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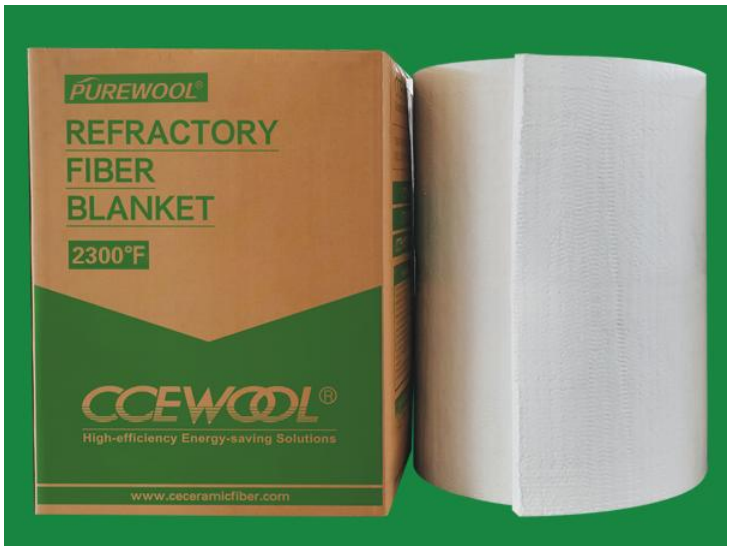
CCEWOOL® PUREWOOL® RCF Blanket for Fabrication



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

CCEWOOL® PUREWOOL® RCF Blanket for Fabrication is a high-purity ceramic fiber blanket developed for demanding high-temperature engineering applications. The product is manufactured using high-purity synthetic raw materials including alumina, silica, and zirconia. Through optimized formulation and fiberization technology, the blanket achieves higher fiber purity, lower impurity levels, and a cleaner white fiber appearance. As a result, the material offers lower shrinkage, improved thermal insulation performance, and greater structural stability under high-temperature operating conditions.

Compared with conventional industrial-grade ceramic fiber blankets, PUREWOOL® RCF Blanket for Fabrication provides improved fiber length, structural uniformity, and mechanical strength. The blanket is produced using an extra-long spun fiber structure combined with double-sided internal needling, creating a stable three-dimensional interlocking fiber network throughout the material. This structure significantly enhances the tensile strength and overall structural integrity of the blanket, with tensile strength reaching up to 90 kPa.

CCEWOOL® PUREWOOL® RCF Blanket also offers excellent Fabrication compatibility. The material can be easily cut, layered, or structurally processed to meet specific engineering requirements for high-temperature insulation systems in industrial equipment. In addition, CCEWOOL® provides the blanket in a wide range of thicknesses, widths, and densities, allowing customers to select the most suitable configuration to improve energy efficiency and insulation performance in different industrial applications.

Characteristics:

Engineering-grade high-purity refractory ceramic fiber blanket;

High-purity synthetic raw materials with extremely low impurity content;

Clean white fiber color and uniform fiber structure;

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Ultra-long spun fiber structure;

Double-sided needle-punched reinforcement for enhanced structural stability;

High tensile strength (up to 90 kPa);

Low thermal conductivity with excellent insulation performance;

Low shrinkage at elevated temperatures;

Suitable for Fabrication and secondary processing.

Applications:

Suitable for high-temperature equipment where superior insulation performance and structural stability are required, including:

Industrial Furnaces and Kilns

Furnace lining insulation layers

Heat treatment furnace insulation systems

Combustion chamber insulation structures

Metallurgical Equipment

Reheating furnace linings

Furnace door sealing insulation

High-temperature pipeline insulation

Petrochemical Equipment

Process heater insulation systems

Piping and flue insulation

Other High-Temperature Equipment

Thermal insulation systems for industrial equipment

Furnace lining repair and reinforcement structures

TDS：

CCEWOOL® PUREWOOL® RCF Blanket for Fabrication		
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）	

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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		
®950°C (1742°F)	-	-
®1000°C (1832°F)	1.5	-
®1100°C (2012°F)	2	-
®1200°C (2192°F)	2.7	1
®1300°C (2372°F)	5.5	2
®1400°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

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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® RCF Board for Fabrication

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

CCEWOOL® PUREWOOL® RCF Board for Fabrication is a high-purity ceramic fiber board developed for demanding high-temperature engineering applications. The product is manufactured using high-purity synthetic raw materials including alumina, silica, and zirconia. High-quality ceramic fiber wool is produced through an optimized fiberization process and then combined with selected binders. The material is subsequently

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formed into rigid boards through pressing, curing, and precision cutting processes.

