

## CCEWOOL® Ceramic Fiber Blanket DB



Temperature Grade 1100° C (2012° F)

CCEWOOL® Ceramic Fiber Blanket DB is a new type of backing refractory insulation material in white appearance, uniform dimensions, and combines fire resistance, insulation, and thermal retention functions in one, without any binders.

Refractory Ceramic fiber blankets are unaffected by oil erosion and can quickly regain their thermal performance and physical characteristics after drying. It is primarily used for furnace lining insulation and is an economically effective insulation filling material. The installation speed of CCEWOOL® Ceramic Fiber

Blanket DB can be four times faster than regular block insulation materials and comes at a competitive price compared to mineral wool.

### Characteristics:

- Excellent chemical stability;
- Excellent thermal stability;
- Excellent tensile strength;
- Low thermal conductivity;
- Low heat capacity;
- Excellent insulation properties;
- Good sound absorption.

### Application:

- Back-up for lining systems
- Filler for insulating pads
- Expansion joint material

### STD:

CCEWOOL® Ceramic Fiber Blanket DB	
Classification temperature	1100°C (2012°F)
Operation Temp(°C)(°F)	982 (1800°F)
Density (kg/m3)	64/ 96/ 128/160(4,6,8,10lb/ft3)
Shot Content(%)	≤15
Color	White
Chemical Composition of refractory ceramic blanket (%)	
Al2O3	≥43
SiO2	≥52

ZrO <sub>2</sub>	-
Permanent Change on Heating (%), EN1094-1	
After 24 hours	
⑧950°C (1742°F)	≤-3
⑧1000°C (1832°F)	-
⑧1100°C (2012°F)	-
⑧1200°C (2192°F)	-
⑧1300°C (2372°F)	-
⑧1400°C (2552°F)	-
Tensile Strength(Kg/m3), EN1094-1 KPa	
64kg/m3(4lb/ft3)	28
96kg/m3(6lb/ft3)	45
128kg/m3(8lb/ft3)	70
160kg/m3(10lb/ft3)	-
Heat Conductive Co-efficient W/(m·k)(128kg/m3)	
200°C (392°F)	0.07
400°C (752°F)	0.12
600°C (1112 °F)	0.2
800°C (1472°F)	0.35
1000°C (1832°F)	-

Thickness	Density (kg/m3)				Length	Width
mm	64	96	128	160	mm	mm
6	-	-	○	○	7200	610, 1220
13	-	√	√	○	14640	
19	-	√	√	○	9760	
25	○	√	√	√	7320	
38	○	√	√	√	4880	
50	○	√	√	-	3660	

Thickness	Density (lb/ft3)				Length	Width
in	4#	6#	8#	10#	in	in
1/4"	-	-	○	○	300"	24", 48"
1/2"	-	√	√	○	600"	
3/4"	-	√	√	○	400"	
1"	○	√	√	√	300"	

3/2"	○	√	√	√	200"	
2"	○	√	√	-	150"	

Note: ( √ ) is standard size, Custom size are available

## CCEWOOL® Ceramic Fiber Blanket S



Temperature Grade 1260° C (2300° F)  
 CCEWOOL® Ceramic Fiber Blanket S is a high-strength needleled blanket made from classic series refractory ceramic fiber spun fiber. This product contains no organic binders. Manufactured through a unique internal needle punching process with tensile strength exceeding 75KPa, making it safe, stable, energy-efficient, and highly effective. CCEWOOL® Ceramic Fiber Blanket S insulation material offers a variety of thicknesses, width and density to meet energy-saving requirements under different conditions.

### Characteristics:

- Excellent handling strength
- Excellent hot strength
- Low thermal conductivity
- Low heat storage
- Light weight
- Resiliency
- Thermal shock resistance
- High heat reflectance
- Excellent corrosion resistance
- Excellent thermal stability
- Excellent sound absorption
- Excellent fire protection

### Application:

- Industrial furnace wall lining;
- Back lining material;
- Furnace masonry expansion joints, door, roof heat insulation seal;
- High temperature pipe insulation material;
- Module / folded module processing material;
- Fireproof coating.
- Steel industry

