



CCEWOOL®

**Advanced Thermal Engineering
& Fabrication Solutions**

- ▶ Ceramic Fiber
- ▶ Bio Soluble Fiber
- ▶ Polycrystalline Fiber
- ▶ Microporous Insulation
- ▶ Stone Wool
- ▶ Calcium Silicate Board
- ▶ Insulating Fire Brick
- ▶ Refractory Fire Brick
- ▶ Refractory Mortar
- ▶ Refractory Castable



Doublegret

Make Furnace Energy Efficiency Simpler



Advanced Thermal Engineering & Fabrication Solutions



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CCEWOOL® specializes in the research, manufacturing, and global supply of high-temperature insulation materials and refractory insulation systems. We help industrial customers improve energy efficiency, reduce operating costs, and enhance the safety and stability of high-temperature equipment.

For more than 20 years, CCEWOOL® has focused on high-temperature insulation innovation. Our product portfolio includes refractory ceramic fiber, low biopersistent fiber (AES), polycrystalline fiber (PCW), insulating fire brick, microporous insulation, and building and industrial insulation materials. CCEWOOL® products are widely used in steel and metallurgy, aluminum, petrochemical, ceramics and glass, heat treatment, power generation, new energy, building fire protection, and industrial equipment manufacturing.



In addition to standard product supply, we provide material selection support, furnace lining optimization, fabrication services, and customized insulation solutions based on different equipment structures and operating conditions.



Today, CCEWOOL® products are exported to more than 100 countries and regions. With a global sales network and local warehousing support in the United States, we provide faster delivery and more responsive project support for customers worldwide.



CCEWOOL® will continue to deliver reliable products, professional solutions, and long-term value for the global high-temperature insulation industry.



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Why CCEWOOL®



20+

20+ Years of History in the Refractory Fiber Field

CCEWOOL® has been deeply rooted in the refractory fiber field for over 20 years, with continuous innovation at the core of our operations. We have driven technological breakthroughs from traditional ceramic fibers to biosoluble fibers and polycrystalline fibers, especially in the innovation of 1600 polycrystalline fiber technology.



Thermal Energy-Saving Solution Technical Support

CCEWOOL® specializes in providing comprehensive thermal energy-saving solutions, with multiple technical experts continually conducting research on industrial kilns, offering energy-saving design and technical consultation for metallurgy, steel, petrochemical, power, ceramic, glass industries, and new energy sectors.



20+ Years of Global Customer Service and Support

CCEWOOL® has been exporting for over 20 years, with its brand covering more than 40 countries worldwide. The company has brand agents in multiple countries to meet customers' immediate purchasing needs. Additionally, CCEWOOL® has warehouses in Charlotte, and Youngstown, USA, providing convenient delivery services to North American customers.



Order Progress Video Presentation

Service is at the core of the CCEWOOL® brand, providing real-time videos and images for every stage of your order, from production to inspection to container loading. This transparent and trustworthy approach has gained high recognition from customers in over 40 countries.



A Brand Validated by 30+ International Exhibition

For 20+ years, from Asia to Europe to the Americas, we have participated in over 30 global exhibitions, becoming a significant force in the industry worldwide. With validation from over 30 exhibitions in 20 years, we have become a trusted brand in the fiber industry.



One-Stop International Procurement Service

CCEWOOL®, with 20 years of international trade experience and a professional logistics documentation and customs clearance service team, offers a one-stop service to ensure your orders are delivered smoothly and worry-free.



Adhere to Strict Quality Control System

CCEWOOL® products have won a number of authoritative certifications, including rach certification, Fraunhofer laboratory certification and CE certification, which fully prove the excellent quality of our products.



Diverse Talent Configuration

Regarding staff configuration, CCEWOOL® employs a diverse talent pool, gathering professionals from around the world, respecting cultural differences to meet the needs of various markets. This cultural diversity makes us unique in the global market, striving for perfection in technological innovation, product quality, and customer service.



Competitive Pricing

As a 20+ year veteran brand in the insulation fiber industry, CCEWOOL® leverages a strong customer base, large-scale supply capabilities, and efficient management processes to offer the most competitive prices and consistently high quality.



U.S. Warehouse Local Stock Support

CCEWOOL® U.S. Warehouse is the most professional distribution center for refractory materials in North America. With the most comprehensive product range and the largest storage capacity in the region, it is designed to meet the high demands of industrial customers with efficiency and reliability.



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Our Products



CCEWOOL® specializes in the development and manufacturing of high-temperature insulation materials and thermal engineering solutions, providing safe, efficient, and energy-saving insulation support for industrial high-temperature equipment.



Designed for demanding industrial environments, our products help reduce heat loss, energy consumption, and carbon emissions while improving equipment stability, extending maintenance intervals, and lowering overall operating costs.



With a comprehensive product portfolio and extensive application experience, CCEWOOL® products are widely used in steel, aluminum, petrochemical, ceramics and glass, cement, heat treatment, power generation, new energy, fire protection, and equipment manufacturing industries.



CCEWOOL® combines material expertise, manufacturing capability, and fabrication support to provide complete solutions based on equipment structure, operating temperature, energy-saving goals, and installation requirements.