Compared with conventional industrial-grade ceramic fiber boards, the PUREWOOL® series is optimized in terms of raw material purity, fiber length, and structural uniformity. These improvements allow the material to maintain more stable structural performance and lower shrinkage when exposed to high-temperature environments.

CCEWOOL® PUREWOOL® RCF Board features a uniform fiber structure, smooth surface, and precise dimensional tolerances, making it particularly suitable for Fabrication processing. The board can be cut, grooved, drilled, or machined to produce a variety of high-temperature insulation components used in industrial equipment.

CCEWOOL® also provides Fabrication customization services, enabling boards to be produced according to equipment structures or engineering drawings. Custom thicknesses, dimensions, and complex-shaped components can be supplied to meet the design requirements of high-temperature industrial equipment and furnace lining systems.

Characteristics:

Engineering-grade high-purity refractory ceramic fiber board;

High-purity raw material system with extremely low impurity content;

Excellent high-temperature stability;

High mechanical strength and structural rigidity;

Low thermal conductivity with superior insulation performance;

Low heat storage, improving thermal efficiency of equipment;

Excellent thermal shock resistance;

Smooth surface and precise dimensional tolerance;

Excellent Fabrication and machining capability.

Applications:

Suitable for industrial equipment requiring high temperature stability and structural strength, including:

Industrial Furnaces and Kilns

Furnace lining structural boards

Combustion chamber insulation panels

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Furnace door insulation structures

Heat Treatment Equipment

Heat treatment furnace insulation systems

High-temperature structural insulation components

Petrochemical Equipment

Process heater insulation structures

High-temperature piping and flue insulation

Equipment Structural Components

Furnace lining structural parts

High-temperature baffle plates

Thermal insulation assemblies for industrial equipment

TDS:

CCEWOOL® PUREWOOL® RCF Board for Fabrication		
Classification temperature	1260(2300°F)	1430(2600°F)
Operation Temp(°C)(°F)	1100°C(2012°F)	1350°C(2462°F)
Density (kg/m3)	250/ 300/ 360	
Color	white	
Loss of Ignition (%)	≤6	
Permanent Linear Shrinkage (%)	1100℃x24h≤3.0	
Modules of Rupture (MPa)	≥0.3	
Chemical Composition of refractory ceramic blanket (%)		
Al2O3	≥44	≥35
SiO2	≥55	≥49
ZrO2	-	≥15
Compressive Strength (MPa,10% relative deformation)		
300kg/m3	≥0.25	
360kg/m3	≥0.3	
Thermal Conductivity (w/m.k)		
400°C (752°F)	0.07	0.07
600°C (1112°F)	0.1	0.1
800°C (1472°F)	0.14	0.13
1000°C (1832°F)	0.19	0.18

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CCEWOOL® PUREWOOL® RCF Board for Fabrication	
Thickness (mm)	20.25.50.80.100
Size (mm)	1200×1000 or customized size

CCEWOOL® PUREWOOL® RCF Board for Fabrication	
Thickness (in)	4/5”,1”,2”,3”,4”
Size (in)	47”×40” or customized size

CCEWOOL® 1900 Back-Up Board for Fabrication

Temperature Grades 1900°F (1050°C), 2100°F (1150°C)

CCEWOOL® 1900 Back-Up Board for Fabrication is a high-performance ceramic fiber board specifically designed for backup insulation layers in industrial furnace lining systems. The product is manufactured using high-purity aluminosilicate ceramic fiber wool combined with selected refractory raw materials. Produced on a fully automated continuous production line, a small amount of binder is added during processing, and the material is formed into rigid boards through pressing, curing, and precision cutting processes.

