

CCEWOOL® Ultra-Thin Ceramic Fiber Blanket for Fabrication



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

Chemical Composition: Alumina, Silica, (Zirconia)
CCEWOOL® Ultra-Thin Ceramic Fiber Blanket for Fabrication is a refractory ceramic fiber insulation material specifically designed for space-constrained and precision insulation applications, with a minimum thickness of 6 mm. Despite its ultra-thin profile, the blanket maintains stable thermal insulation performance and good structural integrity, making it well suited for

compact and lightweight high-temperature equipment designs.

Thanks to its uniform fiber structure and good flexibility, CCEWOOL® Ultra-Thin Ceramic Fiber Blanket for Fabrication is easy to cut, wrap, bend, and form for multilayer insulation systems, sealing structures, and precision furnace lining applications. It can closely conform to curved surfaces, narrow gaps, and complex geometries, helping reduce installation gaps and improve insulation continuity.

With stable fiber quality, good flexibility, and dimensional consistency, the product is also an excellent base material for further Fabrication processing. It can be converted into custom-shaped components, composite insulation structures, and other customized high-temperature parts, better meeting the processing requirements of complex equipment and precision thermal insulation systems.

CCEWOOL® Ultra-Thin Ceramic Fiber Blanket for Fabrication is particularly suitable for high-temperature applications where space efficiency, installation precision, lightweight design, and reliable insulation performance are essential.

Characteristics:

- Lightweight, ultra-thin, and flexible;
- Excellent conformability to complex structures;
- Excellent cutting and processing performance;
- Excellent high-temperature stability;

Low thermal conductivity;
Low heat storage;
Good chemical corrosion resistance;
Binder-free;
Asbestos-free;
High tensile strength;
Excellent thermal shock resistance;
Easy to install.

Applications:

Localized insulation for precision components such as sensors, electrical control boxes, and inspection openings;
Flexible wrap insulation for metal piping in engines, boilers, and exhaust systems;
Insulation linings for fireplaces, baking ovens, sintering furnaces, and other lightweight heating equipment;
Ultra-thin thermal protection layers for aerospace, electronics, and lightweight equipment;
High-efficiency insulation for industrial furnace shells, heaters, reactors, and drying equipment;
Insulation linings for casting molds and pouring systems.

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CCEWOOL® Ultrathin Ceramic Fibre Blanket for Fabrication				
Classification	1260S	1260HPS	1400LZ	1430HZ
Classification temperature	1260°C(2300°F)	1260°C(2300°F)	1400°C(2550°F)	1430°C(2600°F)
Operation Temp	1050°C(1922°F)	1100°C(2012°F)	1200°C(2192°F)	1350°C(2462°F)
Density (kg/m3)	128/ 160 (8,10lb/ft3)			
Shot Content(%)	≤15	≤15	≤15	≤12
Color	White	White	White	White
Chemical Composition of refractory ceramic blanket (%)				
Al ₂ O ₃	≥43	≥44	≥44	≥35
SiO ₂	≥54	≥55	≥50	≥49
ZrO ₂	-	-	≥5	≥15

Permanent Change on Heating (%), EN1094-1 After 24 hours				
@950°C(1742°F)	-	-	-	-
@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)	35	45	45	-
96kg/m3(6lb/ft3)	55	65	65	65
128kg/m3(8lb/ft3)	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)	0.06	0.06	0.06	0.06
400°C(752°F)	0.1	0.1	0.1	0.1
600°C(1112°F)	0.18	0.17	0.16	0.15
800°C(1472°F)	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

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