Heat treating and annealing furnaces  
 Furnace door linings and seals  
 Soaking pit covers and seals  
 Furnace hot face repairs  
 Reheat furnaces  
 Ladle covers  
 Power generation  
 Boiler Insulation  
 Boiler Doors  
 Reusable Turbine Covers  
 Pipe Covering  
 Insulation of Commercial Dryers and Covers  
 Veneer Over Existing Refractory  
 Stress Relieving Furnaces  
 Glass Furnace Crown Insulation  
 Fire Protection

**STD:**

<b>CCEWOOL® Ceramic Fiber Blanket S</b>	
Classification temperature	1260 (2300°F)
Operation Temp(°C)(°F)	1050 (1922°F)
Density (kg/m3)	64/ 96/ 128/160(4,6,8,10lb/ft3)
Shot Content(%)	≤15
Color	White
Chemical Composition of refractory ceramic blanket (%)	
Al2O3	≥44
SiO2	≥52
ZrO2	-
Permanent Change on Heating (%), EN1094-1	
After 24 hours	
@950°C (1742°F)	-
@1000°C (1832°F)	1.5
@1100°C (2012°F)	2.5
@1200°C (2192°F)	3
@1300°C (2372°F)	-
@1400°C (2552°F)	-
Tensile Strength(Kg/m3), EN1094-1 KPa	
64kg/m3(4lb/ft3)	35
96kg/m3(6lb/ft3)	55
128kg/m3(8lb/ft3)	75
160kg/m3(10lb/ft3)	110

**Heat Conductive Co-efficient W/(m·k)(128kg/m<sup>3</sup>)**

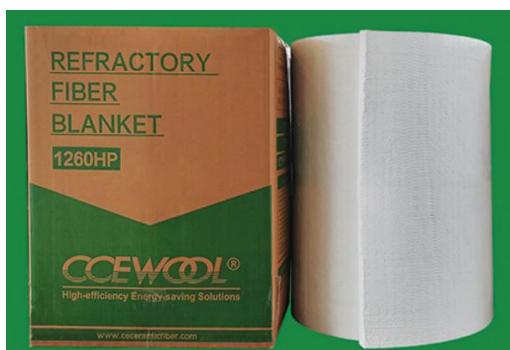
200°C (392°F)	0.07
400°C (752°F)	0.12
600°C (1112 °F)	0.2
800°C (1472°F)	0.3
1000°C (1832°F)	0.45

Thickness	Density (kg/m <sup>3</sup> )				Length	Width
mm	64	96	128	160	mm	mm
6	-	-	○	○	7200	610, 1220
13	-	√	√	○	14640	
19	-	√	√	○	9760	
25	○	√	√	√	7320	
38	○	√	√	√	4880	
50	○	√	√	-	3660	

Thickness	Density (lb/ft <sup>3</sup> )				Length	Width
in	4#	6#	8#	10#	in	in
1/4"	-	-	○	○	300"	24",48"
1/2"	-	√	√	○	600"	
3/4"	-	√	√	○	400"	
1"	○	√	√	√	300"	
3/2"	○	√	√	√	200"	
2"	○	√	√	-	150"	

Note: ( √ ) is standard size, Custom size are available

## CCEWOOL® Ceramic Fiber Blanket HPS



Temperature Grade 1260° C (2300° F)

CCEWOOL® Ceramic Fiber Blanket HPS, purified from raw materials with fewer impurities, is made from high-purity refractory ceramic fiber spun fiber. Compared to RCF Blanket S, this product is whiter and has a lower thermal conductivity. It contains no organic binders. Manufactured through a unique internal needle punching process, with tensile strength exceeding 85KPa, providing higher performance and longer

lifespan in applications involving heat flow or chemical corrosion. CCEWOOL® Ceramic Fiber Blanket HPS insulation material offers a variety of thickness, width, and density.

**Characteristics:**

- Excellent handling strength
- Excellent hot strength
- Low thermal conductivity
- Low heat storage
- Light weight
- Resiliency
- Thermal shock resistance
- High heat reflectance
- Excellent corrosion resistance
- Excellent thermal stability

**Application:**

- Furnace, kiln, reformer and boiler linings;
- Investment casting mold wrappings;
- Removable insulating blankets for stress relieving welds;
- Reusable insulation for steam and gas turbines;
- Flexible high-temperature pipe insulation;
- Pressure and cryogenic vessel fire protection;
- High-temperature kiln and furnace insulation;
- Furnace door linings and seals;
- Soaking pit seals;
- Furnace repairs;
- Thermal reactor insulation;
- Expansion joint seals;
- Primary reformer header insulation;
- High-temperature gasketing;
- Glass furnace crown insulation;
- Incineration equipment and stack linings;
- Annealing cover seals;
- High-temperature filtration;
- Nuclear insulation applications;
- Atmosphere furnace lining;
- Field steam generator lining;
- Chemical process heaters.

