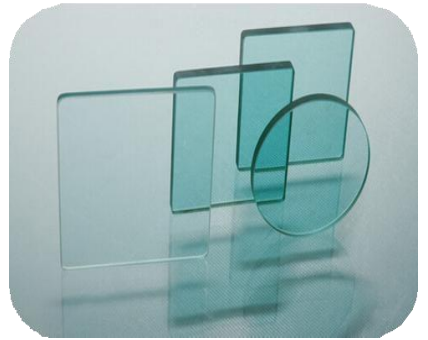


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Ceramic Fiber Blanket

1600 Ceramic Fibre Blanket

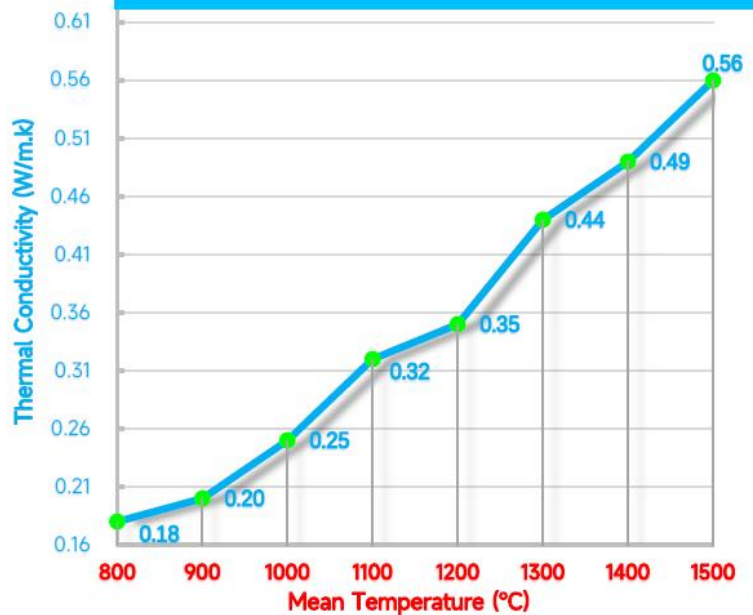
Polycrystalline mullite (PCW) fibre Blanket made by colloid chemistry method. The Al₂O₃ content reach up to 72%, with high refractoriness, high tensile and fibre strength, excellent heat resistance and high fibre strength. Without any organic binder. Double needled for exceptional strength and flexibility for applications up to 2912°F (1600°C) in oxidizing, reducing and chemically aggressing atmospheres.

Characteristics

- Very low shrinkage
- Excellent resistance to Alkali and chemical attack
- Double needled blanket
- Low thermal conductivity
- Very low shrinkage and heat storage
- Quickly heat up and cool down
- Excellent chemical and thermal stability
- Excellent tensile strength
- Resilience and resistance to thermal shock
- Flexible and easy to cut or install
- Without organic binder and Asbestos free
- Excellent resiliency and compression resistance

Application

- Wall lining and back lining of industrial furnaces
- Hot pressing apparatus
- Heat treatment temperature control equipment
- Glass furnace and ceramics kiln linings
- Furnace door seals, expansion joint seals
- Duct linings and pipe insulations
- Insulation of crystal furnace
- Insulation of the roller of heating furnaces
- Insulation of petrochemical heating furnaces
- Steel industry reheat furnaces. Steel ladle cover
- Materials for hot filtration
- Catalytic Converter



Product Grade

 1600 Ceramic Fiber
 Blanket (PCW)

Density	kg/m ³	130
Chemical Composition		
Alumina, Al ₂ O ₃	%	72
Silica, SiO ₂	%	28
Thermal Shrinkage (1500°Cx24h)	%	0.7
Specific Heat	kJ/(kg - K)	1.17
Size	mm	Length* Width* Thickness 3600*610*12.5/7200*610*12.5 3600*610*25/7200*610*25



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Ceramic Fiber Board

Ceramic Fibre Board

Ceramic fibre board is made of aluminium silicate refractory fibre (ceramic fibre bulk) which is processed into board by mixing, vacuum formed and heat treatment, with good mechanical strength and high temperature resistance. It has organic or inorganic type. Used as thermal lining and back lining insulation material for all kinds of kilns and furnace. It has excellent performance in high temperature applications.