Supported by advanced production capacity, a broad product range, and a global service network, CCEWOOL® continues to deliver reliable high-temperature insulation solutions to customers worldwide.



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Ceramic Fiber Products

CCEWOOL® ceramic fiber products feature low thermal conductivity, low heat storage, lightweight structure, good thermal shock resistance, and easy installation. They help reduce heat loss in high-temperature equipment and improve energy efficiency.

Product forms include ceramic fiber bulk, blanket, board, paper, module, textiles, and vacuum-formed shapes. They are widely used in steel, petrochemical, aluminum, ceramics and glass, heat treatment, and industrial furnace applications.



Bio Soluble Fiber Products

CCEWOOL® bio soluble fiber products are made from AES alkaline earth silicate materials. While maintaining excellent insulation performance, they offer improved biosolubility and stronger health and environmental advantages. The products comply with GHS requirements and do not require carcinogen warning labels. Their solubility and safety have been tested and verified by the Fraunhofer Institute in Germany.

Product forms include bio soluble fiber bulk, blanket, board, paper, and module. They are widely used in petrochemical, power generation, heat treatment, industrial furnaces, and equipment manufacturing applications.



Polycrystalline Fiber Products

CCEWOOL® polycrystalline fiber products are designed for ultra-high-temperature and harsh chemical environments. They are produced using the sol-gel process, with high alumina content and a classification temperature of up to 1600°C.

Product forms include polycrystalline fiber bulk, blanket, board, paper, and module. They are widely used in high-temperature heat treatment furnaces, ceramic kilns, petrochemical units, special industrial furnaces, and other ultra-high-temperature insulation systems.



High-Temperature Insulation Fiber Shapes

Custom-made for different equipment structures, these shapes provide good insulation, lightweight performance, and easy installation for industrial furnaces, heat treatment equipment, and special high-temperature areas.



Stone Wool

Stone wool provides thermal insulation, fire resistance, sound absorption, and durability for buildings, industrial equipment, pipelines, and large insulation projects.



Microporous Insulation

Microporous insulation offers extremely low thermal conductivity and high insulation efficiency in limited spaces, suitable for steel, petrochemical, power generation, new energy, and advanced thermal equipment.



Calcium Silicate Board

Calcium silicate board combines thermal insulation with mechanical strength. It is easy to cut and install, and is used for pipelines, equipment, furnace backup insulation, and building fire protection.



Insulating Fire Brick

Insulating fire brick features low thermal conductivity, low heat storage, and lightweight structure, helping reduce furnace heat loss in walls, roofs, doors, and other furnace areas.



Refractory Fire Brick

Refractory fire brick provides high-temperature resistance, corrosion resistance, and structural strength for furnace linings in steel, cement, glass, ceramics, and related industries.



Refractory Mortar

Refractory mortar is used for laying, repairing, and high-temperature sealing of refractory bricks and insulating fire bricks, with good bonding strength and workability.



Refractory Castable

Refractory castable offers flexible installation and good structural integrity for furnace linings, combustion chambers, flues, and complex structural areas.



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CCEWOOL® Refractory Ceramic Fiber (RCF)

Classification Temperature:

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

Chemistry: Alumina, Silica

CCEWOOL® refractory ceramic fiber products are manufactured from high-purity raw materials through an advanced electric furnace melting and spinning process. They offer excellent thermal insulation, low heat storage, and good thermal shock resistance, helping industrial equipment reduce heat loss, improve energy efficiency, and shorten heating and cooling cycles.



With a stable fiber structure and a wide range of product forms, CCEWOOL® refractory ceramic fiber products are widely used in industrial furnaces, heat treatment equipment, petrochemical units, steel and metallurgical systems, ceramic and glass production equipment, and other high-temperature industrial equipment.



The product range includes ceramic fiber bulk, blanket, board, paper, module, textiles, and vacuum-formed shapes, meeting diverse application needs from furnace lining insulation and equipment sealing to fire protection and complex shaped component fabrication.



With mature manufacturing processes and extensive engineering application experience, CCEWOOL® refractory ceramic fiber products have become a widely used insulation solution in many high-temperature industrial fields.



CCEWOOL® Ceramic Fiber Bulk

Classification Temperature:

1100°C
(2012°F)

1260°C
(2300°F)

1400°C
(2550°F)

1430°C
(2600°F)

Chemistry: Alumina, Silica



CCEWOOL® ceramic fiber bulk is a fully inorganic fiber material. It does not carbonize or generate smoke during heating, making it suitable for direct high-temperature insulation filling.

With its stable fiber quality, it is also an ideal raw material for fabrication processes and can be further processed into monolithic spray-applied insulation, vacuum-formed shapes, custom fiber shapes, and other integrated high-temperature insulation products.

To meet different processing requirements, CCEWOOL® ceramic fiber bulk is available in multiple forms, including:

- Milled Fiber
- Fine Chopped Fiber
- Medium Chopped Fiber
- Coarse Chopped Fiber



CCEWOOL® Ceramic Fiber Blanket

Classification Temperature:

1100°C
(2012°F)

1260°C
(2300°F)

1400°C
(2550°F)

1430°C
(2600°F)

Chemistry: Alumina, Silica



CCEWOOL® Ceramic Fiber Blanket is manufactured from high-purity ceramic fiber spun bulk using our self-developed double-sided inner needle-punching process. It offers excellent handling strength, low heat storage, and outstanding thermal shock resistance, making it suitable for a wide range of high-temperature insulation applications.