**STD:**

CCEWOOL® Ceramic Fiber Blanket HPS	
Classification temperature	1260 (2300°F)

Operation Temp(°C)(°F)	1100 (2012°F)	
Density (kg/m3)	64/ 96/ 128/160(4,6,8,10lb/ft3)	
Shot Content(%)	≤15	
Color	White	
Chemical Composition of refractory ceramic blanket (%)		
Al2O3	≥44	
SiO2	≥55	
ZrO2	-	
Permanent Change on Heating (%), EN1094-1		
After 24 hours		
@950°C (1742°F)	-	
@1000°C (1832°F)	1.5	
@1100°C (2012°F)	2.2	
@1200°C (2192°F)	3	
@1300°C (2372°F)	-	
@1400°C (2552°F)	-	
Tensile Strength(Kg/m3), EN1094-1 KPa		
64kg/m3(4lb/ft3)	45	
96kg/m3(6lb/ft3)	65	
128kg/m3(8lb/ft3)	85	
160kg/m3(10lb/ft3)	125	
Heat Conductive Co-efficient W/(m·k)(128kg/m3)		
200°C (392°F)	0.07	
400°C (752°F)	0.12	
600°C (1112 °F)	0.2	
800°C (1472°F)	0.3	
1000°C (1832°F)	0.4	

Thickness	Density (kg/m3)				Length	Width
mm	64	96	128	160	mm	mm
6	-	-	○	○	7200	610, 1220
13	-	√	√	○	14640	
19	-	√	√	○	9760	
25	○	√	√	√	7320	
38	○	√	√	√	4880	
50	○	√	√	-	3660	

Thickness	Density (lb/ft3)	Length	Width
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in	4#	6#	8#	10#	in	in
1/4"	-	-	○	○	300"	24",48"
1/2"	-	√	√	○	600"	
3/4"	-	√	√	○	400"	
1"	○	√	√	√	300"	
3/2"	○	√	√	√	200"	
2"	○	√	√	-	150"	

Note: ( √ ) is standard size, Custom size are available

## CCEWOOL® Ceramic Fiber Blanket LZ



Temperature Grade 1400°C (2550°F)  
 CCEWOOL® Ceramic Fiber Blanket LZ is primarily made from refractory ceramic fiber spun fiber as raw material with properly amount of ZrO<sub>3</sub>, double-sided internal needle punching process. It is a lightweight, flexible refractory fiber insulation material resistant to high temperatures up to 1400°C (2550°F). CCEWOOL® Ceramic Fiber Blanket LZ exhibit excellent toughness, elasticity, and workability, making them versatile high-temperature insulation products.

### Characteristics:

- High compressive strength and long service life;
- Low heat capacity and low thermal conductivity;
- Non-brittle material with good toughness;
- Small dimensional tolerance and good flatness;
- Easy to cut and install, convenient for construction;
- Excellent resistance to wind erosion;
- Continuous production with uniform fiber distribution and stable performance;
- Excellent sound absorption and noise reduction performance.

### Applications:

- Industrial kiln linings and backing materials with a long-term operating temperature between 1150° C to 1250° C.
- Insulation materials for industrial kiln expansion joints, furnace doors, and top covers.
- Insulation materials for high-temperature pipelines.

High-temperature insulation gaskets with a long-term operating temperature below 1250° C.  
Raw materials for zirconia-alumina refractory ceramic fiber modules/folded blocks.