Compared with conventional industrial-grade fiber boards, CCEWOOL® 1900 Back-Up Board for Fabrication features a more uniform fiber distribution and enhanced structural stability, enabling more reliable thermal insulation performance in furnace lining systems. As a backup insulation material within multilayer furnace linings, the board offers low thermal conductivity and low heat storage capacity, effectively reducing furnace heat loss, improving thermal efficiency, lowering overall lining weight, and enhancing structural stability.

The board has a uniform structure, smooth surface, and precise dimensional tolerances, providing good mechanical strength and excellent thermal shock resistance. It is suitable for a wide range of backup

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insulation applications in industrial furnace systems.

In addition, the material provides excellent Fabrication compatibility. The board can be easily cut, drilled, and mechanically machined, and CCEWOOL® also offers Fabrication customization services, including custom dimensions, thicknesses, and complex-shaped components. This allows the product to be adapted to various furnace designs and engineering requirements in high-temperature industrial equipment.

Characteristics:

Engineering-grade furnace back-up insulation board;

Excellent thermal stability and thermal shock resistance;

Low thermal conductivity and low heat storage;

Lightweight structure, reducing furnace load;

Good mechanical strength and compressive resistance;

Excellent moisture resistance and corrosion resistance;

Uniform structure with precise dimensional tolerance;

Easy Fabrication, machining, and installation.

Applications:

Primarily used as a back-up insulation layer in industrial furnace lining systems, including:

Industrial Kilns and Furnaces

Cement kiln back-up insulation

Ceramic kiln back-up insulation

Glass furnace wall and back-up insulation

Heat Treatment Equipment

Heat treatment furnace back-up insulation

Electric furnace insulation layers

Metallurgical and Petrochemical Equipment

Metallurgical furnace back-up insulation

Petrochemical process heater insulation layers

Other High-Temperature Equipment

Back-up insulation for high-temperature reaction equipment

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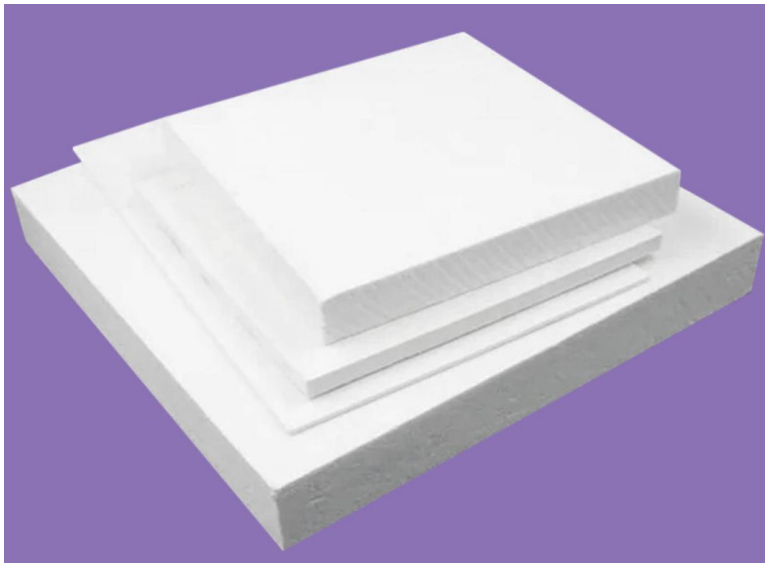
Thermal insulation structures for high-temperature pipelines and equipment

TDS：

CCEWOOL® 1900 Back-Up Board for Fabrication		
Classification Temperature	1900°F (1050°C)	2100°F (1150°C)
Continuous Temperature Use Limit (°C)	1750°F (950°C)	1850°F (1000°C)
Color	White	White
Modulus of Rupture (MPa)	≥0.3	≥0.3
Compressive Strength (MPa, 10% relative deformation)	≥0.1	≥0.2
Loss on Ignition (%)	≤7	≤7
Permanent Linear Shrinkage (%)	950°Cx24h≤2.0	1000°Cx24h≤2.0
Thermal Conductivity (W/m·K)		
800°C	≤0.116	-
1000°C	--	≤0.135

CCEWOOL® Alumina Fiber Board 2732 for Fabrication



Temperature Grades 1500°C (2732°F) CCEWOOL® Alumina Fiber Board 2732 for Fabrication is a high-performance alumina fiber insulation board developed for demanding high-temperature engineering applications. The product is manufactured from high-purity alumina fibers using a wet vacuum forming process, followed by controlled high-temperature treatment to create a stable fiber structure. This manufacturing process enables the board to maintain excellent thermal stability and structural integrity in operating environments up to 1500°C (2732°F).

