

## CCEWOOL® Low Biopersistent Fiber Board 2192



Temperature grade 1200°C (2192°F)  
CCEWOOL® Low Biopersistent Fiber Board 2192 is a soluble fiber board made from a mixture of organic and inorganic binders, with a very low Fe<sub>2</sub>O<sub>3</sub> content. Our CCEWOOL® Low Biopersistent Fiber boards can come into direct contact with fire and can be cut into various sizes according to customer requirements. It

has an extremely low thermal conductivity, low heat storage capacity, and excellent resistance to thermal shock, making it suitable for applications with large temperature variations.

### Characteristics:

Low thermal conductivity;  
Low thermal storage;  
High tensile strength;  
Thermal shock resistance;  
Lightweight;  
Excellent corrosion resistance.

### Application:

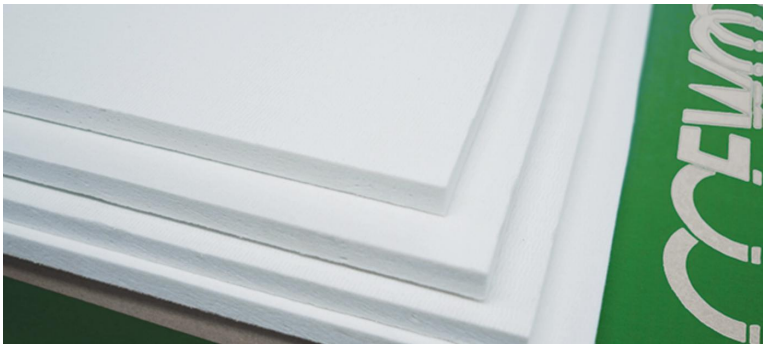
Hot face lining for furnace and oven;  
Flue & chimney linings in furnaces & kilns;  
Insulating backup for these products:  
- Fire brick  
- Insulating brick  
- Refractory castable;  
Insulation for electric appliance and heat treatment.

### TDS

CCEWOOL® Low Biopersistent Fiber Board 2192	
Classification Temperature (°C )	1200°C(2192°F)
Color	Light Bluish
Density (kg/m <sup>3</sup> )	300
Modules of Rupture (MPa)	≥0.25
Compressive Strength (MPa, 10% relative deformation)	0.15
Loss of Ignition (%)	≤7

Permanent Linear Shrinkage (%)	1100 °C x 24h ≤2.0
Thermal Conductivity (W/m·K)	
200 °C	0.05
400 °C	0.08
600 °C	0.10
800 °C	0.12
1000 °C	0.14

## CCEWOOL® Low Biopersistent Fiber Board 2372



Temperature grade 1300 °C (2372 °F) CCEWOOL® Low Biopersistent Fiber Board 2372 is the latest development in soluble fiber products, made from a blend of soluble fiber cotton, organic, and inorganic binders, forming a hard board. In use, Low Biopersistent Fiber Board maintains high compressive strength and low thermal conductivity,

with physical properties remaining stable. It can withstand temperatures up to 1300 °C (2372 °F), providing stability to the entire refractory lining system. CCEWOOL® Low Biopersistent Fiber Board 2372 exhibits excellent chemical stability and can resist attack from most acids and corrosive agents, except hydrofluoric acid, phosphoric acid, and concentrated alkalis.

### Characteristics:

- High temperature stability;
- Low thermal conductivity;
- Resistance to thermal shock;
- Good handling strength;
- Easy to cut with standard tools.

### Application:

- Hot gas duct linings;
- Rigid high temperature gaskets and seals;
- Heat shields;
- Shapes for domestic appliances;
- Molten metal transfer systems.



**TDS**

<b>CCEWOOL® Low Biopersistent Fiber Board 2372</b>	
Classification Temperature (°C )	1300°C(2372°F)
Color	Light Bluish
Density (kg/m³)	300
Modules of Rupture (MPa)	≥0.25
Compressive Strength (MPa, 10% relative deformation)	0.15
Loss of Ignition (%)	≤7
Permanent Linear Shrinkage (%)	1260°C x 24h ≤2.0
Thermal Conductivity (W/m·K)	
200°C	0.05
400°C	0.07
600°C	0.10
800°C	0.11
1000°C	0.14

**CCEWOOL® Ceramic Fiber Board DB**



Temperature Grade 1100°C (2012°F)

CCEWOOL® Ceramic Fiber Board DB is a refractory ceramic fiber backboard made primarily from alumina-silica fiber , natural refractory materials, and a small amount of organic binders. It is processed using a fully automated continuous production line. The product has a high fiber content and features characteristics such as high-temperature resistance, lightweight, and thermal shock resistance. It can be used in various applications,

including industrial kiln and furnace lining, wall lining, lining materials, insulation for electric heating furnaces, ceramic shuttle kilns, tunnel kilns, and roller kilns, providing strong support for energy saving, consumption reduction, high quality, and high yield in kilns.

**Characteristics:**

- Low heat capacity, low thermal conductivity;
- High compressive strength;
- Non-brittle material, good elasticity;
- Accurate sizes and good flatness
- Easily molded or cut, easy to install



Continuous production, even fiber distribution and stable performance;  
Excellent thermal stability and thermal shock resistance.

