

CCEWOOL® Ceramic Fiber Blanket



Classification Temperature: 1100°C (2012°F), 1260°C (2300°F), 1400°C (2552°F), 1430°C (2600°F)

Chemical Composition: Alumina, Silica, (Zirconia)

CCEWOOL® Ceramic Fiber Blanket is manufactured from high-purity spun ceramic fibers using our self-developed double-sided internal needle-punching process. It offers excellent handling strength, low heat storage, and good thermal shock resistance, making it

suitable for a wide range of high-temperature insulation applications.

The product contains no organic binders and produces no smoke or odor during initial heating. Under long-term high-temperature service and repeated thermal cycling, CCEWOOL® Ceramic Fiber Blanket maintains stable structural integrity and thermal insulation performance. It is available in different sizes, temperature grades, and densities to meet diverse refractory and thermal insulation requirements.

With its stable fiber structure, good strength, and consistent quality, CCEWOOL® Ceramic Fiber Blanket is also well suited as a base material for Fabrication processing. It can be further processed into custom-shaped components, modules, composite insulation structures, and other customized high-temperature components, helping meet the requirements of complex equipment structures, installation adaptability, and system integration.

Characteristics:

- Low thermal conductivity;
- High tensile strength;
- Excellent thermal shock resistance;
- Excellent thermal insulation performance;
- Lightweight;
- Inorganic;

Excellent corrosion resistance;
Binder-free;
Asbestos-free;
Excellent machining and cutting performance;
Easy to install;
High refractoriness;
Good sound insulation performance.

Applications:

Heat-treatment and annealing furnaces;
Furnace door linings and seals;
Furnace and kiln repair;
Reusable insulation for steam and gas turbines;
Reformers and pyrolysis furnaces;
Pipe seals, gaskets, and expansion joints;
Pipeline wrap insulation;
Backup insulation for kilns and furnaces;
Crude oil heater linings;
Hot-face furnace lining repair;
Reheating furnaces;
Boiler insulation;
Boiler doors;
Reusable turbine covers;
Kiln car insulation and sealing;
Continuous and intermittent kilns;
Insulation for commercial dryers and hoods;
Veneer insulation over existing refractory linings;
Vacuum furnaces;
Glass furnace roof insulation;
Fire protection systems;
Raw material for modules and folded modules;
High-temperature gaskets.

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CCEWOOL® Ceramic Fiber Blanket					
Classification	1100DB	1260S	1260HPS	1400LZ	1430HZ
Classification temperature	1100°C (2012°F)	1260°C (2300°F)	1260°C (2300°F)	1400°C (2550°F)	1430°C (2600°F)
Operation Temp	982°C (1800°F)	1050°C (1922°F)	1100°C (2012°F)	1200°C (2192°F)	1350°C (2462°F)
Density (kg/m3)	96/ 128/ 160 (6,8,10lb/ft3)				
Shot Content(%)	≤15	≤15	≤15	≤15	≤12
Color	White	White	White	White	White
Chemical Composition of refractory ceramic blanket (%)					
Al ₂ O ₃	≥43	≥43	≥44	≥44	≥35
SiO ₂	≥52	≥54	≥55	≥50	≥49
ZrO ₂	-	-	-	≥5	≥15
Permanent Change on Heating (%), EN1094-1 After 24 hours					
@950°C (1742°F)	≤-3	-	-	-	-
@1000°C (1832°F)	-	1.5	1.5	-	-
@1100°C (2012°F)	-	2.5	2.2	1.5	-
@1200°C (2192°F)	-	3	3	2	1
@1300°C (2372°F)	-	-	-	3	2
@1400°C (2552°F)	-	-	-	-	3
Tensile Strength(Kg/m3), EN1094-1 KPa					
64kg/m3(4lb/ft3)	28	35	45	45	-
96kg/m3(6lb/ft3)	45	55	65	65	65
128kg/m3(8lb/ft3)	70	75	85	85	85
160kg/m3(10lb/ft3)	-	110	125	125	125
Heat Conductive Co-efficient W/(m·k)(128kg/m3)					
200°C (392°F)	0.07	0.06	0.06	0.06	0.06
400°C (752°F)	0.12	0.1	0.1	0.1	0.1
600°C (1112°F)	0.2	0.18	0.17	0.16	0.15
800°C (1472°F)	0.35	0.2	0.2	0.2	0.19
1000°C (1832°F)	-	0.27	0.26	0.26	0.26

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	

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