Compared with conventional industrial-grade fiber boards, CCEWOOL® Alumina Fiber Board 2732 for

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Fabrication features improved fiber purity, enhanced structural uniformity, and superior dimensional stability. These optimizations provide lower shrinkage and higher mechanical strength under elevated temperature conditions. The uniform and dense fiber structure also makes the board particularly suitable for Fabrication and secondary processing, allowing it to be cut, drilled, or machined into various engineered insulation components.

CCEWOOL® also provides Fabrication customization services for this product. Based on equipment configurations or engineering drawings, boards can be supplied in customized dimensions, thicknesses, or complex shapes to meet the specific requirements of high-temperature industrial equipment, laboratory furnaces, and aerospace thermal protection systems.

Characteristics:

Excellent high-temperature stability;

Outstanding thermal shock resistance;

High mechanical strength and structural rigidity;

Low thermal conductivity;

Low heat storage capacity;

Excellent compatibility with Fabrication and machining processes.

Applications:

Industrial furnace linings;

Insulation structures for heating and reaction furnaces;

Linings for flues and high-temperature equipment;

High-temperature laboratory furnaces;

Laboratory heating systems;

Thermal insulation structures for high-temperature testing equipment;

Engineered high-temperature insulation components;

Thermal protection structures for aerospace systems;

Back-up insulation layers behind dense refractory linings;

High-temperature expansion joint filling materials.

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TDS:

CCEWOOL® Alumina Fiber Board 2732 for Fabrication					
Classification temp. °C (°F)	1500(2732)	1600(2912)	1700(3092)	1800(3272)	1900(3452)
Continuous duty temperature, °C(°F)	1350(2462)	1400(2732)	1500(2732)	1650(3000)	1800(3272)
Density approx. kg/m3	350/400	350/400	350	350/400	650/700
Linear shrinkage, %(24 hours at max. continuous duty temperature)					
1400°C	＜0.5				
1500°C		＜0.1			
1600°C			＜0.5		
1700°C				＜0.5	
1750°C					＜0.2
Chemical Composition (%)					
Al2O3	62	64	75	75	87
SiO2	37	35	24.5	24.5	12.5
Other	＜1	＜1	＜0.5	＜0.5	＜0.5
Cr2O3	-	-	-	-	
Thermal conductivity, W/m.K					
600°C (1120°F)	0.11	0.14	0.12	0.12	0.11
800°C (1472°F)	0.15	0.17	0.15	0.16	0.14
1000°C (1832°F)	0.27	0.24	0.18	0.19	0.17

CCEWOOL® PCW Board 2912 for Fabrication

Temperature Grades 1600°C (2912°F)

CCEWOOL® PCW Board 2912 for Fabrication is a high-performance polycrystalline wool (PCW) insulation board developed for demanding high-temperature engineering applications. The product is manufactured from high-purity polycrystalline fibers using a wet vacuum forming process, creating a dense and uniform fiber structure throughout the board.

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This structure enables the material to maintain excellent dimensional stability and structural integrity in operating environments up to 1600°C (2912°F).

This product belongs to the polycrystalline fiber board for Fabrication category. Compared with standard industrial-grade fiber boards, it features higher fiber purity, improved structural uniformity, and superior dimensional stability. As a result, the board exhibits lower thermal shrinkage and improved long-term stability under sustained high-temperature operating conditions.

CCEWOOL® PCW Board 2912 also offers excellent Fabrication compatibility. The dense and homogeneous board structure allows precise cutting, drilling, and machining, making it suitable for manufacturing a wide range of high-temperature insulation components. CCEWOOL® additionally provides Fabrication customization services, supplying boards in custom dimensions, thicknesses, or special shapes according to equipment structures or engineering drawings to meet the design requirements of high-temperature industrial systems.

Characteristics:

Engineering-grade polycrystalline fiber insulation board with superior quality;

Stable structure in operating temperatures up to 1600°C (2912°F);

High mechanical strength and structural rigidity;

Low thermal conductivity and low heat storage;

Excellent thermal shock resistance;

Minimal shot content and ultra-low dust generation;

Excellent Fabrication and machining capability.