The product contains no organic binders, ensuring no smoke and no odor during initial heating. In addition, thanks to its stable fiber structure, good strength, and consistent quality, CCEWOOL® Ceramic Fiber Blanket is also highly suitable as a base material for Fabrication processing.

- ✓ Low thermal conductivity
- ✓ High tensile strength
- ✓ High thermal shock resistance
- ✓ Excellent thermal insulation performance
- ✓ Lightweight
- ✓ Inorganic
- ✓ High corrosion resistance
- ✓ Binder-free
- ✓ Asbestos-free
- ✓ Excellent fabrication and cutting performance



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CCEWOOL® Ceramic Fiber Board



Classification Temperature:

1100°C
(2012°F)

1260°C
(2300°F)

1400°C
(2550°F)

1430°C
(2600°F)



Chemistry: Alumina, Silica



CCEWOOL® ceramic fiber board is manufactured from our own high-purity refractory ceramic fiber bulk as the main raw material. It is formed through a vacuum forming process and produced using a 2-hour rapid drying process. This process allows the fibers to be evenly distributed within the board, forming consistent bulk density and good compressive strength. As a result, the product provides excellent thermal insulation and structural stability in high-temperature environments, with good resistance to high-velocity gas erosion, mechanical vibration, and certain impact loads.



According to different application requirements, CCEWOOL® ceramic fiber board is available in both organic-bonded and inorganic smoke-free grades. For organic-bonded grades, the organic content burns out completely when the equipment is first heated to approximately 230–315°C (450–600°F), without affecting the board's refractory and insulation performance. If the product is exposed to water, steam, or oil during installation or use, its physical and thermal properties can return to a stable condition after sufficient drying, making it suitable for complex site conditions.



With its stable board structure, good dimensional consistency, and excellent machinability, CCEWOOL® ceramic fiber board is suitable not only for standard insulation applications but also for fabrication processing. It can be cut, grooved, drilled, chamfered, and machined into custom shapes. Based on customer drawings, fabrication customization is available for shaped components, composite insulation structures, and customized high-temperature parts, helping meet the requirements of complex equipment structures and integrated insulation system designs.



With excellent insulation performance, thermal shock resistance, abrasion resistance, chemical corrosion resistance, and good adaptability for further processing, CCEWOOL® ceramic fiber board is widely used in furnace and oven linings, boiler ducts, chimneys, and insulation and structural protection areas of various high-temperature equipment. It is a reliable high-temperature insulation material for both standard applications and fabrication customization needs.

- ✓ Excellent Compressive Strength
- ✓ Low Thermal Conductivity
- ✓ High-Temperature Stability
- ✓ Excellent Thermal Shock Resistance
- ✓ High Mechanical Strength
- ✓ Easy to Machine and Fabricate
- ✓ Excellent Chemical Stability
- ✓ Lightweight with Low Heat Storage
- ✓ Good Chemical Corrosion Resistance
- ✓ Excellent Resistance to Gas Velocity Erosion
- ✓ Good Sound Insulation Performance
- ✓ Uniform Structure and Excellent Workability
- ✓ Accurate Dimensions and Good Flatness



Ceramic Fiber Board



Inorganic Ceramic Fiber Board



Water Repellent Ceramic Fiber Board



1900°F LTC Board



Super Duty Ceramic Fiber Board



Ceramic Fiber Large-Format Board for Fabrication



Ceramic Fiber Ultra-Thin Board for Fabrication



Aluminum Foil Ceramic Fiber Board for Fabrication



1900°F Back-Up Board for Fabrication



PUREWOOL® Ceramic Fiber Board for Fabrication

CCEWOOL® Ceramic Fiber Paper



Classification Temperature:

1260°C
(2300°F)

1400°C
(2550°F)

1430°C
(2600°F)



Chemistry: Alumina, Silica

CCEWOOL® ceramic fiber paper is a flexible high-temperature insulation product made from high-purity ceramic fiber with a small amount of organic binder. It is produced through a nine-step fine slag removal process. With strict slag content control, the product offers good flexibility and stable mechanical integrity. It is easy to cut, die-cut, laminate, and multilayer composite, making it suitable for fabrication processing.

CCEWOOL® ceramic fiber paper can be further processed into gaskets, seals, insulation pads, and other functional high-temperature components.

CCEWOOL® can also provide fabrication customization according to customer drawings and specific application requirements, producing ceramic fiber paper products in different sizes, thicknesses, and shapes to meet the needs of high-temperature equipment, sealing structures, and integrated insulation system designs.



