65	23	400	1470	1600±0.3

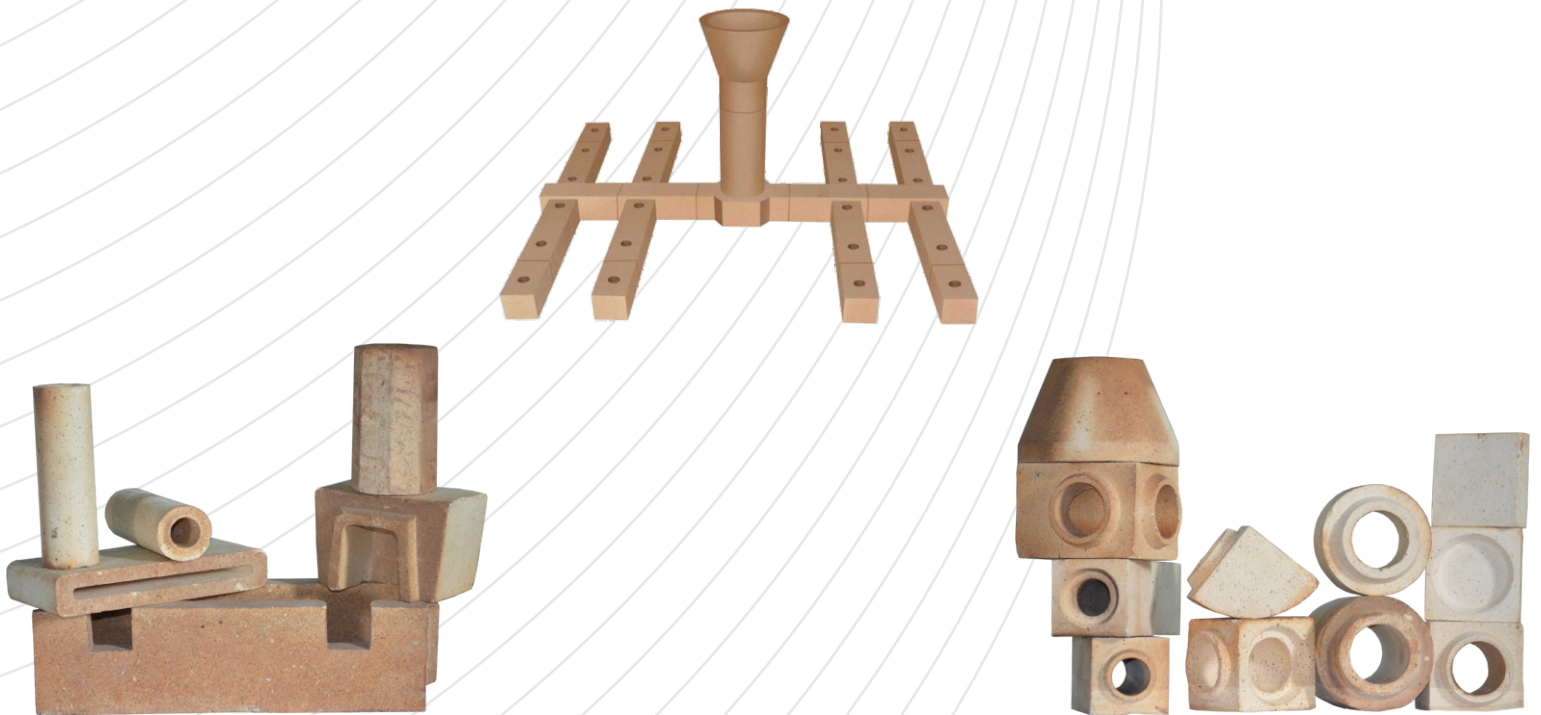


Bottom Pouring Sets (B.P. Sets) / Special Pouring Set

Bottom Pouring sets are of different sizes and different combinations, it is highly used for pouring melted Steel and Iron from the furnace to the moulds. It is difficult to mention all the physical and chemical specifications of this product because different furnaces have different shapes and due to which they need different types of B.P. Sets.

We Manufacture all types of Bottom Pouring sets. May it be American Gating finish, Normal IS6, High Alumina B.P. Sets, Burner Blocks, etc.

We also Manufacture B.P. Sets according to your drawings and your specification, have a well equipped with highly skilled work and pattern shop gives us the advantage to manufacture the best quality and precise Bottom Pouring sets.



Magnesite Bricks

High Alumina Bricks

We supply excellent quality Magnesite Bricks. This exclusive range of Magnesite Bricks is manufactured under the strict supervision of experts, to avoid any defect. These bricks are widely used in various industries. Our quality-tested Magnesite Bricks are widely acknowledged by the clients owing to their superior properties and efficient performance. These Magnesite Bricks are specially designed in order to meet various requirements of the clients. Our clients can avail our high quality range of Magnesite Bricks at affordable rates.