Applications:

High-temperature laboratory furnaces;

Experimental thermal processing equipment;

Insulation structural components for industrial furnaces;

Back-up insulation behind dense refractory linings;

High-temperature insulation panels;

Furnace doors and structural insulation assemblies.

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TDS：

CCEWOOL® PCW Board 2912 for Fabrication					
Classification temp. °C (°F)	1500(2732)	1600(2912)	1700(3092)	1800(3272)	1900(3452)
Continuous duty temperature, °C(°F)	1350(2462)	1400(2732)	1500(2732)	1650(3000)	1800(3272)
Density approx. kg/m3	350/400	350/400	350	350/400	650/700
Linear shrinkage, %(24 hours at max. continuous duty temperature)					
1400°C	＜0.5				
1500°C		＜0.1			
1600°C			＜0.5		
1700°C				＜0.5	
1750°C					＜0.2
Chemical Composition (%)					
Al2O3	62	64	75	75	87
SiO2	37	35	24.5	24.5	12.5
Other	＜1	＜1	＜0.5	＜0.5	＜0.5
Cr2O3	-	-	-	-	
Thermal conductivity, W/m.K					
600°C (1120°F)	0.11	0.14	0.12	0.12	0.11
800°C (1472°F)	0.15	0.17	0.15	0.16	0.14
1000°C (1832°F)	0.27	0.24	0.18	0.19	0.17

CCEWOOL® PCW Board 3092 for Fabrication

Temperature Grades 1700°C (3092°F)

CCEWOOL® PCW Board 3092 for Fabrication is an advanced polycrystalline wool (PCW) insulation board developed for high-temperature hot-face applications and environments exposed to high-velocity gas flow. The product is manufactured from high-purity polycrystalline fibers using a wet vacuum forming process followed by controlled high-temperature stabilization, resulting in a

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stable crystalline fiber structure with excellent high-temperature performance.

CCEWOOL® PCW Board 3092 for Fabrication belongs to the polycrystalline fiber board category. Compared with conventional industrial-grade fiber boards, it provides higher structural strength, improved dimensional accuracy, and significantly lower shrinkage at elevated temperatures. Under operating conditions up to 1700°C (3092°F), the board maintains excellent structural stability and demonstrates strong resistance to high-velocity gas flow erosion, making it suitable for hot-face areas or environments with intense thermal gas movement.

CCEWOOL® PCW Board 3092 also offers excellent Fabrication compatibility. Its uniform and dense fiber structure allows precise machining, including cutting, drilling, and shaping into engineered components such as burner blocks, flame baffles, and high-temperature insulation assemblies.

CCEWOOL® additionally provides Fabrication customization services, supplying boards in custom thicknesses, special shapes, and complex structural components according to equipment configurations or engineering drawings to meet the design requirements of high-temperature industrial systems.

Characteristics:

Engineering-grade polycrystalline fiber insulation board;

Stable structure in operating temperatures up to 1700°C (3092°F);

Excellent resistance to high-velocity gas flow erosion;

High mechanical strength and modulus of rupture;

Outstanding thermal shock resistance;

Minimal shot content and ultra-low dust generation;

Excellent Fabrication and machining capability.

Applications:

Hot-face insulation components for industrial furnaces;

Combustion chamber structural parts;

High-temperature gas flow erosion zones;

Burner blocks and flame baffles;

Furnace doors and flame deflection panels;

High-temperature flues and hot gas ducts.

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TDS：

CCEWOOL® PCW Board 3092 for Fabrication					
Classification temp. °C (°F)	1500(2732)	1600(2912)	1700(3092)	1800(3272)	1900(3452)
Continuous duty temperature, °C(°F)	1350(2462)	1400(2732)	1500(2732)	1650(3000)	1800(3272)
Density approx. kg/m3	350/400	350/400	350	350/400	650/700
Linear shrinkage, %(24 hours at max. continuous duty temperature)					
1400°C	＜0.5				
1500°C		＜0.1			
1600°C			＜0.5		
1700°C				＜0.5	
1750°C					＜0.2
Chemical Composition (%)					
Al2O3	62	64	75	75	87
SiO2	37	35	24.5	24.5	12.5
Other	＜1	＜1	＜0.5	＜0.5	＜0.5
Cr2O3	-	-	-	-	
Thermal conductivity, W/m.K					
600°C (1120°F)	0.11	0.14	0.12	0.12	0.11
800°C (1472°F)	0.15	0.17	0.15	0.16	0.14
1000°C (1832°F)	0.27	0.24	0.18	0.19	0.17

