

## **CCEWOOL® Ceramic Fiber Board with Aluminum Foil for Fabrication**



Classification Temperature: 1100°C  
(2012°F), 1260°C (2300°F), 1400°C  
(2550°F), 1430°C (2600°F)

Chemical Composition: Alumina, Silica,  
(Zirconia)

CCEWOOL® Ceramic Fiber Board with Aluminum Foil for Fabrication is a high-temperature composite board developed for customized insulation and

protective structures. It is designed for applications requiring high dimensional accuracy, structural integrity, and surface protection. Rather than simply applying foil to a standard fiber board, the product is developed around Fabrication requirements for complex structures, precision assembly, and integrated insulation design.

The board is manufactured using a fully automated vacuum-forming process with 24-hour continuous production, followed by rapid and uniform automatic drying. This creates a dense and consistent internal structure, helping maintain stable compressive strength and thermal insulation performance at high temperatures. The stable board structure provides a reliable base for customized Fabrication components requiring dimensional consistency and structural stability.

The board surface is faced with 0.2 mm European-standard aluminum foil with an EN M1 fire classification. The foil layer provides radiant heat reflection, surface protection, and a barrier against external environmental influences. It also helps improve surface integrity and durability during assembly, transportation, and long-term service.

As a Fabrication product, CCEWOOL® Ceramic Fiber Board with Aluminum Foil can be customized according to customer drawings, structural designs, and installation requirements. It can be

manufactured into customized insulation panels, structural separators, protective components, and composite insulation parts. Single-sided, double-sided, and six-sided full aluminum foil facing options are available to suit different equipment structures and system designs.

With stable board performance, reliable foil facing, and good customization adaptability, CCEWOOL® Ceramic Fiber Board with Aluminum Foil for Fabrication provides an efficient material solution for insulation, protection, and structural separation in electrical and electronic equipment.

#### **Characteristics:**

Low heat capacity and low thermal conductivity;  
High compressive strength;  
Excellent resistance to gas erosion and long service life;  
Excellent thermal stability and thermal shock resistance;  
Continuous production with uniform fiber distribution and stable performance;  
Good sound insulation;  
Easy to form, cut, and install;  
Accurate dimensions and good flatness.

#### **Applications:**

External insulation for industrial pipelines;  
Insulation for hot-air ducts and high-temperature gas conveying systems;  
Thermal insulation for heat-treatment equipment casings;  
Insulation and protection for industrial furnaces and auxiliary equipment;  
Thermal insulation for high-temperature vessels and equipment shells;  
Insulation and protection for control cabinets and electrical equipment;  
High-temperature insulation areas requiring radiant heat reflection.

#### **TDS**

| <b>CCEWOOL® Ceramic Fiber Board with Aluminum Foil for Fabrication</b> |                    |                    |                    |                    |                    |
|------------------------------------------------------------------------|--------------------|--------------------|--------------------|--------------------|--------------------|
| Classification Temperature                                             | 1100°C<br>(2012°F) | 1260°C<br>(2300°F) | 1260°C<br>(2300°F) | 1400°C<br>(2550°F) | 1430°C<br>(2600°F) |

|                                                     |                      |                    |                    |                    |                    |
|-----------------------------------------------------|----------------------|--------------------|--------------------|--------------------|--------------------|
| Operation Temperature                               | 950°C<br>(1742°F)    | 1050°C<br>(1922°F) | 1100°C<br>(2012°F) | 1200°C<br>(2192°F) | 1350°C<br>(2462°F) |
| Color                                               | white                |                    |                    |                    |                    |
| Loss of Ignition (%)                                | ≤6                   |                    |                    |                    |                    |
| Permanent Shrinkage (%)<br>Linear                   | 950°Cx24h≤<br>2.0    | 1050°Cx24h≤<br>3.0 | 1050°Cx24h≤<br>3.0 | 1200°Cx24h<br>≤3.5 | 1350°Cx24h<br>≤3.5 |
| Modules of Rupture (MPa)                            | ≥0.3                 |                    |                    |                    |                    |
| Compressive Strength (MPa,10% relative deformation) |                      |                    |                    |                    |                    |
| 250kg/m3                                            | ≥0.15                |                    |                    |                    |                    |
| 300kg/m3                                            | ≥0.25                |                    |                    |                    |                    |
| 360kg/m3                                            | ≥0.3                 |                    |                    |                    |                    |
| Thermal Conductivity (w/m.k)                        |                      |                    |                    |                    |                    |
| 400°C                                               | 0.09                 | 0.08               | 0.07               | 0.07               | 0.07               |
| 600°C                                               | 0.11                 | 0.11               | 0.1                | 0.1                | 0.1                |
| 800°C                                               | 0.15                 | 0.14               | 0.13               | 0.13               | 0.13               |
| 1000°C                                              | 0.2                  | 0.19               | 0.17               | 0.19               | 0.18               |
| Chemical Composition (%)                            |                      |                    |                    |                    |                    |
| Al2O3                                               | ≥44                  | ≥44                | ≥44                | ≥44                | ≥35                |
| SiO2                                                | ≥52                  | ≥52                | ≥55                | ≥50                | ≥49                |
| ZrO2                                                | -                    | -                  | -                  | ≥5                 | ≥15                |
| Package                                             | Carton box or pallet |                    |                    |                    |                    |

| <b>CCEWOOL® Ceramic Fiber Board with Aluminum Foil for Fabrication</b> |                              |
|------------------------------------------------------------------------|------------------------------|
| Thickness (mm)                                                         | 20.25.50.80.100              |
| Size (mm)                                                              | 1200×1000 or customized size |