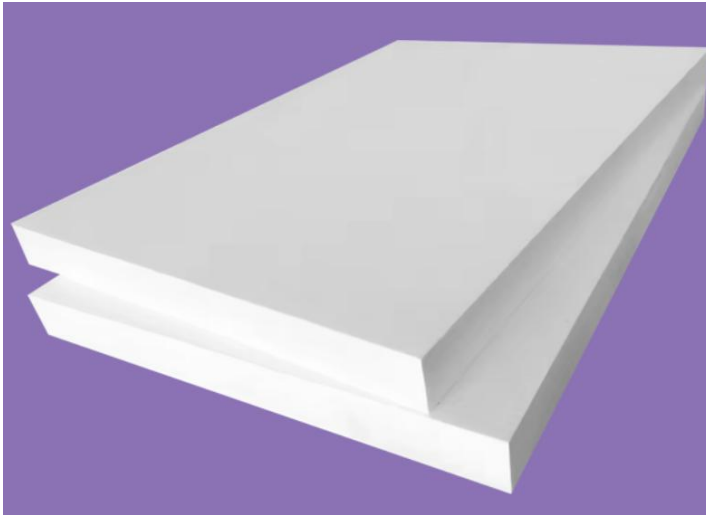


CCEWOOL® PCW Board 3272 for Fabrication



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;
 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 |
| 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 |