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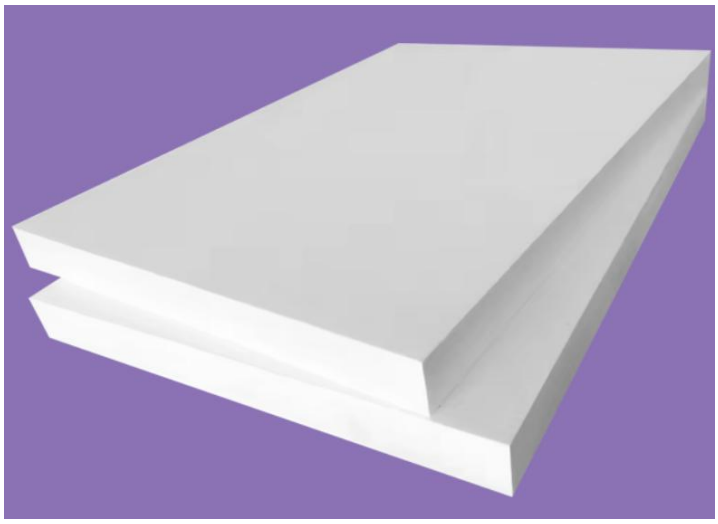
CCEWOOL® PCW Board 3272 for Fabrication



Temperature Grades 1800°C (3272°F)

CCEWOOL® PCW Board 3272 for Fabrication is a high-performance polycrystalline wool (PCW) insulation board developed for extreme high-temperature furnace lining systems. The product is manufactured from high-purity polycrystalline fibers using a wet vacuum forming process followed by high-temperature sintering, resulting in a highly stable fiber structure with excellent performance in severe thermal environments.

CCEWOOL® PCW Board 3272 for Fabrication belongs to the high-temperature polycrystalline fiber board category. Compared with conventional industrial-grade fiber boards, it offers higher material purity and a more stable crystalline structure. As a result, the board exhibits extremely low linear shrinkage and superior long-term stability when exposed to elevated temperatures. Even under operating conditions up to 1800°C (3272°F), the board maintains excellent structural integrity while providing strong resistance to thermal shock and high-velocity gas flow erosion.

CCEWOOL® PCW Board 3272 also provides excellent Fabrication compatibility. The homogeneous structure and high mechanical strength allow the material to be easily cut, drilled, or machined into engineered components such as furnace door panels, flame baffles, and high-temperature structural insulation parts. CCEWOOL® additionally offers Fabrication customization services, supplying boards in custom thicknesses, dimensions, and complex shapes according to furnace lining designs or engineering drawings.

Characteristics:

Engineering-grade polycrystalline fiber insulation board;

Maximum operating temperature up to 1800°C (3272°F);

Extremely low linear shrinkage at high temperatures;

Excellent thermal shock resistance;

High mechanical strength and structural stability;

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Capable of direct flame exposure;

Minimal shot content and ultra-low dust generation;

Excellent Fabrication and machining capability.

Applications:

High-temperature laboratory furnaces

Vacuum furnaces and controlled atmosphere furnaces

High-temperature sintering furnaces

Ceramic kilns

Glass industry furnaces

Hot-face linings for high-temperature equipment

Structural insulation components for extreme temperature environments.