**Applications:**

Backing insulation for kilns in the cement and building materials industry;  
Backing insulation for various kilns in the ceramics industry;  
Backing, wall lining, and insulation for kilns in the petrochemical and metallurgical industries;  
Wall lining and backing insulation for glass kilns;  
Backing insulation for heat treatment kilns;  
Refractory brick backing for aluminum reduction cells in aluminum plants;  
Wall lining and backing materials for high-temperature reactors and heating equipment.

**TDS**

<b>CCEWOOL® Ceramic Fiber Board DB</b>	
Classification temperature	1100°C (2012°F)
Operation Temp(°C)(°F)	950°C (1742°F)
Permanent Linear Change on Heating (%)	
@950C,24hrs	4
@1200C,24hrs	-
@1300C,24hrs	-
@1350C,24hrs	-
Thermal Conductivity (w/m.k)	
600 °C	0.13
800 °C	0.2
1000 °C	-
Rupture Strength (Mpa)	
Thickness≤25mm	0.5
Thickness> 25mm	0.2
Chemical Composition (%)	
Al <sub>2</sub> O <sub>3</sub>	≥43
SiO <sub>2</sub>	≥52
ZrO <sub>2</sub>	-
Package	Carton box or pallet

<b>CCEWOOL® Ceramic Fiber Board DB</b>	
Thickness (mm)	20.25.50.80.100 (0.8",1",2",3",4")
Size (mm)	1200*1000 (47"*40") or customized size

## CCEWOOL® Ceramic Fiber Board LD



Temperature Grade 1260°C (2300°F)

CCEWOOL® Ceramic Fiber Board LD is made from high-purity alumina-silicate fibers with a certain proportion of binders added. It is manufactured through processes such as pressing, curing, shaping, longitudinal and transverse cutting, and vacuum molding. It features a uniform structure, excellent thermal and acoustic insulation properties, low thermal

conductivity, low heat capacity, high compressive strength, precise dimensions, good flatness, ease of mechanical processing, and installation. These characteristics make it ideal for use as a core material or sandwich material in the manufacturing of components where aesthetics, quality, uniformity, and performance are crucial. CCEWOOL® Ceramic Fiber Board LD is produced through a fully automatic vacuum molding process, operating continuously for 24 hours, resulting in improved compressive strength. The surface of CCEWOOL® Ceramic Fiber Board LD is flat, and it is available in various standard thicknesses for selection.

### Characteristics:

- Low heat capacity, low thermal conductivity;
- Non-brittle material, good elasticity;
- High compressive strength;
- Excellent wind-erosion resistance, long service life;
- Excellent thermal stability and thermal shock resistance;
- Continuous production, even fiber distribution and stable performance;
- Good sound insulation;
- Good anti-stripping properties;
- Easily molded or cut, easy to install;
- Accurate sizes and good flatness.

### Application:

- refractory lining;
- Insulating backup to dense refractory materials;
- Insulating backup to brick & castable;
- Furnace hot face lining in ceramic kiln, box furnace & petrochemical furnace;
- Use in industrial heat processing equipment;
- Rigid high-temperature gaskets & seals;
- High-temperature baffles & muffles;
- Flue & chimney linings in furnaces & kilns;
- Molten metal trough covers;



Hot gas duct linings;  
Expansion joints;  
Industrial heat shields & thermal barriers;  
Industrial combustion chamber construction;  
Domestic appliance & light-duty industrial combustion chamber construction.

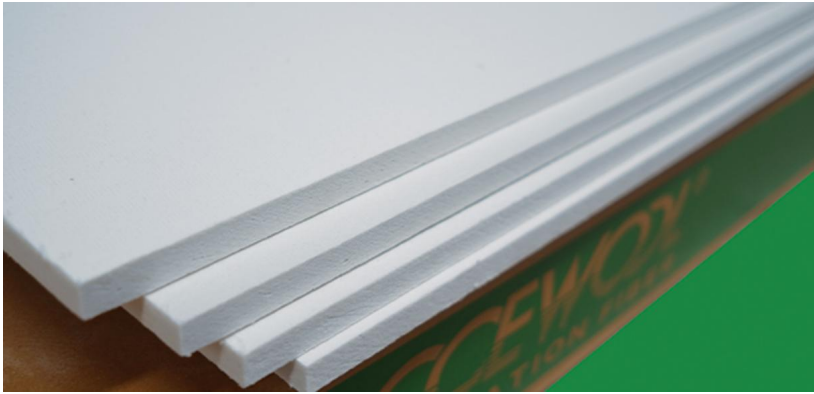
**TDS**

<b>CCEWOOL® Ceramic Fiber Board LD</b>	
Classification Temperature (°C)(°F)	1260°C(2300°F)
Operation Temp(°C)(°F)	1050°C(1922°F)
Color	white
Permanent Linear Change on Heating (%)	
@950C,24hrs	-
@1200C,24hrs	3
@1300C,24hrs	-
@1350C,24hrs	-
Thermal Conductivity (w/m.k)	
600°C	-
800°C	0.13
1000°C	0.19
Rupture Strength (Mpa)	
Thickness≤25mm	0.5
Thickness > 25mm	0.2
Chemical Composition (%)	
Al <sub>2</sub> O <sub>3</sub>	≥44
SiO <sub>2</sub>	≥52
ZrO <sub>2</sub>	-
Package	Carton box or pallet