**STD:**

<b>CCEWOOL® Ceramic Fiber Blanket LZ</b>		
Classification temperature		1400 (2550°F)
Operation Temp(°C)(°F)		1200°C (2192°F)
Density (kg/m3)		64/ 96/ 128/160(4,6,8,10lb/ft3)
Shot Content(%)		≤15
Color		White
Chemical Composition of refractory ceramic blanket (%)		
Al2O3		≥44
SiO2		≥50
ZrO2		≥5
Permanent Change on Heating (%), EN1094-1		
After 24 hours		
@950°C (1742°F)		-
@1000°C (1832°F)		-
@1100°C (2012°F)		1.5
@1200°C (2192°F)		2
@1300°C (2372°F)		3
@1400°C (2552°F)		-
Tensile Strength(Kg/m3), EN1094-1 KPa		
64kg/m3(4lb/ft3)		45
96kg/m3(6lb/ft3)		65
128kg/m3(8lb/ft3)		85
160kg/m3(10lb/ft3)		125
Heat Conductive Co-efficient W/(m·k)(128kg/m3)		
200°C (392°F)		0.07
400°C (752°F)		0.12
600°C (1112 °F)		0.2
800°C (1472°F)		0.3
1000°C (1832°F)		0.43

<b>Thickness</b>	<b>Density (kg/m3)</b>				<b>Length</b>	<b>Width</b>
mm	64	96	128	160	mm	mm
6	-	-	○	○	7200	610, 1220
13	-	√	√	○	14640	

19	-	✓	✓	○	9760	
25	○	✓	✓	✓	7320	
38	○	✓	✓	✓	4880	
50	○	✓	✓	-	3660	

Thickness	Density (lb/ft <sup>3</sup> )				Length	Width
in	4#	6#	8#	10#	in	in
1/4"	-	-	○	○	300"	24",48"
1/2"	-	✓	✓	○	600"	
3/4"	-	✓	✓	○	400"	
1"	○	✓	✓	✓	300"	
3/2"	○	✓	✓	✓	200"	
2"	○	✓	✓	-	150"	

Note: ( ✓ ) is standard size, Custom size are available

## CCEWOOL® Ceramic Fiber Blanket 2600



Temperature Grade 1430°C (2600°F)

CCEWOOL® Ceramic Fiber Blanket 2600 is made from high-purity alumina, zirconia, and silica as raw materials through a unique fiber manufacturing process. It possesses excellent insulation properties and exhibits extremely low shrinkage characteristics at high temperatures. Its long-term operating temperature reaches around 1350°C (2462°F). This product is white in color, flexible in texture, has good flatness, and is highly temperature-resistant, delivering excellent fire resistance and insulation. It is

an ideal material for refractory, insulation, and thermal insulation applications in high-temperature environments.

### Characteristics:

Excellent handling strength;

Excellent hot strength;

Low thermal conductivity;

Low heat storage;

Light weight;

Resiliency;  
 Thermal shock resistance;  
 High heat reflectance;  
 Excellent corrosion resistance;  
 Excellent thermal stability.

**Applications:**

Furnace linings;  
 Boiler insulation;  
 Temperature control in heat treatment processes;  
 Insulation for the roofs of glass furnaces;  
 Furnace door seals;  
 Lining for flue ducts;  
 Insulation for pipelines;  
 Insulation components in transportation equipment;  
 Fire protection;  
 Thermal sealing gaskets for household appliances;  
 Thermal stress relief insulation at outdoor welding joints;  
 High-temperature insulation;  
 Fire-resistant insulation for fire shutter doors.

**TDS**

CCEWOOL® Ceramic Fiber Blanket 2600		
Classification temperature	1430HZ (2600°F)	
Operation Temp(°C)(°F)	1350°C (2462°F)	
Density (kg/m3)	96/ 128/ 160 (6,8,10lb/ft3)	
Shot Content(%)	≤12	
Color	White	
Chemical Composition of refractory ceramic blanket (%)		
	Al2O3	≥35
	SiO2	≥49
	ZrO2	≥15
Permanent Change on Heating (%), EN1094-1		
After 24 hours		
⑧950°C (1742°F)	-	
⑧1000°C (1832°F)	-	
⑧1100°C (2012°F)	-	

⑧1200°C (2192°F)	1
⑧1300°C (2372°F)	2
⑧1400°C (2552°F)	3
Tensile Strength(Kg/m3), EN1094-1 KPa	
64kg/m3(4lb/ft3)	-
96kg/m3(6lb/ft3)	65
128kg/m3(8lb/ft3)	85
160kg/m3(10lb/ft3)	125
Heat Conductive Co-efficient W/(m·k)(128kg/m3)	
200°C (392°F)	0.06
400°C (752°F)	0.11
600°C (1112 °F)	0.16
800°C (1472°F)	0.23
1000°C (1832°F)	0.35