Ceramic Fiber Paper



Ceramic Fiber Retardant Paper



Intumescent Ceramic Fiber Paper



PUREWOOL® Ceramic Fiber Paper for Fabrication



Ceramic Fiber Gasket for Fabrication

CCEWOOL® Ceramic Fiber Module



Classification Temperature:

1260°C
(2300°F)

1400°C
(2550°F)

1430°C
(2600°F)



Chemistry: Alumina, Silica

CCEWOOL® ceramic fiber modules are made from high-quality refractory ceramic fiber blanket. The blanket is mechanically pre-compressed, folded, and fitted with a pre-installed anchoring system according to furnace lining design requirements.

The modules can be directly fixed to the steel shell anchoring system of industrial furnaces, forming a continuous and integrated high-temperature insulation lining structure.

CCEWOOL® ceramic fiber modules are available in various standard structures and also support fabrication customization for different furnace types and installation methods. Module size, thickness, density, folding pattern, and anchoring system can be optimized and customized according to customer lining designs or engineering drawings, ensuring better compatibility with different industrial furnace structures, operating conditions, and installation requirements.

Multiple Module Structure Types:

- S-Fold Module
- U-Fold Module
- L-Shape Module
- Stack Module
- Monolithic Module

Multiple Anchor Systems & Installation Options:

- Center Fixing (Welded Anchor)
- Pre-Welded Stud (Center Fixing)
- Side Fixing System
- Self-Tapping Screw System



Ceramic Fiber Module



Superbloc® Monolithic Fiber Module

CCEWOOL® Ceramic Fiber Textiles



Classification Temperature: 1260°C (2300°F)



Chemistry: Alumina, Silica

CCEWOOL® ceramic fiber textiles are made from our high-purity ceramic textile fiber bulk and reinforced with fiberglass or stainless steel wire. They offer excellent chemical stability, thermal shock resistance, corrosion resistance, and resistance to damage caused by mechanical vibration and stress.



Ceramic Fiber Yarn



Ceramic Fiber Cloth



Ceramic Fiber Tape



Ceramic Fiber Rope



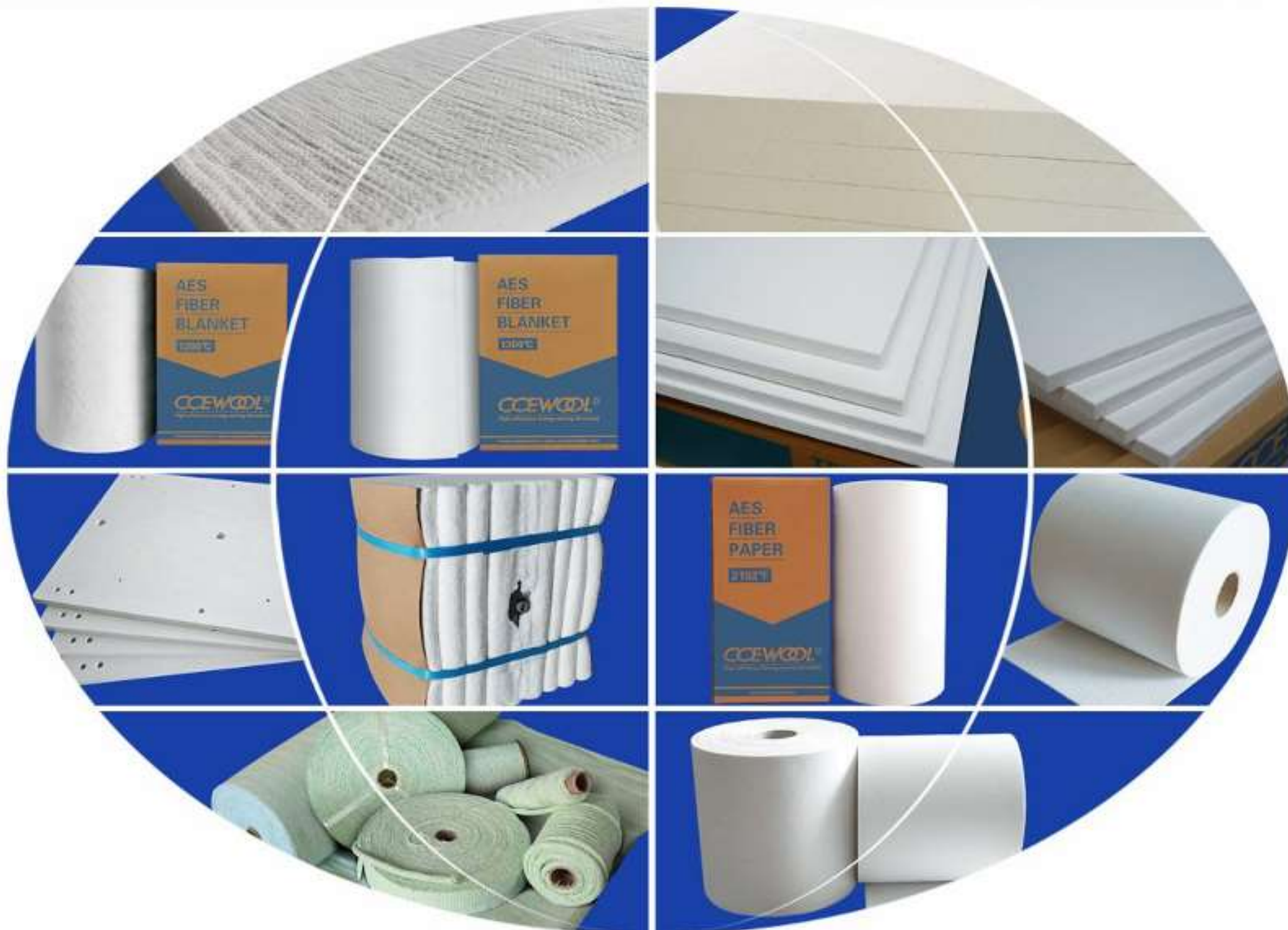
1200°C (2192°F), 1300°C (2372°F)