<b>CCEWOOL® Ceramic Fiber Board LD</b>	
Thickness (mm)	20.25.50.80.100 (0.8",1",2",3",4")
Size (mm)	1200*1000 (47"*40") or customized size



## CCEWOOL® Ceramic Fiber Board MD



Temperature Grade 1260°C (2300°F)  
CCEWOOL® Ceramic Fiber Board MD is produced from high-purity alumina-silicate fibers with a certain proportion of inorganic or organic binders added. It is manufactured through processes such as pressing, curing, shaping, longitudinal and transverse cutting, resulting in a rigid board with outstanding performance.

CCEWOOL® Ceramic Fiber Board MD is designed to meet the demanding requirements of modern industry, offering high strength and rigidity while exhibiting excellent insulation properties and high-temperature stability. The surface of CCEWOOL® Ceramic Fiber Board MD is flat, and it is available in various standard thicknesses for selection.

### **Characteristics:**

- Low heat capacity, low thermal conductivity;
- Non-brittle material, good elasticity;
- High compressive strength;
- Excellent wind-erosion resistance, long service life;
- Excellent thermal stability and thermal shock resistance;
- Continuous production, even fiber distribution and stable performance;
- Good sound insulation;
- Good anti-stripping properties;
- Easily molded or cut, easy to install;
- Accurate sizes and good flatness.

### **Application:**

- High temperature kiln and furnace linings;
- Rigid high temperature gaskets and seals;
- Heat shields;
- Gas boiler combustion chamber linings;
- Furnace hot face lining in ceramic kiln, box furnace & petrochemical furnace;
- Use in industrial heat processing equipment;
- High-temperature baffles & muffles;
- Flue & chimney linings in furnaces & kilns;
- Industrial heat shields & thermal barriers.

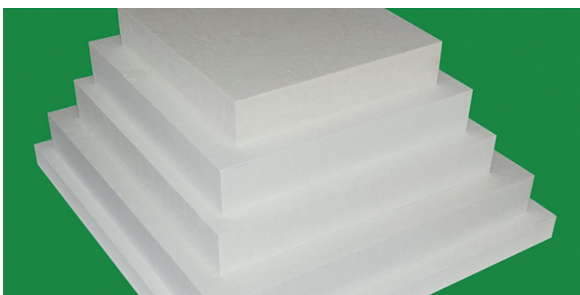


TDS

<b>CCEWOOL® Ceramic Fiber Board MD</b>	
Classification Temperature (°C)(°F)	1260°C (2300°F)
Operation Temp(°C)(°F)	1050°C (1922°F)
Color	white
Permanent Linear Change on Heating (%)	
@950C,24hrs	-
@1200C,24hrs	3
@1300C,24hrs	-
@1350C,24hrs	-
Thermal Conductivity (w/m.k)	
600°C	-
800°C	0.13
1000°C	0.19
Rupture Strength (Mpa)	
Thickness≤25mm	0.5
Thickness>25mm	0.2
Chemical Composition (%)	
Al <sub>2</sub> O <sub>3</sub>	≥44
SiO <sub>2</sub>	≥52
ZrO <sub>2</sub>	-
Package	Carton box or pallet

<b>CCEWOOL® Ceramic Fiber Board MD</b>	
Thickness (mm)	20.25.50.80.100 (0.8",1",2",3",4")
Size (mm)	1200*1000 (47"*40") or customized size

**CCEWOOL® Ceramic Fiber Board HD**



Temperature Grade 1260°C (2300°F)

CCEWOOL® Ceramic Fiber Board HD insulation material is a high-density board product made primarily from alumina-silicate fibers with the addition of binders. This product has a tough texture, excellent self-supporting strength, and compressive strength, making it highly resistant to the impact of molten metals. The compressive



strength of CCEWOOL® Ceramic Fiber Board HD is more than ten times that of typical refractory ceramic fiber boards. It is a high-strength fiberboard available in various standard thicknesses for selection.

**Characteristics:**

- Low heat capacity, low thermal conductivity;
- Non-brittle material, good elasticity;
- High compressive strength;
- Excellent wind-erosion resistance, long service life;
- Excellent thermal stability and thermal shock resistance;
- Continuous production, even fiber distribution and stable performance;
- Good sound insulation;
- Good anti-stripping properties;
- Easily molded or cut, easy to install;
- Accurate sizes and good flatness.