Thickness	Density (kg/m3)				Length	Width
mm	64	96	128	160	mm	mm
6	-	-	○	○	7200	610, 1220
13	-	√	√	○	14640	
19	-	√	√	○	9760	
25	○	√	√	√	7320	
38	○	√	√	√	4880	
50	○	√	√	-	3660	

Thickness	Density (lb/ft3)				Length	Width
in	4#	6#	8#	10#	in	in
1/4"	-	-	○	○	300"	24", 48"
1/2"	-	√	√	○	600"	
3/4"	-	√	√	○	400"	
1"	○	√	√	√	300"	
3/2"	○	√	√	√	200"	
2"	○	√	√	-	150"	

Note: (√) is standard size, Custom size are available

## CCEWOOL® PUREWOOL Ceramic Fiber Blanket



Temperature Grades 1260° C (2300° F) and 1430° C (2600° F)

CCEWOOL® PUREWOOL Ceramic Fiber Blanket is a premium product among refractory ceramic fibers. It is made from upgraded materials using high-purity alumina, zirconia, and silica as raw materials. Due to its extremely low impurity content, this blanket is whiter in color. Ultra-long spun fibers are interlocked through a double-sided

internal needle punching process, providing a tensile strength of up to 90KPa. With improvements made from the raw materials, CCEWOOL® PUREWOOL Ceramic Fiber Blanket offers a longer lifespan and superior thermal insulation performance. This insulation material is available in various thicknesses, widths, and densities to meet energy-saving requirements under different conditions.

### Characteristics:

- Excellent handling strength;
- Excellent hot strength;
- Low thermal conductivity;
- Low heat storage;
- Light weight;
- Resiliency;
- Thermal shock resistance;
- High heat reflectance;
- Excellent corrosion resistance;
- Excellent thermal stability.

### Applications:

- Industrial furnace wall lining;
- Back lining material;
- Furnace masonry expansion joints, door, roof heat insulation seal;
- High temperature pipe insulation material;
- Module / folded module processing material;
- Fireproof coating;
- Steel industry;
- Heat treating and annealing furnaces;
- Furnace door linings and seals;
- Soaking pit covers and seals;

Furnace hot face repairs;  
 Reheat furnaces;  
 Ladle covers;  
 Power generation;  
 Boiler Insulation;  
 Boiler Doors;  
 Reusable Turbine Covers;  
 Pipe Covering;  
 Insulation of Commercial Dryers and Covers;  
 Veneer Over Existing Refractory;  
 Stress Relieving Furnaces;  
 Glass Furnace Crown Insulation;  
 Fire Protection.

**STD:**

<b>CCEWOOL® PUREWOOL Ceramic Fiber Blanket</b>		
Classification temperature	1260(2300°F)	1430(2600°F)
Operation Temp(°C)(°F)	1100°C(2012°F)	1350°C(2462°F)
Density (kg/m3)	96/ 128/ 160 (6,8,10lb/ft3)	
Shot Content(%)		≤12
Color	White	
Chemical Composition of refractory ceramic blanket (%)		
Al2O3	≥44	≥35
SiO2	≥55	≥49
ZrO2	-	≥15
Permanent Change on Heating (%), EN1094-1		
After 24 hours		
⑧950°C (1742°F)	-	-
⑧1000°C (1832°F)	1.5	-
⑧1100°C (2012°F)	2	-
⑧1200°C (2192°F)	2.7	1
⑧1300°C (2372°F)	5.5	2
⑧1400°C (2552°F)		3
Tensile Strength(Kg/m3), EN1094-1 KPa		
64kg/m3(4lb/ft3)	-	-
96kg/m3(6lb/ft3)	60	60
128kg/m3(8lb/ft3)	90	90
160kg/m3(10lb/ft3)	130	130
Heat Conductive Co-efficient W/(m·k)(128kg/m3)		