1600/1700/1800/1800H/1900 Ceramic Fibre Board (PCW)

1600/1700/1800 Board made from polycrystalline mullite fibre
1800H/1900 Board made from polycrystalline alumina fibre (Al₂O₃+SiO₂), After high temperature calcination treatment, it has excellent thermal insulating properties and good thermal shock resistance. Without any smoke. Used as hot face lining and backup lining under high temperature. It widely used for muffle furnace, lab furnace, crystal growth furnace, ceramics furnace, sintering furnace, melting furnace and other high temperature furnace. PCW Board can be continuous use temperature from 1300° to 1750°C.



Characteristic

- Smooth surface and Lightweight
- Low impurity, even bulk density and thickness
- Excellent mechanical strength and structural strength
- Strong compressive strength
- Low thermal conductivity and Low shrinkage
- Resistant airspeed eroding
- High plasticity to make complex shape
- Lightweight and easy to cut or install
- Good erosion resistance
- Shorter heat up and cool down time
- Light weight
- Non Asbestos

Application

- Heat insulation for back lining of industrial furnace
- Hot surfaces of industrial furnaces, electric furnaces, heat treatment furnace, metallurgical heat furnace
- Combustion chamber construction
- Ceramic industry (kiln linings, kiln car insulation)
- Glass industry
- (Glass tank wall, side, end wall and port neck insulation)
- Ducts insulation
- As heat shields and insulation for furnace door
- Back up in steel ladle and torpedo cars
- Flue and chimney linings
- As a non-combustible material for building structures

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Technical Data (1600/1700/1800/1800H/1900 Board (PCW))					
Products Grade	1600 Board	1700 Board	1800 Board	1800M Board	1900M Board
Polycrystalline Mullite Fibre	Yes	Yes	Yes	No	No
Polycrystalline Alumina Fibre	No	No	No	Yes	Yes
Product Properties					
Colour	White	White	White	White	White
Type					
Classification Temp.	1600°C	1700°C	1800°C	1800°C	1900°C
Melting Point	1760°C	1760°C	1760°C	1760°C	1760°C
	≤1350°C (350kg/m3) Density	≤1450°C (400kg/m3) Density	≤1600°C (500kg/m3) Density	≤1700°C (400kg/m3) Density	≤1750°C (700kg/m3) Density
Recommended Continuous	≤1400°C (400kg/m3) Density	≤1500°C (450kg/m3) Density	≤1650°C (550kg/m3) Density		
Service Temperature	≤1450°C (450kg/m3) Density	≤1550°C (500kg/m3) Density			
Density	1600 Board	1700 Board	1800 Board	1800M Board	1900M Board
	350kg/m3 400kg/m3 450kg/m3	400kg/m3 450kg/m3 500kg/m3	500kg/m3 550kg/m3	400kg/m3	700kg/m3
Compressive Strength	≥0.4Mpa	≥0.5Mpa	≥0.6Mpa	≥0.6Mpa	≥0.8Mpa
Modulus of Rupture	≥0.7Mpa (350kg/m3) Density	≥1.2Mpa (400kg/m3) Density	≥1.7Mpa (500kg/m3) Density	≥1.4Mpa (400kg/m3) Density	≥3Mpa (700kg/m3) Density
Chemical Composition					
Alumina, Al ₂ O ₃	≥68%	≥80%	≥85%	≥75%	≥87%
Silica, SiO ₂	≥31%	≥19%	≥14%	≥24%	≥12%
Thermal Conductivity					
800°C	0.14W/m.k	0.14W/m.k	0.21W/m.k	0.16W/m.k	0.25W/m.k
Dimensions					
Thickness	LxWxH				
25mm	1000x600x25mm				
40mm	1000x600x40mm				
50mm	1000x600x50mm				
75mm	1000x600x75mm				
100mm	1000x600x100mm				
*Special sizes and density can be customized according to minimum order requirements					

Reliable Energy Saving Thermal Insulation Technology Partner

Ceramic Fiber Module

Ceramic Fibre Module

Ceramic fibre Modules are manufactured from ceramic fibre blanket to provide stacked or folded etc. These prefabricated anchored modules are specifically designed to meet the thermal insulation requirements of industrial furnaces, kilns and heaters.