**Application:**

- Full thickness refractory lining;
- Insulating backup to dense refractories;
- Insulating backup to brick & castable;
- Furnace hot face lining in ceramic kiln, box furnace & petrochemical furnace;
- Board over blanket hot face lining;
- Rigid high-temperature gaskets & seals;
- High-temperature baffles & muffles;
- Flue & chimney linings in furnaces & kilns;
- Infrared element supports;
- Glass tank side & end wall & port neck insulation;
- Trough linings for conveying molten metals;
- Molten metal trough covers;
- Thermal insulation where high velocities are encountered;
- Heat shields for personnel protection;
- Hot gas duct linings;
- Low- & high-temperature dryers;
- Pouring forms for castable;
- Expansion joints.

**TDS**

<b>CCEWOOL® Ceramic Fiber Board HD</b>	
Classification Temperature (°C)(°F)	1260°C (2300°F)
Operation Temp(°C)(°F)	1050°C (1922°F)
Color	white
Permanent Linear Change on Heating (%)	
@950C,24hrs	-

	@1200C,24hrs	3
	@1300C,24hrs	-
	@1350C,24hrs	-
Thermal Conductivity (w/m.k)		
	600℃	-
	800℃	0.13
	1000℃	0.19
Rupture Strength (Mpa)		
	Thickness≤25mm	0.5
	Thickness>25mm	0.2
Chemical Composition (%)		
	Al <sub>2</sub> O <sub>3</sub>	≥44
	SiO <sub>2</sub>	≥52
	ZrO <sub>2</sub>	-
Package		Carton box or pallet

<b>CCEWOOL® Ceramic Fiber Board HD</b>	
Thickness (mm)	20.25.50.80.100 (0.8",1",2",3",4")
Size (mm)	1200*1000 (47"*40") or customized size

## CCEWOOL® Ceramic Fiber Board RG



### Temperature Grade

1260℃(2300°F)

CCEWOOL® Ceramic Fiber Board RG insulation material is an economical and efficient insulation board. The surface of the board is coated with a hardening agent, which, after drying, provides the board with rigid characteristics. It is suitable for applications that require rigid strength in the product. This material offers high resistance to

fracture, compressive strength, wear resistance, and resistance to thermal gas erosion.

CCEWOOL® Ceramic Fiber Board RG insulation material is ideal for use as an alternative material for dense refractories (such as refractories used in the glass industry) and can also be used as a thermal

protection layer for blanket linings. The rigid surface helps suppress dust during installation and operation. Various standard thicknesses are available for selection.

**Characteristics:**

Low heat capacity, low thermal conductivity;  
Non-brittle material, good elasticity;  
High compressive strength;  
Excellent wind-erosion resistance, long service life;  
Excellent thermal stability and thermal shock resistance;  
Continuous production, even fiber distribution and stable performance;  
Good sound insulation;  
Good anti-stripping properties;  
Easily molded or cut, easy to install;  
Accurate sizes and good flatness.

**Application:**

Full thickness refractory lining;  
Insulating backup to dense refractories;  
Insulating backup to brick & castable;  
Furnace hot face lining in ceramic kiln, box furnace & petrochemical furnace;  
Board over blanket hot face lining;  
Use in industrial heat processing equipment;  
Rigid high-temperature gaskets & seals;  
High-temperature baffles & muffles;  
Flue & chimney linings in furnaces & kilns;  
Infrared element supports;  
Glass tank side & end wall & port neck insulation;  
Trough linings for conveying molten metals;  
Molten metal trough covers;  
Thermal insulation where high velocities are encountered;  
Heat shields for personnel protection;  
Hot gas duct linings;  
Low- & high-temperature dryers;  
Pouring forms for castable;  
Expansion joints;  
Industrial heat shields & thermal barriers;  
Industrial combustion chamber construction;  
Domestic appliance & light-duty industrial combustion chamber construction;  
Wood-burning stove backup insulation.

**TDS**

**CCEWOOL® Ceramic Fiber Board RG**



Classification Temperature (°C)(°F)	1260°C (2300°F)
Operation Temp(°C)(°F)	1050°C (1922°F)
Color	white
Permanent Linear Change on Heating (%)	
@950C,24hrs	-
@1200C,24hrs	3
@1300C,24hrs	-
@1350C,24hrs	-
Thermal Conductivity (w/m.k)	
600°C	-
800°C	0.13
1000°C	0.19
Rupture Strength (Mpa)	
Thickness≤25mm	0.5
Thickness>25mm	0.2
Chemical Composition (%)	
Al2O3	≥44
SiO2	≥52
ZrO2	-
Package	Carton box or pallet

### CCEWOOL® Ceramic Fiber Board RG

Thickness (mm)	20.25.50.80.100 (0.8",1",2",3",4")
Size (mm)	1200*1000 (47"*40") or customized size

### CCEWOOL® Ceramic Fiber Board LZ



Temperature Grade 1400°C(2550°F)

CCEWOOL® Ceramic Fiber Board LZ is a zirconium alumina refractory ceramic fiber board made from low-zirconium refractory ceramic fiber spun cotton as raw material, produced through a fully automated vacuum forming process. It operates continuously for 24 hours and dries quickly, resulting in better compressive strength. The surface is smooth, the dimensions are

precise, and it is easy to install. It is a refractory fiber insulation material capable of withstanding high temperatures up to 1400°C (2550°F). There are various standard thicknesses available for selection.

