

## 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 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
- 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:**

| <b>CCEWOOL® PUREWOOL® RCF Board for Fabrication</b> |                |                |
|---|----------------|----------------|
| 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°Cx24h≤3.0 |  |      |
| Modules of Rupture (MPa)                               | ≥0.3           |  |      |
| Chemical Composition of refractory ceramic blanket (%) |                |  |      |
| Al <sub>2</sub> O <sub>3</sub>                         | ≥44            |  | ≥35  |
| SiO <sub>2</sub>                                       | ≥55            |  | ≥49  |
| ZrO <sub>2</sub>                                       | -              |  | ≥15  |
| Compressive Strength (MPa,10% relative deformation)    |                |  |      |
| 300kg/m <sup>3</sup>                                   | ≥0.25          |  |      |
| 360kg/m <sup>3</sup>                                   | ≥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 |

| <b>CCEWOOL® PUREWOOL® RCF Board for Fabrication</b> |                              |
|---|------------------------------|
| Thickness (mm)                                      | 20.25.50.80.100              |
| Size (mm)   | 1200×1000 or customized size |

| <b>CCEWOOL® PUREWOOL® RCF Board for Fabrication</b> |                            |
|---|----------------------------|
| Thickness (in)                                      | 4/5",1",2",3",4"           |
| Size (in)   | 47"×40" or customized size |