Chemistry: Silicon, Calcium, Magnesium (AES)

Compared with traditional ceramic fiber, low biopersistent fiber has lower thermal conductivity and higher fiber content, helping reduce heat transfer and improve overall insulation efficiency. Under the same application conditions, it provides enhanced insulation performance and helps reduce equipment energy consumption and operating costs.

CCEWOOL® low biopersistent fiber products are available in various forms, including bulk, blanket, board, paper, and modules. They are widely used in petrochemical, power generation, heat treatment, industrial furnace, and other high-temperature applications where occupational health and environmental requirements are important.





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CCEWOOL® Bio Soluble Fiber Bulk



Classification Temperature:

1200°C (2192°F), 1300°C (2372°F)



Chemistry: Silicon, calcium, magnesium (AES)

As it is based on a low biopersistent fiber system, this product maintains good high-temperature performance while offering higher biosolubility, helping meet modern industrial requirements for occupational health and environmental standards.

According to different production process requirements, CCEWOOL® Bio Soluble Fiber Bulk is available in multiple specifications, including:

- Milled Fiber
- Fine Chopped Fiber
- Medium Chopped Fiber
- Coarse Chopped Fiber



CCEWOOL® Bio Soluble Fiber Blanket



Classification Temperature:

1200°C (2192°F), 1300°C (2372°F)



Chemistry: Silicon, calcium, magnesium (AES)

CCEWOOL® Bio Soluble Fiber Blanket is manufactured from alkaline earth silicate (AES) fibers and belongs to the calcium-magnesium biosoluble fiber material family. These fibers are soluble in body fluids, making them a safer alternative to traditional alumino-silicate ceramic fibers.



CCEWOOL® Low Biopersistent Fiber Blanket has passed the solubility certification by the Fraunhofer Institute in Germany, is classified by the International Agency for Research on Cancer (IARC) as a non-carcinogenic material, and complies with relevant environmental requirements such as GHS, requiring no additional carcinogen warning label.



CCEWOOL® Bio Soluble Fiber Board



Classification Temperature:

1200°C (2192°F), 1300°C (2372°F)



Chemistry: Silicon, calcium, magnesium (AES)

CCEWOOL® Bio Soluble Fiber Board is a high-performance refractory insulation board developed for fabrication-customized insulation and protective structures.

It is manufactured from our high-purity low biopersistent fiber bulk, combined with selected organic and inorganic bonding systems, and formed through a vacuum forming process. The product features a uniform and dense internal structure with stable bulk density, meeting higher requirements for structural integrity, installation accuracy, and system compatibility in high-temperature equipment.



CCEWOOL® Bio Soluble Fiber Paper



Classification Temperature: 1200°C (2192°F)



Chemistry: Silicon, calcium, magnesium (AES)

CCEWOOL® Bio Soluble Fiber Paper is made from our high-purity alkaline earth silicate (AES) fibers, combined with a unique organic bonding system.

It offers good flexibility, mechanical strength, and high-temperature stability, making it an environmentally friendly fiber paper product for high-temperature insulation, protection, and precision insulation structure applications.



CCEWOOL® Bio Soluble Fiber Module



Classification Temperature:
1200°C (2192°F), 1300°C (2372°F)



Chemistry: Silicon, calcium, magnesium (AES)

CCEWOOL® Bio Soluble Fiber Modules are manufactured from our high-quality low biopersistent fiber blankets through a precise compression-forming process. They maintain stable thermal insulation performance and chemical stability at temperatures up to 1300°C (2372°F).

Featuring a lightweight structure, low thermal conductivity, and low heat storage, the modules effectively reduce furnace heat loss while improving thermal efficiency and overall energy utilization.



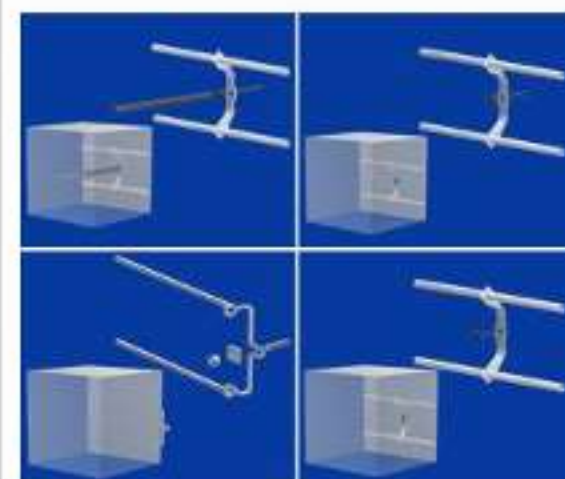
MULTIPLE MODULE STRUCTURE TYPES

- S-Fold Module
- U-Fold Module
- L-Shape Module
- Stack Module
- Monolithic Module