**Characteristics:**

- Low heat capacity, low thermal conductivity;
- Non-brittle material, good elasticity;
- High compressive strength;
- Excellent wind-erosion resistance, long service life;
- Excellent thermal stability and thermal shock resistance;
- Continuous production, even fiber distribution and stable performance;
- Good sound insulation;
- Good anti-stripping properties;
- Easily molded or cut, easy to install;
- Accurate sizes and good flatness.

**Application:**

- refractory lining;
- Insulating backup to dense refractory materials;
- Insulating backup to brick & castable;
- Furnace hot face lining in ceramic kiln, box furnace & petrochemical furnace;
- Use in industrial heat processing equipment;
- Rigid high-temperature gaskets & seals;
- High-temperature baffles & muffles;
- Flue & chimney linings in furnaces & kilns;
- Molten metal trough covers;
- Hot gas duct linings;
- Expansion joints;
- Industrial heat shields & thermal barriers;
- Industrial combustion chamber construction;
- Domestic appliance & light-duty industrial combustion chamber construction.

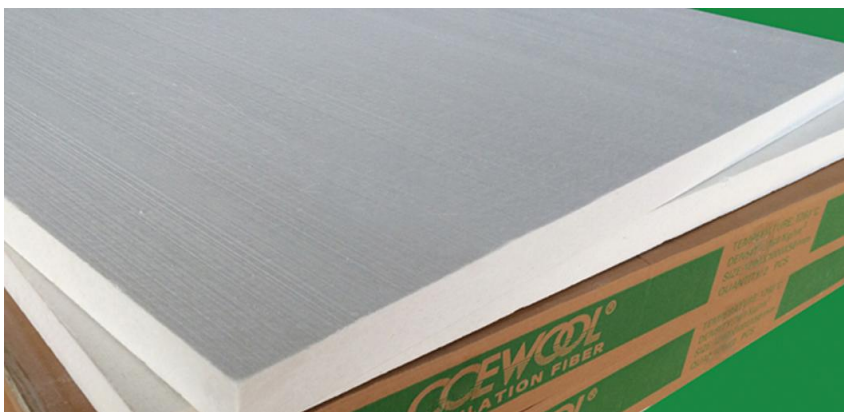
**TDS**

<b>CCEWOOL® Ceramic Fiber Board LZ</b>	
Classification Temperature (°C)(°F)	1400°C (2550°F)
Operation Temp(°C)(°F)	1200°C(2192°F)
Permanent Linear Change on Heating (%)	
@950C,24hrs	-
@1200C,24hrs	-
@1300C,24hrs	3
@1350C,24hrs	-
Thermal Conductivity (w/m.k)	

	600℃	-
	800℃	0.12
	1000℃	0.2
Rupture Strength (Mpa)		
	Thickness≤25mm	0.5
	Thickness>25mm	0.2
Chemical Composition (%)		
	Al <sub>2</sub> O <sub>3</sub>	≥44
	SiO <sub>2</sub>	≥50
	ZrO <sub>2</sub>	≥5
Package	Carton box or pallet	

<b>CCEWOOL® Ceramic Fiber Board LZ</b>		
Thickness (mm)	20.25.50 (0.8",1",2")	80.100 (3",4")
Density (kg/m <sup>3</sup> )	280. 300. 320. 350 (17#,19#,20#,22#)	280. 300. 320 (17#,19#,20#)
Size (mm)	1200*1000 (47"*40") or customized size	

## CCEWOOL® Ceramic Fiber Board 2600



### Temperature Grade

1430℃(2600°F)

CCEWOOL® Ceramic Fiber Board 2600 is an insulating material that contains zirconium refractory ceramic fibers. Zirconium is added to the production raw materials to form a high-temperature resistant zirconium-containing insulation board, providing high stability at high temperatures. It has a

long-term working temperature of approximately 1350℃ (2462°F). CCEWOOL® Ceramic Fiber Board 2600 exhibits excellent chemical stability and can resist the corrosion of most corrosive media. It can withstand oxidation and reduction at high temperatures.

### Characteristics:

Low heat capacity, low thermal conductivity;

Non-brittle material, good elasticity;  
 High compressive strength;  
 Excellent wind-erosion resistance, long service life;  
 Excellent thermal stability and thermal shock resistance;  
 Continuous production, even fiber distribution and stable performance;  
 Good sound insulation;  
 Good anti-stripping properties;  
 Easily molded or cut, easy to install;  
 Accurate sizes and good flatness.

**Application:**

Full thickness refractory lining;  
 Insulating backup to dense refractories;  
 Insulating backup to brick & castable;  
 Furnace hot face lining in ceramic kiln, box furnace & petrochemical furnace;  
 Board over blanket hot face lining;  
 Rigid high-temperature gaskets & seals;  
 High-temperature baffles & muffles;  
 Flue & chimney linings in furnaces & kilns;  
 Infrared element supports;  
 Glass tank side & end wall & port neck insulation;  
 Trough linings for conveying molten metals;  
 Molten metal trough covers;  
 Thermal insulation where high velocities are encountered;  
 Heat shields for personnel protection;  
 Hot gas duct linings;  
 Low- & high-temperature dryers;  
 Pouring forms for castable;  
 Expansion joints.