Sr. No.	Product	Mgo	Fe ₂ O ₃	Sio ₂	A. P.	CCS.. Kg/Cm ² Max.	R.U.L. Ta° c	PLC at 16000° C / 2hrs.	Application
1	Crown - MGN	85	-	6.5	22	400	1560	0.5	For Steel Plant, General Purpose Use
2	Crown - MGT	87	-	6	22	450	1600	0.5	For Steel Plant, BOF/eaf,, Copper Refineries
3	Crown MGD	92	0.5	3	16	1600	1620	0.5	Low Iron Dense Brick, Generator, Chemical Industry And Other Applications



Insulation Bricks

We offer our valuable clients a comprehensive collection of Insulation Bricks. Low weight, high solidity and low heat conductivity are the special features of insulation bricks that make them matchless in all perspectives. Light Weight Fire Insulating Bricks are being used in all types of furnaces, boilers etc. for heat insulation. We are capable of satisfying bulk requirements of our valued customers in a very economical way.

Sr. No.	Product	AL2O3 %MIN	Fe2O3 % max	B.d Gm/cc	AP % Max.	CCS Kg/cm ₂	Thermal Conductivity at 600°C mean temp W/MK	Refractoriness Orton	Service Temp.	PCE
1	Maithan-LW	30	2.5	1.1	55	30	0.45	30	1200	-
2	Maithan-CFI	30	2.5	0.8	65	15	0.35	30	1250	-
3	Maithan - HFI	30	2.5	0.9	60	20	0.4	30	1300	-
4	Maithan-HFK	40	2.5	1.1	55	40	0.5	32	1400	-
5	Maithan-P100	40	1.5	1	60	40	0.4	32	1450	-
6	Crown-CFI	28	2	0.8	70	15	0.19	28	1100	-
7	Crown-HFI	35	2	1.1	60	40	0.3	30	1300	-
8	Crown-MICA500	-	-	0.5	80	7	0.14	-	1000	-
9	CrownMICA600	-	-	0.65	75	9	0.16	-	1050	-
10	ACINSI110	20	2	1	60	25	0.25	-	1100	20
11	ACINSI135	30	2	1.1	60	25	0.3	-	1350	29
12	ACINSI140	40	2	1	60	25	0.3	-	1400	30
13	Porosint1550	60	1	1.1	-	30	0.4	-	1550	37
14	Prosin1650	70	0.8	1.2	-	40	0.45	-	1650	37

** According to Indian Standard



INSULATING FIRE BRICKS (IFB)

Insulation firebricks have low thermal conductivity and low heat storage properties. They may be used as the hot face layer or as backing insulation for dense bricks. Range from Grade 23 to Grade 30.