Ceramic fibre Module adopt pre-compression type in the production, which can compensate the linear shrinkage of ceramic fibre modules and back lining insulation layer at high temperature. Add the service life of furnace and reduces the transfer of heat to the cold face. It has the excellent anti-wind corrosion performance. Moreover, it is simple to install and convenient to repair, and the production can be quickly resumed.

1260 Ceramic Fibre Module (ST)

1260 Module ST produced from 1260 Blanket ST— natural alumina-silica fire clay ($Al_2O_3+SiO_2$). It to meet a wide range of hot face insulation applications. (Recommended continuous use $\leq 1000^\circ C$)

1260 Ceramic Fibre Module (HP)

1260 Module HP produced from 1260 Blanket HP— high purity synthetic material ($Al_2O_3+SiO_2$), It to meet a wide range of hot face insulation applications. (Recommended continuous use $\leq 1100^\circ C$)

1300 Ceramic Fibre Module (HA)

1300 Module increases the content of aluminium oxide, raise the service temperature and resistance to effect of heat , produced from 1300 Blanket HA and the main chemical components are still ($Al_2O_3+SiO_2$), It to meet a wide range of hot face insulation applications. (Recommended continuous use $\leq 1200^\circ C$)

1350 Ceramic Fibre Module (LZ)

1350 Module LZ add 5~7% zirconia .It made from 1350 Blanket LZ— high-purity alumina, zirconia, and silica spun ceramic fibres ($Al_2O_3+SiO_2+ZrO_2$), raise the service temperature. Recommended continuous use ($\leq 1250^\circ C$)



1430 Ceramic Fibre Module (HZ)

1430 Module HZ made from 1430 Blanket HZ— high-purity alumina, zirconia oxide, and silica spun ceramic fibres ($Al_2O_3+SiO_2+ZrO_2$), increase zirconia up to 15~17%, raise the service temperature with low thermal conductivity and low shrinkage. It is used as hot face insulation under high temperature. (Recommended continuous use $\leq 1300^\circ C$)

1500 Ceramic Fibre Module (CR)

1500 Module CR made from 1500 blanket CR— high-purity alumina, Chromium Oxide, and silica spun ceramic fibres ($Al_2O_3+SiO_2+Cr_2O_3$), Chromium Oxide content 1.8~3%, raise service temperature with low thermal conductivity and low shrinkage. It is used as hot face lining under high temperature. (Recommended continuous use $\leq 1350^\circ C$)

1600 Ceramic Fibre Module (PCW)

1600 Module PCW made from 1600 Blanket PCW— polycrystalline mullite fibre by sol-gel method technology. The alumina content reached 72%, main chemical components ($Al_2O_3+SiO_2$), It have extremely low impurity content, low shrinkage, low porosity and high strength. Usually used as hot face lining. Max working temperature $1600^\circ C$. (Recommended continuous use $\leq 1500^\circ C$)

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CF Module - Characteristics

- Low thermal conductivity & heat storage
- High temperature stability
- Resistance to thermal shock & chemical attack
- To be secured by concealed anchor
- Resistance to gas flow erosion
- Quickly heat up and cool down
- Flexible and easy to cut or install
- Make up the shrinkage and improve heat insulation
- Lightweight & Asbestos free

CF Module - Application

- Hot face insulation of industrial furnaces
- Insulation of furnace lining in petrochemical industry (Heating, Reformer, Cracking Furnace)
- Insulation of furnace lining in metallurgy industry
- Insulation in ceramics Shuttle kilns, Tunnel kilns
- Insulation for furnace lining in glass industry
- Insulation of Heat treatment furnace
- Iron and steel industry: Reheating furnace, Multi and single stack coil annealing furnaces, Transfer ladle lid
- Waste heat recovery units, Combustion Chambers, Boiler ductwork