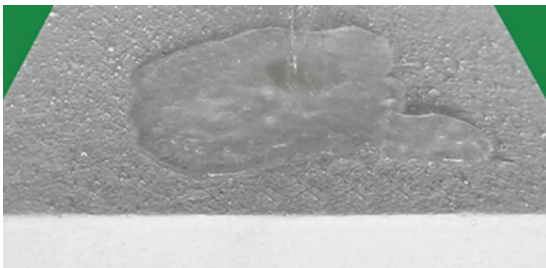
**TDS**

<b>CCEWOOL® Ceramic Fiber Board 2600</b>	
Classification Temperature (°C)(°F)	1430°C (2600°F)
Operation Temp(°C)(°F)	1350°C(2462°F)
Permanent Linear Change on Heating (%)	
@950C,24hrs	-
@1200C,24hrs	-
@1300C,24hrs	-
@1350C,24hrs	3
Thermal Conductivity (w/m.k)	
600°C	-

	800℃	0.16
	1000℃	0.2
Rupture Strength (Mpa)		
	Thickness≤25mm	0.5
	Thickness>25mm	0.2
Chemical Composition (%)		
	Al2O3	≥35
	SiO2	≥49
	ZrO2	≥15
Package	Carton box or pallet	

<b>CCEWOOL® Ceramic Fiber Board 2600</b>		
Thickness (mm)	20.25.50 (0.8",1",2")	80.100 (3",4")
Density (kg/m3)	280. 300. 320. 350 (17#,19#,20#,22#)	281. 300. 320 (17#,19#,20#)
Size (mm)	1200*1000 (47"*40") or customized size	

## CCEWOOL® Water Repellent Ceramic Fiber Board



Temperature Grade 1100℃ (2012°F), 1260℃ (2300°F)

CCEWOOL® Water Repellent Ceramic Fiber Board is a kind of refractory ceramic fiber board which combines water proof, thermal insulation and fire resistance in one.

We added a hydrophobic formula to the raw materials, and use full automatic production line, 2 hours deep

drying to dry the refractory ceramic fiber board completely which realizes the overall hydrophobicity for our refractory ceramic fiber board. The hydrophobicity of CCEWOOL® Water Repellent Ceramic Fiber Board under 200℃ is above 99%.

CCEWOOL® Water Repellent Ceramic Fiber Board is specially developed for preventing the moisture in thermal insulation. It is especially suitable for fire protection, thermal insulation, sound insulation and noise reduction in marine and other high humidity environments. It greatly improves the thermal insulation performance of the fiber and prevented problems of thermal insulation performance reducing and thermal insulation layer corrosion caused by conventional refractory ceramic fiber board's moisture absorption.



**Characteristics:**

Good hydrophobic property, hydrophobic rate more than 98%;  
 Low thermal conductivity, non-combustible, moisture-proof, good sound absorption;  
 Good rigid property, high-strength, anti-vibration, corrosion;  
 Convenient construction, good stability, long useful life.

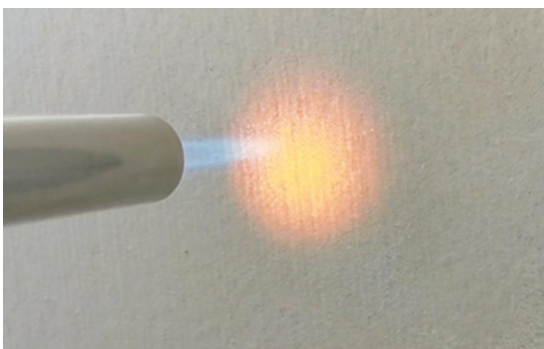
**Application:**

Widely used in shipping building, metallurgical machinery, petro-chemical industry;  
 Nuclear power, automobile;  
 Municipal heating system and building;  
 Wall composite and proof insulation;  
 Sound barrier;  
 Architectural soundproofing;  
 Marine (or Ships).

**TDS**

<b>CCEWOOL® Water Repellent Ceramic Fiber Board</b>		
Type(°C)	1100	1260
Permanent Linear Change on Heating (%)	950°Cx24h<=-2.5	1050°Cx24h<=-2
Theoretic Heat Conductivity Co-efficient (w/m.k) (800°C)	<=0.116	<=0.135
Theoretical density (kg/m3)	220	300
Water content (%)	<=1	
organic content (%)	<=6	
Hydrophobicity	>=98%	
Regular Size (mm)	1200x600mm (47"*24") Thickness: 25/50mm (1"/2")	
Package	Carton/Pallet	

**CCEWOOL® Inorganic Ceramic Fiber Board**



Temperature Grade 1260°C (2300°F)

CCEWOOL has developed pure inorganic ceramic fiber boards and inorganic shaped pieces tailored to market demands. These products are manufactured on a proprietary production line with the addition of an inorganic binder. Used in domestic appliances and smoke-free thermal equipment

(such as electric heating stoves, wall-mounted boilers, and spinning ducts), these fire-resistant insulation materials do not blacken at high temperatures and are smokeless and odorless. They also boast excellent strength and hardness, with no significant reduction in post-fire strength.