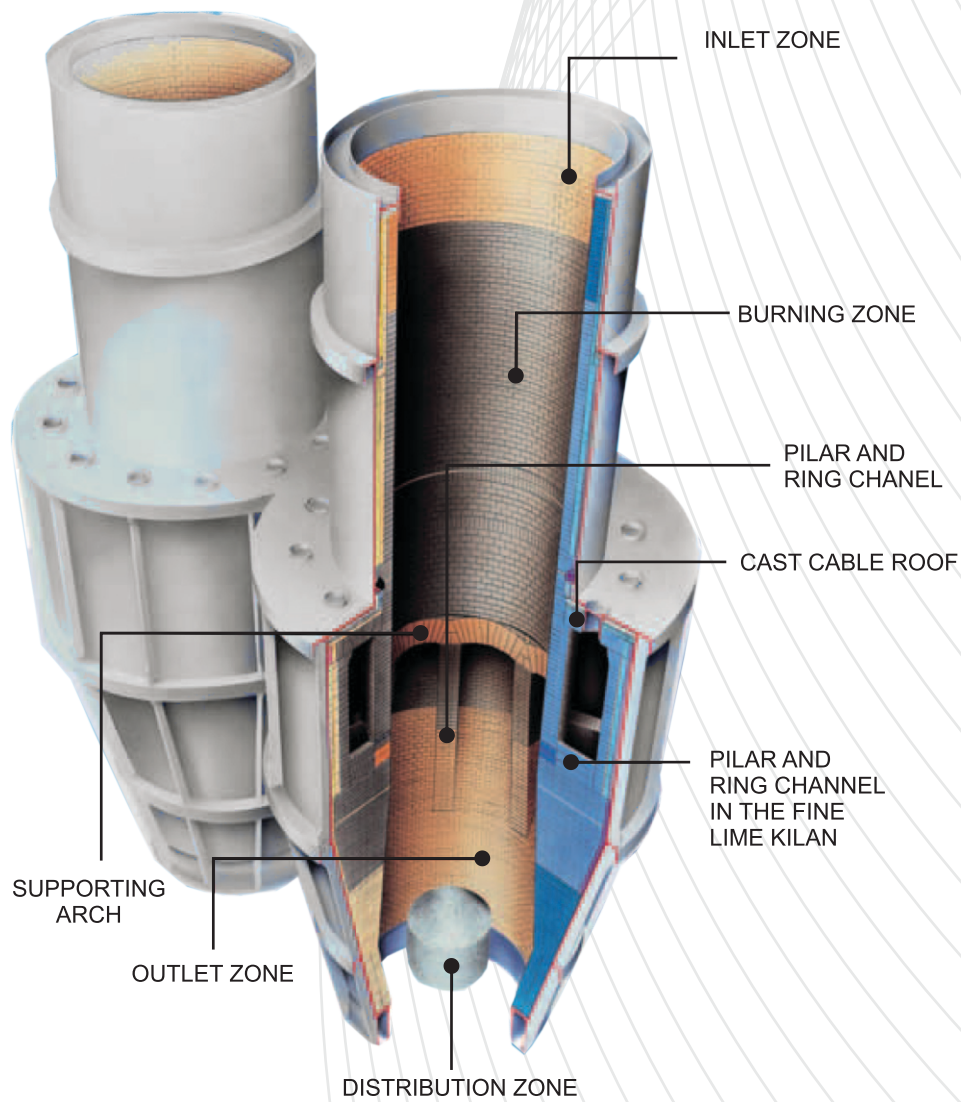
Classification Temperature		IFB 23	IFB 26	IFB 28	IFB 30	
Clasificación de Temperatura		1260 °C	1430 °C	1540 °C	1650 °C	
Klassifizierung Temperatur		2300 °F	2600 °F	2800 °F	3000 °F	
Température de classification						
Temperatura klasyfikacyjna						
Colour						
Color		White	White	White	White	
Farbe						
Couleur						
Kolor						
Chemical Analysis (%)						
Composición química						
Chemische Analyse						
Composition chimique						
Skład Chemiczny						
		Al ₂ O ₃	38.0	57.0	62.0	72.0
		SiO ₂	43.0	39.0	37.0	26.0
		ZrO ₂	-	-	-	-
		Fe ₂ O ₃	0.9	0.7	0.6	0.5
		Cr ₂ O ₃	-	-	-	-
		TiO ₂	1.2	0.1	0.1	0.1
		CaO	15.2	0.1	0.1	-
		MgO	0.3	0.2	0.1	-
Bulk Density						
Densidad aparente		kg/m ³	600	800	900	1000
Rohdichte						
Masse volumique aparente		lb/ft ³	37.50	50	56.20	62.40
Gęstość pozorna						
Cold Crushing Strength (MPa)						
Resistencia a la compresión			1.20	1.60	2.10	2.20
Kaltdruckfestigkeit						
Résistance à la pression						
Wytrzymałość na ściskanie						
Thermal Conductivity (W/mK)						
Conductividad térmica		600°C / 1110°F	0.14	0.27	0.32	0.39
Wärmeleitfähigkeit		1000°C / 1830°F	0.19	0.33	0.36	0.41
Conductivité thermique						
Przewodność cieplna						
Permanent Linear Change		(3h) 1260°C / 2300 °F	<0.6	-	-	-
Combio lineal permanente		(3h) 1370°C / 2500 °F	-	<0.6	-	-
Lineare Schwindung nach 3 Stunden		(3h) 1470°C / 2670 °F	-	-	<0.8	-
Retrait linéaire continue après la cuisson de 3 heures		(3h) 1530°C / 2780 °F	-	-	-	<0.8
Stały skurcz liniowy po wypalaniu 3 godz.						

** According
to British Standard

Ceramic FiberBlankets

We offer Ceramic Fiber Blankets, which is made of special ceramic long-fiber that is produced by the melting of very pure raw materials in double surface needling process with out binders and with good stability in a large range of temperature. The process of double surface needling increase interweaving and tensile strength. Its unique fiber layup and needling process provide Ceramic Fibre Blanket with outstanding consistency, handling strength and resiliency at elevated temperatures.

Fiberfrax Product Properties	Blankets, Durablanket Z, Durablanket 5
Maximum use/Grade Temp., °C	1425, 1260
Dimensions, mm unless stated	Width 610, Length 7620 Other sizes on request
Thickness, mm Density, kg/m ³ (lbs/cutt)	6, 13, 19, 25, 38 & 50, 64, 96, 128 & 160(4,6,8 & 10)
Thermal Conductivity at min temp. of 550°C, w/rek (btu-in/hrft ² °F)	0.11 (0.76) for 128 kg/ m, 0.13 (0.9) for 96 kg/m ³
Application Notes	<p>The test data shown are based on average results of control tests and are subject to normal variation on individual tests.</p> <p>Maximum use temperature is indicative. It is dependent of fuel, atmosphere and other service factors.</p> <p>High temp. pipe, duct & reformers, kilns, turbine insulation, Heat Treatment furnaces. Reheating furnaces, Soaking pit cover sealing, Kilns & Kiln cars insulation & seals. Over & stack linings, Boilers, Exhaust duct & Air preheater insulation. Fire Protection.</p>



Standard H.A.



Hanger





CROWN CERAMICS

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