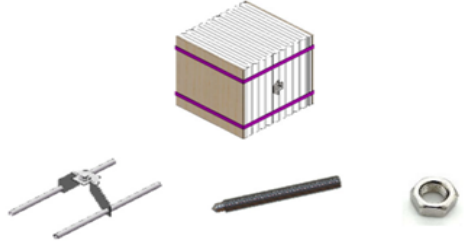
Product Grade		1260	1260	1300	1350	1430	1500	1600
		Module	Module	Module	Module	Module	Module	Module
		(ST)	(HP)	(HA)	(LZ)	(HZ)	(CR)	(PCW)
Product Properties								
Colour		white	white	white	white	white	blue/green	white
Classification Temperature	°C	1260	1260	1300	1350	1430	1500	1600
Recommended Continuous Service Temperature	°C	≤1000	≤1100	≤1200	≤1250	≤1300	≤1350	≤1500
Melting point	°C	1760	1760	1760	1760	1760	1760	1760
Fibre Diameter	µm	2.5~3.5	2.5~3.5	2.5~3.5	2.5~3.5	2.5~3.5	2.5~3.5	3~5
Density	kg/m ³	160	160	192	192	192	192	192
		192	192	210	210	210	210	210
		210	210	220	220	220	220	220
		220	220	240	240	240	240	240
Chemical Composition								
Alumina, Al ₂ O ₃	%	42~43	44~47	51~53	43~45	33~35	41~43	72
Silica, SiO ₂	%	≥53	≥54	≥48	≥47	≥49	≥54	≥27
Zirconia, ZrO ₂	%	-	-	-	≥5	≥15	-	-
Chromium oxide, Cr ₂ O ₃	%	-	-	-	-	-	≥1.8	-
Thermal Conductivity								
(Density in 160kg/m ³)								
400°C	W/m.k	0.14	0.12	0.14	0.13	0.12	0.11	0.08
600°C	W/m.k	0.20	0.16	0.20	0.19	0.19	0.16	0.13
800°C	W/m.k	0.27	0.23	0.29	0.28	0.27	0.23	0.18
1000°C	W/m.k	0.38	0.31	0.41	0.37	0.36	0.31	0.26
1200°C	W/m.k	-	-	0.51	0.50	0.48	0.45	0.36
Linear shrinkage								
(°Cx24H)	%	≤2	≤2	≤2	≤2	≤2	≤2	≤1.0
		(1100°C)	(1150°C)	(1200°C)	(1250°C)	(1300°C)	(1350°C)	(1500°C)
Dimensions								
	mm		Length		Width (Compress)		Thickness	
			300/600/900/1200		300		150/200/250/300	

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- Special sizes and shapes can be customized according to drawings

Shape Type

Fold Type



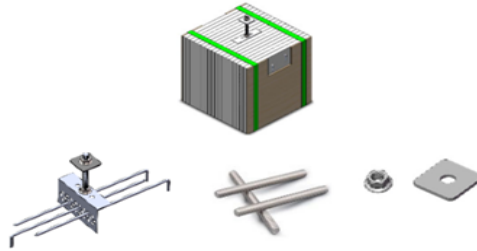
M Anchor

Bolt

Nut

- Metal Bolt need be welded

Stack Type



T Anchor & Pin

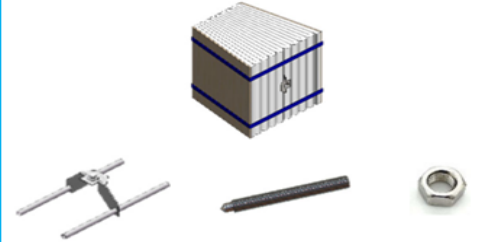
Rod

Nut

Washer

- hang-type installation need not be welded

Reducer Type



M Anchor

Bolt

Nut

- Metal Bolt need be welded

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Ceramic Fiber Module

Shape and Size