MULTIPLE ANCHOR SYSTEMS & INSTALLATION OPTIONS

- Center Fixing (Welded Anchor)
- Pre-Welded Stud (Center Fixing)
- Side Fixing System
- Self-Tapping Screw System



CCEWOOL® Bio Soluble Fiber Textiles



Classification Temperature: 1200°C (2192°F)



Chemistry: Silicon, calcium, magnesium (AES)

CCEWOOL® Bio Soluble Fiber Textiles are made from low biopersistent fibers reinforced with fiberglass or stainless steel wire.

As an innovative solution for high-temperature applications, these textiles are based on a calcium-magnesium chemical composition, meeting service requirements up to 1200°C while offering excellent biosolubility and environmental advantages.

CCEWOOL® Bio Soluble Fiber Textiles provide excellent chemical stability and are resistant to most chemicals, except hydrofluoric acid, phosphoric acid, and strong alkalis. If exposed to water or steam, their thermal and physical properties remain unaffected after drying.

The products have passed solubility testing by the Fraunhofer Institute in Europe.



Ceramic Fiber Yarn



Ceramic Fiber Cloth



Ceramic Fiber Tape



Ceramic Fiber Rope



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CCEWOOL® Polycrystalline Wool (PCW)



Classification Temperature: 1600°C (2912°F)



Chemistry: Alumina, Silica

CCEWOOL® polycrystalline wool products are designed for ultra-high-temperature applications and harsh chemical environments, making them one of the most advanced insulation materials for high-temperature thermal systems.

Manufactured using advanced Sol-Gel technology, these products contain up to 73% alumina, forming a uniform and stable polycrystalline fiber structure. Compared with conventional refractory fibers, polycrystalline wool offers higher service temperatures, lower permanent linear shrinkage, and superior chemical corrosion resistance.

Due to their high fiber purity and extremely low shot content, CCEWOOL® polycrystalline wool products provide exceptionally

low thermal conductivity. Even under prolonged high-temperature operating conditions, they maintain excellent insulation performance and dimensional stability. With a classification temperature of up to 1600°C (2912°F), they are well suited for ultra-high-temperature applications where traditional ceramic fibers may not be sufficient.

The CCEWOOL® polycrystalline wool product range includes polycrystalline wool bulk, blanket, board, paper, and modules. These products are widely used in high-temperature heat treatment furnaces, ceramic kilns, petrochemical reactors, specialty industrial furnaces, and other applications requiring outstanding temperature resistance and chemical stability.

With excellent high-temperature stability and long-term reliability, CCEWOOL® polycrystalline wool products provide efficient and durable insulation solutions for demanding ultra-high-temperature environments.





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CCEWOOL® Polycrystalline Wool Bulk



Classification Temperature: 1600°C (2912°F)



Chemistry: Alumina, Silica

CCEWOOL® Polycrystalline Wool Bulk Fiber is designed for high-temperature applications, severe chemical attack, and long-term stable operation.

It is widely used in high-temperature industrial furnace linings, expansion joint filling, high-temperature sealing structures, and insulation systems requiring excellent excellent chemical inertness and long-term dimensional stability.



CCEWOOL® Polycrystalline Wool Board



Classification Temperature:

1500°C (2732°F), 1600°C (2912°F), 1700°C (3092°F),
1800°C (3272°F), 1900°C (3452°F)



Chemistry: Alumina, Silica

CCEWOOL® Polycrystalline Wool Board is a high-performance PCW board developed for ultra-high-temperature engineering and fabrication customization applications.

With excellent ultra-high-temperature stability, dimensional integrity, and strong adaptability for fabrication customization, it is a reliable customized insulation board solution for advanced high-temperature equipment.



CCEWOOL® Polycrystalline Wool Blanket



Classification Temperature: 1600°C (2912°F)



Chemistry: Alumina, Silica

CCEWOOL® Polycrystalline Wool Blanket is a high-performance refractory insulation product developed for extreme high-temperature applications from 1350°C to 1500°C (2462°F to 2732°F).

With extremely low shot content and a more uniform fiber structure, CCEWOOL® PCW Blanket effectively reduces thermal bridging, providing lower and more stable thermal conductivity.



CCEWOOL® Polycrystalline Wool Paper



Classification Temperature: 1600°C (2912°F)



Chemistry: Alumina, Silica

CCEWOOL® Polycrystalline Wool Paper is a flexible high-performance insulation material developed for ultra-high-temperature applications.

It can be fabricated into custom shapes, insulation gaskets, thermal barriers, and high-temperature protection parts, making it suitable for electronic equipment, electrical systems, battery systems, and other precision thermal structures.



CCEWOOL® Ultra-Thin Polycrystalline Wool Blanket for Fabrication



Classification Temperature: 1600°C (2912°F)



Chemistry: Alumina, Silica

CCEWOOL® Fabrication Ultra-Thin Polycrystalline Wool Blanket is an ultra-high-temperature insulation material developed for highly integrated customized insulation structures.