**Characteristics:**

- Low heat capacity, low thermal conductivity;
- Non-brittle material, good elasticity;
- High compressive strength;
- Excellent wind-erosion resistance, long service life;
- Excellent thermal stability and thermal shock resistance;
- Continuous production, even fiber distribution and stable performance;
- Good sound insulation;
- Good anti-stripping properties;
- Easily molded or cut, easy to install;
- Accurate sizes and good flatness.

**Application:**

- Iron and steel industry: All heat treatment furnace lining, expansion joints, backing insulation, thermal insulation and mold insulation, steel mill ladle, tundish, ladle and refined ladle back linings;
- Non-ferrous metals industry: Firebrick back lining for tundish, slot cover and aluminum plant electrolytic reduction cell;
- Ceramics industry: lightweight kiln car structure and the furnace hot face lining, separation and fire position for all kiln temperature zones;
- Glass industry: As furnace hearth back insulation lining, burner blocks;
- Kiln construction: Hot surface refractories, heavy refractory back linings, expansion joints.
- Light industry: Industrial and household boiler combustion chamber lining;
- Petrochemical industry: as high-temperature furnace hot surface lining material;
- Craft glass: As craft glass or other deep-processed and molded products mold;
- Cement and construction materials: furnace back thermal insulation lining.

**TDS**

<b>CCEWOOL® Inorganic Ceramic Fiber Board</b>	
Classification Temperature	1260 °C (2300 °F)
Density (kg/m3)	320/360
Loss on ignition (%)	≤ 2
Normal temperature compressive strength (MPa)	≥0.15
Post-Firing Compressive Strength (MPa)	≥0.15
Surface Hardness (Hc)	≥60
Thermal Conductivity (W/m-K)	≤0.135 (500 °C)
Common Specifications and Dimensions (mm)	900*600*20-50 (47"*24"*0.8"-2")

## CCEWOOL® LTC Fiber Board



Temperature Grade 1260°C (2300°F),  
1400°C (2552°F)

CCEWOOL® LTC Fiber Board, independently developed by our company, combining micro-nano technology and infrared shielding technology, achieves lower thermal conductivity and better insulation performance. Its thermal insulation performance is 20-50% better

than traditional lightweight fire-resistant materials. The thermal insulation principle of CCEWOOL® LTC Fiber Board is through compositing refractory ceramic fiber and high efficient thermal insulation agent to reduce heat conduction, heat convection and heat radiation, thus resulting in lower thermal conductivity. CCEWOOL® LTC Fiber Board provides high strength stability and excellent workability. We can produce water repellent ultra low thermal conductivity board which has good water resistance, so the board will not absorb the moisture of adjacent fire-resistant materials. Due to its ultra-low thermal conductivity it has better thermal insulation performance than most of the other insulation materials on market, it will surely replace most of the refractory ceramic fiber boards in future.

### Characteristics:

- Ultra-low thermal conductivity;
- Low thermal storage;
- High tensile strength;
- Excellent thermal shock resistance;
- Excellent corrosion resistance.

### Application:

- Refractory Lining;
- Back lining insulation for dense refractory materials;
- Back lining insulation for refractory bricks and castables;
- Hot surface lining of ceramic kilns, box furnaces, and petrochemical furnace;
- Used in industrial heat processing equipment;
- Rigid high-temperature sealing gasket;
- High temperature shields;
- Insulation lining for flues and chimneys;
- Molten metal tank covers;
- Hot gas pipe lining;
- Expansion joints;
- Industrial insulation covers and insulation layers;
- Industrial combustion chamber;



Light industrial combustion chamber.

**TDS**

<b>CCEWOOL® LTC Fiber Board</b>		
Product Name	1260 LTC	1400 LTC
Classification temperature (°C)	1260	1400
Theoretical Bulk Density (Kg/m <sup>3</sup> )	300	320
Cold Compressive Strength (MPa)	≥0.15	
Compressive Strength After Heating (MPa)	≥0.1	
Permanent Linear Change After Heating (%)	≤3(1050°C×24h)	≤3(1200°C×24h)
Thermal Conductivity W/(m·K)	0.09(Average 500°C)	0.1(Average 600°C)
Regular Size (L×W×T)mm	900×600×25/50mm (35"×24"×1"/2") 1200×600×25/50mm (47"×24"×1"/2")	

**CCEWOOL® Super Duty Ceramic Fiber Board**



CCEWOOL® Super Duty Ceramic Fiber Board is a new type of refractory and heat insulation material, which is made of refractory ceramic fiber bulk as the main raw material. It can maintain high strength and low thermal conductivity at high temperature.

CCEWOOL® Super Duty Ceramic Fiber Board has tough texture. The bearing capacity at normal temperature is greater than 80 t/m<sup>2</sup> and the bearing

capacity at high temperature is greater than 40 t/m<sup>2</sup>. Its compressive strength is more than ten times that of general refractory ceramic fiber board. Its thermal insulation performance is basically the same as that of general refractory ceramic fiber board. It is a kind of high-strength thermal insulation fiber board.

