

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.

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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 (%)				
Al ₂ O ₃	60	62	70	70
Al ₂ O ₃ +SiO ₂	98	98	98.5	98.5
Color	White	White	White	White
Density (kg/m ³)(lb/ft ³)	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	1450°C x 24h	1600°C x 24h	1600°C x 24h
	≤2.0	≤2.0	≤1.5	≤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