Designed for fabrication applications, it meets the demanding requirements of space-limited, complex, and high thermal-safety equipment for insulation thickness, conformability, stability, and assembly consistency.



CCEWOOL® Polycrystalline Wool Module



Classification Temperature: 1600°C (2912°F)



Chemistry: Alumina, Silica

CCEWOOL® Polycrystalline Wool Module is designed for full-fiber furnace lining systems operating at 1300°C–1500°C (2372°F–2732°F).

To balance performance and cost, CCEWOOL® can also provide composite modules made with polycrystalline wool blanket and CCEWOOL® 1430HZ RCF Blanket.





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CCEWOOL® Vacuum-Formed High-Temperature Fiber Shapes

Classification Temperature:

1260°C (2300°F), 1430°C (2600°F), 1500°C (2732°F), 1600°C (2912°F),
1700°C (3092°F), 1800°C (3272°F), 1900°C (3452°F)

Chemistry: Alumina, Silica

CCEWOOL® vacuum-formed high-temperature fiber shapes can be customized according to customer drawings, samples, or structural requirements.

Available shapes include tubes, cones, domes, boxes, and other complex custom geometries.



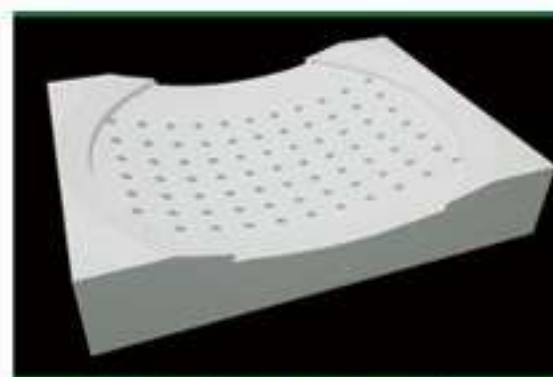
Molten Iron Sampling Ladle



Aluminum Industry Plug



Molten Iron Sampling Ladle



Heat Bent Glass Shaped Parts



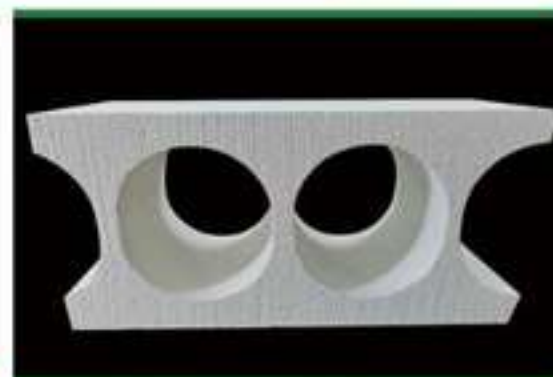
Sintering Furnace Quartz Heating Tube Shaped Parts



Sintering Furnace Heating Zone Shaped Parts



Electric Furnace Chamber Shaped Parts



Roll Hole Shaped Parts



Polycrystalline Mullite Fiber Furnace Chamber



Electric Heating Plate Shaped Parts



Electric Heating Furnace Chamber Shaped Parts



Resistance Wire Heater Shaped Parts



Tubular heating furnace port



Electric Radiant Tubes



Burner Insulation Shaped Parts



Electric Heating Plate Shaped Parts



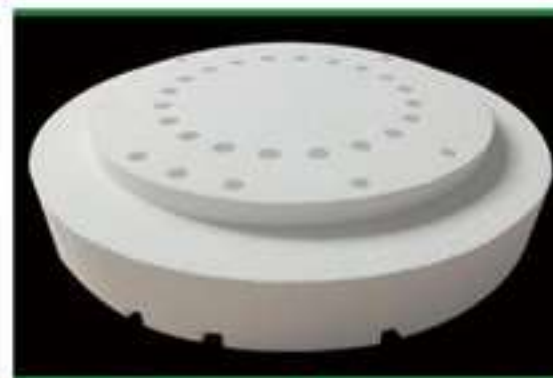
Electric Heating Plate



Silicon Carbide Rod Insulation Base



Insulation Box



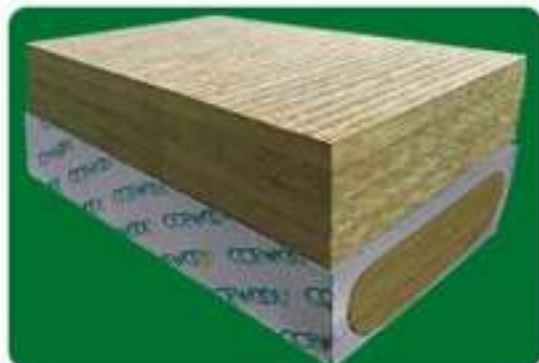
Electric Heating Tube Insulation

CCEWOOL® Stone Wool Board

 Classification Temperature: 750°C (1382°F)

 Chemistry: Basalt

CCEWOOL® stone wool board offers good thermal stability and chemical stability. It is resistant to aging during long-term use, does not cause corrosion, and has no adverse effects on metal or building structures. In terms of fire performance, CCEWOOL® stone wool board can achieve the A1 non-combustible standard. It will not burn under fire conditions and will not release toxic smoke, making it a reliable fire protection and insulation product for building and industrial systems.