**Characteristics:**

- Excellent load bearing capacity;
- Excellent thermal stability;
- Excellent thermal shock resistance;
- Low thermal conductivity;



Low heat storage;  
Can be machined, cut and shaped easily.

**Application:**

Back lining in ladle, tundish, torpedo car and hot metal ditch;  
Load-bearing of kiln trolley;  
Load-bearing of aluminum reduction cell bottom;  
Cover plate for reformer floor tubes;  
High temperature flange gasket for heat treatment furnace.

**TDS**

<b>CCEWOOL® Super Duty Ceramic Fiber Board</b>		
Description	600 Super Duty Board	900 Super Duty Board
Density (kg/m <sup>3</sup> )	600	900
Modules of Rupture (MPa)	≥2.0 Before Firing	≥4.0 Before Firing
	≥0.8 After Firing	≥1.2 After Firing
Compressive Strength (MPa, 10% relative deformation)	≥0.8 Before Firing	≥4.0 Before Firing
	≥0.4 After Firing	≥2.5 After Firing
Permanent Linear Shrinkage (%)	1100°C X24h ≤3.0	1100°C X24h ≤3.0
Thermal Conductivity (W/m·K)		
300°C	0.08	0.12
400°C	0.09	0.13
500°C	0.1	0.14

**CCEWOOL® Polycrystalline Wool Fiber Board**



Temperature Grade 1600°C (2912°F)  
CCEWOOL® Polycrystalline Wool Fiber Board is manufactured in a wet forming process using CCEWOOL® Polycrystalline fiber bulk and binders. This product is designed for various applications that require excellent stability and high temperature resistance. It has excellent insulation performance and unparalleled heat resistance, wear resistance, and chemical erosion resistance.

CCEWOOL® Polycrystalline Wool Fiber Board has superior thermal stability and insulation performance compared with refractory ceramic fiber board at extremely high working temperatures, which can reduce energy costs and enhance efficiency.

CCEWOOL® Polycrystalline Wool Fiber Board has higher rigidity and fracture resistance compared to refractory ceramic fiber board, making it very suitable for applications where sag resistance is critical. We offer standard sizes and shapes required in the market. We also make customized sizes as per your specific application.

**Characteristics:**

- High rigidity and lightweight;
- Resistance to particle and hot gas erosion;
- High strength;
- High temperature resistance;
- Low thermal conductivity and low heat capacity;
- Highly resistant to thermal shock;
- Can resist most chemical attacks;
- No wetting to molten aluminum, non-ferrous metals and other substances;
- Easy to cut, handle, and install;
- Excellent thermal shock resistance;
- Low thermal conductivity;
- Low heat capacity.

**Application:**

- High temperature laboratory;
- High temperature furnaces and kilns;
- Aerospace Industry;
- Spare insulation layer for dense refractory lining;
- Expansion joint;
- Hot surface lining of furnace;
- Alternative insulation materials for amorphous refractory materials and brick refractory materials;
- Ladle lining and cover;
- Aluminum groove liner and special shapes;
- Riser sleeve, tapping cone, and hot top;
- Combustion chamber of boiler and heater;
- Hot gas pipeline, flue, and chimney lining;
- Heat treated insulation;
- Rounded ceramic tiles;
- Burner block;
- Thermal insulation for glass regenerators, tank sides, end walls, and port necks;
- Backup insulation for ladle, tundish, and torpedo car.

**TDS**



<b>CCEWOOL® Polycrystalline Wool Fiber Board</b>				
Description	PCW1400 Board	PCW1450 Board	PCW1600 LD Board	PCW1600 HD Board
Classification Temperature (°C)	1600(2912°F)	1600(2912°F)	1700(3092°F)	1700(3092°F)
Continuous Temperature Use Limit (°C)	1400(2552°F)	1450(2642°F)	1600(2912°F)	1600(2912°F)
Chemical Composition (%)				
AlO	60	62	70	70
Al <sub>2</sub> O <sub>3</sub> +SiO <sub>2</sub>	98	98	98.5	98.5
Color	White	White	White	White
Density (kg/m <sup>3</sup> )(lb/ft <sup>3</sup> )	300	300	250	400
Modules of Rupture(MPa)	≥0.3	≥0.3	≥0.3	≥0.3
Compressive Strength (MPa,10% relative deformation)	0.25	0.25	0.15	0.3
Loss of lanition (%%)	≤8	≤8	≤8	≤8
Permanent Linear Shrinkage (%)	1400°C x 24h ≤2.0	1450°C x 24h ≤2.0	1600°C x 24h ≤1.5	1600°C x 24h ≤1.5
Thermal Conductivity (W/m-K)				
400°C	0.08	0.08	0.08	0.08
600°C	0.1	0.1	0.12	0.09
800°C	0.13	0.13	0.14	0.12
1000°C	0.16	0.15	0.17	0.15
1200°C	0.19	0.19	0.2	0.19