200°C (392°F)	0.07	0.06
400°C (752°F)	0.12	0.1
600°C (1112 °F)	0.2	0.15
800°C (1472°F)	0.3	0.2
1000°C (1832°F)	0.35	0.3

Thickness	Density (kg/m3)				Length	Width
mm	64	96	128	160	mm	mm
6	-	-	○	○	7200	610, 1220
13	-	√	√	○	14640	
19	-	√	√	○	9760	
25	○	√	√	√	7320	
38	○	√	√	√	4880	
50	○	√	√	-	3660	

Thickness	Density (lb/ft3)				Length	Width
in	4#	6#	8#	10#	in	in
1/4"	-	-	○	○	300"	24",48"
1/2"	-	√	√	○	600"	
3/4"	-	√	√	○	400"	
1"	○	√	√	√	300"	
3/2"	○	√	√	√	200"	
2"	○	√	√	-	150"	

Note: ( √ ) is standard size, Custom size are available

## CCEWOOL® Water Repellent Ceramic Fiber Blanket



Temperature Grades 1100°C (2012°F), 1260°C (2300°F)  
 CCEWOOL® Water Repellent Ceramic Fiber Blanket is a refractory ceramic fiber hydrophobic (water-repellent) blanket made from high-strength needle blanket produced from refractory ceramic fiber spun fiber. It features a solvent-based high-temperature nano-hydrophobic material as a surface treatment agent and is manufactured using a unique double-sided internal

needle punching process. This product achieves overall water repellency for refractory ceramic fiber blankets and exhibits excellent hydrophobic properties, greatly enhancing the insulation performance of the fibers. It solves the issues of reduced thermal conductivity and insulation body corrosion caused by moisture absorption in conventional fiber blankets.

### **Characteristics:**

- Excellent hydrophobicity;
- Excellent chemical stability;
- Excellent thermal stability;
- Excellent tensile strength;
- Low thermal conductivity;
- Low heat capacity;
- Excellent insulation properties;
- Good sound absorption

### **Applications:**

- Sheathed steel beams and ventilation ducts;
- Installation of firewalls, doors, and ceilings;
- Insulation of cables and wires inside wall pipes;
- Fire protection for ship decks and bulkheads;
- Soundproofing enclosures and measurement rooms;
- Sound insulation in industrial and power plants;
- Sound barriers;
- Building soundproofing;
- Soundproofing for ships and automobiles.

### **TDS**

<b>CCEWOOL® Water Repellent Ceramic Fiber Blanket</b>		
Classification temperature	1100°C (2012°F)	1260 (2300°F)
Operation Temp(°C)(°F)	982 (1800°F)	1050 (1922°F)
Density (kg/m3)	64/ 96/ 128(4,6,8lb/ft3)	
Water content(%)	≤1	
Hydrophobicity(%)	≥99	
Shot Content(%)	≤15	≤15
Color	White	
Chemical Composition of refractory ceramic blanket (%)		
Al2O3	≥43	≥44
SiO2	≥52	≥52
ZrO2	-	-

Permanent Change on Heating (%), EN1094-1

After 24 hours

®950°C (1742°F)	≤-3	-
®1000°C (1832°F)	-	1.5
®1100°C (2012°F)	-	2.5
®1200°C (2192°F)	-	3
®1300°C (2372°F)	-	-

Tensile Strength(Kg/m3), EN1094-1 KPa

64kg/m3(4lb/ft3)	28KPa min.	35KPa min.
96kg/m3(6lb/ft3)	45KPa min.	55KPa min.
128kg/m3(8lb/ft3)	70KPa min.	75KPa min.

Heat Conductive Co-efficient W/(m·k)(128kg/m3)

200°C (392°F)	0.07	0.07
400°C (752°F)	0.12	0.12
600°C (1112 °F)	0.2	0.2
800°C (1472°F)	0.35	0.3
1000°C (1832°F)	-	0.45

Thickness	Density (kg/m3)				Length	Width
mm	64	96	128	160	mm	mm
25	○	√	√	√	7320	610, 1220
38	○	√	√	√	4880	
50	○	√	√	-	3660	

Thickness	Density (lb/ft3)				Length	Width
in	4#	6#	8#	10#	in	in
1"	○	√	√	√	300"	610, 1220 (24", 48")
3/2"	○	√	√	√	200"	
2"	○	√	√	-	150"	

Note: ( √ ) is standard size, Custom size are available