

CCEWOOL® Vacuum-Formed Ceramic Fiber Shapes

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

Chemical Composition: Alumina, Silica

CCEWOOL® Vacuum-Formed Ceramic Fiber Shapes are engineered Fabrication products developed for customized high-temperature insulation and structural protection. Made from our own high-purity ceramic fiber bulk specifically selected for vacuum forming, the products are formed in one piece using advanced vacuum-forming technology and precision molds to meet complex high-temperature and structural requirements.

The product is specifically developed around Fabrication customization, allowing shape, dimensions, strength, and installation fit to be matched to different equipment structures and functional areas. The vacuum-forming process creates a dense and uniform internal structure that maintains good dimensional stability and mechanical integrity during long-term service at 1260–1430°C.

CCEWOOL® Vacuum-Formed Ceramic Fiber Shapes can be customized according to customer drawings, samples, or structural requirements. Available geometries include tubular, conical, domed, box-shaped, and other complex configurations. Selected standard sizes may also be available from stock. Where required, local cutting or machining can be applied for easier installation and maintenance.

Depending on application requirements, both organic-bonded and inorganic-bonded grades are available. Specialized rigidizers or refractory surface coatings can also be applied to improve abrasion resistance, surface strength, and service life under high gas velocity, frequent thermal cycling, or localized mechanical wear.

With stable high-temperature performance, good structural integrity, and strong Fabrication flexibility, CCEWOOL® Vacuum-Formed Ceramic Fiber Shapes are widely used in metallurgy, chemical processing, power generation, and glass manufacturing for furnace linings, high-temperature piping, heating equipment protection, fire doors, flues, and other critical high-temperature areas.

Characteristics:

Precision forming and good dimensional stability;

High strength and rigidity;

Low heat capacity;

Low thermal conductivity;

Excellent thermal stability;

Excellent thermal shock resistance;

Good resistance to gas erosion;

Good chemical stability;

Good machinability for complex shapes.

Applications:

Industrial furnace linings and high-temperature structural components;

Observation ports and thermocouple openings;

Burner blocks for industrial furnaces;

Thermal protection for furnace doors, heating equipment, and high-temperature piping;

Linings and sealing components for aluminum cells, glass furnaces, and chemical reactors;

High-temperature flues and fire door linings;

Radiant heat insulation for commercial and industrial heating equipment;

Industrial furnace nozzles and furnace door seals;

Non-ferrous metal transfer channels;

Pads, cap linings, and electrical equipment connection gaskets.

TDS

CCEWOOL® Vacuum-Formed Ceramic Fiber Shapes					
Classification		1260S	1260HPS	1400LZ	1430HZ
Density(KG/m ³)		280-400	280-400	280-400	280-400
320kg/m ³ /at(°C/24h)		≤1.5	≤1.5	≤1.5	≤1.5
Linear Shrinkage Rate(%)		-1000	-1000	-1100	-1200
Flexural strength(mpa)		≥0.6	≥0.6	≥0.6	≥0.6
Thermal Conductivity Rate(W/m.k)	400°C	0.08	0.08	-	-
	600°C	0.15	0.15	0.14	0.12
	800°C	0.2	0.19	0.18	0.16

	1000°C	-	-	0.21	0.19
Chemical Composition (%)	Al ₂ O ₃	44-46	47-49	52-55	38-43
	Al ₂ O ₃ +SiO ₂	≥99.0	≥99.0	≥99.0	-
	ZrO ₃	-	-	-	15-17
	Other	≤1.0	≤1.0	≤1.0	≤1.0