TDS：

CCEWOOL® PCW Board 3272 for Fabrication					
Classification temp. °C (°F)	1500(2732)	1600(2912)	1700(3092)	1800(3272)	1900(3452)
Continuous duty temperature, °C(°F)	1350(2462)	1400(2732)	1500(2732)	1650(3000)	1800(3272)
Density approx. kg/m3	350/400	350/400	350	350/400	650/700
Linear shrinkage, %(24 hours at max. continuous duty temperature)					
1400°C	＜0.5				
1500°C		＜0.1			
1600°C			＜0.5		
1700°C				＜0.5	
1750°C					＜0.2
Chemical Composition (%)					
Al2O3	62	64	75	75	87
SiO2	37	35	24.5	24.5	12.5
Other	＜1	＜1	＜0.5	＜0.5	＜0.5
Cr2O3	-	-	-	-	
Thermal conductivity, W/m.K					
600°C (1120°F)	0.11	0.14	0.12	0.12	0.11

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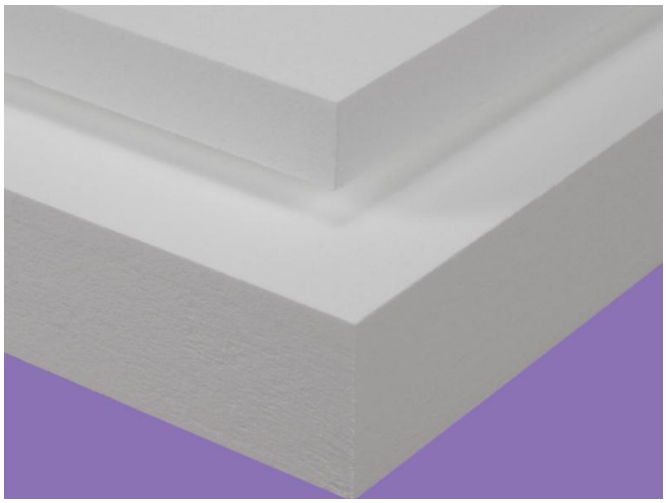
800°C (1472°F)	0.15	0.17	0.15	0.16	0.14
1000°C (1832°F)	0.27	0.24	0.18	0.19	0.17

CCEWOOL® PCW Board 3452 for Fabrication



Temperature Grades 1900°C (3452°F)

CCEWOOL® PCW Board 3452 for Fabrication is an advanced polycrystalline wool (PCW) insulation board specifically developed for ultra-high temperature industrial and research equipment. The product is manufactured from high-purity polycrystalline mullite fibers using a wet vacuum forming process followed by high-temperature stabilization treatment. This manufacturing process produces a highly stable fiber structure capable of maintaining structural integrity in extreme temperature environments.

CCEWOOL® PCW Board 3452 for Fabrication belongs to the polycrystalline fiber board category. Compared with conventional industrial fiber boards, it offers significantly higher raw material purity and a more stable crystalline structure. Even under operating conditions up to 1900°C (3452°F), the material maintains very low thermal shrinkage and stable mechanical properties, making it suitable for ultra-high temperature experimental equipment and specialized industrial systems.

CCEWOOL® PCW Board 3452 also provides excellent Fabrication compatibility, allowing precise machining for engineered insulation components. The board can be cut, drilled, or mechanically processed to manufacture complex high-temperature structural parts. CCEWOOL® additionally offers Fabrication customization services, providing boards in custom thicknesses, dimensions, and special shapes according to engineering requirements and equipment designs.

Characteristics:

Engineering-grade polycrystalline fiber insulation board;

Ultra-high temperature stability up to 1900°C (3452°F);

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Extremely low thermal shrinkage;

Excellent thermal shock resistance;

High mechanical strength and structural stability;

Capable of direct flame exposure;

Minimal shot content and ultra-low dust generation;

Excellent Fabrication and machining capability.

Applications:

Ultra-high temperature laboratory furnaces;

Advanced materials research equipment;

Vacuum high-temperature furnaces;

Specialized ultra-high temperature furnace systems;

Aerospace thermal testing equipment;

High-temperature structural insulation components;

Ultra-high temperature insulation structures;

Custom high-temperature structural insulation parts.

TDS:

CCEWOOL® PCW Board 3452 for Fabrication					
Classification temp. °C (°F)	1500(2732)	1600(2912)	1700(3092)	1800(3272)	1900(3452)
Continuous duty temperature, °C(°F)	1350(2462)	1400(2732)	1500(2732)	1650(3000)	1800(3272)
Density approx. kg/m3	350/400	350/400	350	350/400	650/700
Linear shrinkage, %(24 hours at max. continuous duty temperature)					
1400°C	＜0.5				
1500°C		＜0.1			
1600°C			＜0.5		
1700°C				＜0.5	
1750°C					＜0.2

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Chemical Composition (%)					
Al2O3	62	64	75	75	87
SiO2	37	35	24.5	24.5	12.5
Other	＜1	＜1	＜0.5	＜0.5	＜0.5
Cr2O3	-	-	-	-	
Thermal conductivity, W/m.K					
600°C (1120°F)	0.11	0.14	0.12	0.12	0.11
800°C (1472°F)	0.15	0.17	0.15	0.16	0.14
1000°C (1832°F)	0.27	0.24	0.18	0.19	0.17

CCEWOOL® PUREWOOL® RCF Paper for Fabrication

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

CCEWOOL® PUREWOOL® RCF Paper for Fabrication is an advanced refractory ceramic fiber paper developed for high-temperature insulation and precision Fabrication applications. The product is manufactured from high-purity aluminosilicate ceramic fibers using a multi-stage shot removal process combined with a precision wet-forming technique. This manufacturing process produces a uniform fiber structure with extremely low shot content, ensuring stable insulation performance and excellent processability in high-temperature environments.

This product belongs to the Refractory Ceramic Fiber Paper category. Compared with standard industrial ceramic fiber paper, it features higher raw material purity and improved structural uniformity, providing greater consistency and reliability in high-temperature operating conditions. The material offers excellent flexibility and surface smoothness, making it particularly suitable for Fabrication-intensive applications, including die-cut gaskets, laminated insulation materials, roll processing, and engineered sealing components.

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CCEWOOL® PUREWOOL® RCF Paper for Fabrication also features low thermal conductivity and low heat storage, helping reduce heat transfer and improve the thermal efficiency of equipment. In addition, the material provides excellent electrical insulation properties and strong resistance to molten metal penetration, making it widely used in high-temperature sealing, insulation gaskets, electrical insulation, and equipment protection applications.

To meet the design requirements of different industrial systems, CCEWOOL® also provides Fabrication customization services, including custom thicknesses, dimensions, and die-cut shapes. This enables the material to be directly integrated into customers' Fabrication processes for high-temperature equipment and engineered insulation systems.

Characteristics:

Low thermal conductivity and low heat storage;

Uniform fiber structure with minimal shot content;

Excellent electrical insulation performance;

High flexibility and tear resistance;

Smooth surface suitable for precision die-cutting;

Excellent Fabrication and secondary processing capability;

Good resistance to molten metal penetration;

Suitable for high-temperature sealing and insulation structures.

Applications:

High-temperature sealing and insulation gaskets;

Automotive and aerospace heat shield systems;

Household appliance insulation gaskets (ovens, water heaters, etc.);

Automotive acoustic and thermal insulation components;

Investment casting mold wrapping and separation gaskets;

Thermal insulation wrapping for steel ladles and structural components;

High-temperature expansion joint filling materials;

Electrical insulation materials for heating elements and electrical equipment.

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TDS:

CCEWOOL® PUREWOOL® RCF Paper for Fabrication		
Item	1260(2300℉)	1430(2600℉)
Operation Temperature	1100℃(2012℉)	1350℃(2462℉)
Density (kg/m3)	200	
Tensile Strength (MPa)	0.4	0.7
Color	White	White
Lose on ignition (%)	≤9	≤6
Chemical Composition (%)		
Al2O3	≥44	≥35
SiO2	≥55	≥49
ZrO2	-	≥15
Thermal Conductivity (w/m.k)		
200℃ (392℉)	0.06	0.06
400℃ (752℉)	0.09	0.08
600℃ (1112 ℉)	0.13	0.13
800℃ (1472℉)	0.19	0.18
1000℃ (1832℉)	-	0.29
1200℃ (2192℉)	-	0.43
Specification (MM)	60000×610×1 (200'×24”×1/24”) 30000×610×2 (100'×24”×1/12”)	
	20000×610×3 (66'×24”×1/8”) 15000×610×4 (50'×24”×1/6”)	
	12000×610×5 (40'×24”×1/5”) 10000×610×6 (33'×24”×1/4”)	
	Min Width: 5cm (2”)	
Package	Inner Plastic Bag +Outer Carton	