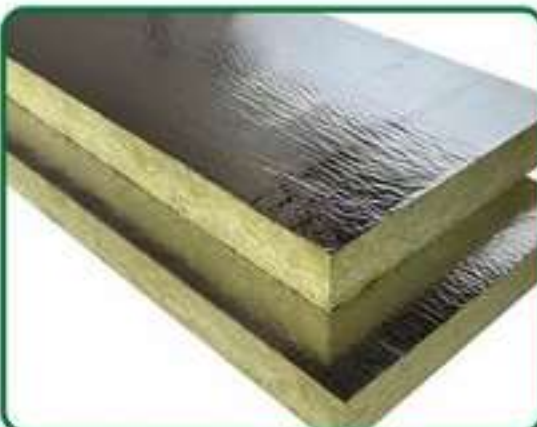


CCEWOOL® Stone Wool Board for Fabrication

 Classification Temperature: 750°C (1382°F)

 Chemistry: Basalt

CCEWOOL® stone wool board for fabrication offers excellent post-processing adaptability for further fabrication. It is well suited as a high-quality base board material for subsequent cutting, grooving, and structural processing. Based on project requirements, it can be further fabricated into different board components for use in pipe insulation systems, equipment insulation assemblies, and industrial structural insulation units.



CCEWOOL® Stone Wool Blanket

 Classification Temperature: 550°C (1022°F), 750°C (1382°F)

 Chemistry: Basalt

CCEWOOL® stone wool blanket is a fibrous roll insulation product that combines thermal insulation, fire protection, and sound absorption performance. With its flexible structure, it can closely conform to irregular equipment surfaces and large-diameter pipes, making it suitable for continuous insulation needs under complex operating conditions.



CCEWOOL® Stone Wool Blanket with Wire Mesh

 Classification Temperature: 550°C (1022°F), 750°C (1382°F)

 Chemistry: Basalt

CCEWOOL® Stone Wool Blanket with Wire Mesh is a flexible insulation product designed for industrial high-temperature applications and demanding operating conditions. It is manufactured from high-quality stone wool blanket reinforced with galvanized wire mesh, combining excellent thermal insulation performance, structural stability, and installation adaptability.



CCEWOOL® Stone Wool Pipe

 Classification Temperature: 750°C (1382°F)

 Chemistry: Basalt

CCEWOOL® Stone Wool Pipe is widely used for insulation and protection of hot and cold media pipelines. It helps reduce heat loss, maintain stable media temperature, and provide reliable burn protection and safety isolation for operators under high-temperature conditions.





Advanced Thermal Engineering
& Fabrication Solutions

MICROPOROUS INSULATION

CCEWOOL®

Microporous Insulation Board



Classification Temperature:
900°C (1652°F) | 1100°C (2012°F)



Chemistry:
Alumina, Silica

CCEWOOL® Microporous Insulation Board is manufactured using advanced nano-microporous insulation technology and offers extremely low thermal conductivity, making it one of the most efficient high-temperature insulation materials available. Its unique microporous structure effectively reduces heat conduction, convection, and radiation, allowing the product to maintain excellent insulation performance even in high-temperature environments.

Compared with traditional insulation materials, CCEWOOL® Microporous Insulation Board provides significantly higher insulation efficiency at the same thickness, typically achieving 3–4 times the insulation performance of conventional materials. It is especially suitable for industrial furnaces and thermal equipment where installation space is limited, surface temperature control is required, or energy-saving performance is critical.

PERFORMANCE HIGHLIGHTS

Feature	Benefit
Ultra-Low Thermal Conductivity	Reduce heat loss and improve energy efficiency
Thin Insulation Design	Save installation space and reduce equipment size
High Compressive Strength	Ensure structural stability and reliable operation
Lightweight	Reduce load and ease of handling and installation

AVAILABLE FORMS



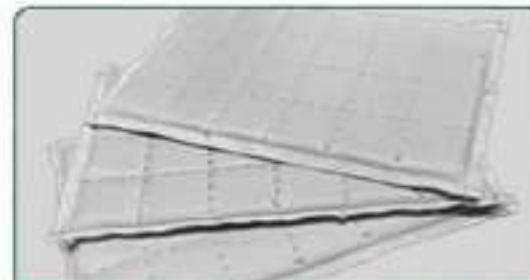
Standard Board

Common board form for general insulation applications.



Aluminum Foil Laminated

Laminated with aluminum foil to improve thermal reflection and moisture resistance.



Fabric Wrapped Panel

Reinforced with high-temperature fabric for enhanced strength and handling protection.



Custom Fabrication Parts

Available in various custom shapes and sizes to meet specific application requirements.

TYPICAL APPLICATIONS



Industrial Furnaces
and Kilns



High-Temperature
Pipelines



Thermal
Equipment



Heat Treatment
Systems



Energy-Saving
and Retrofit

CCEWOOL® Microporous Insulation Board combines excellent compressive strength, dimensional stability, and long-term reliability, making it suitable for use as backup insulation in industrial furnaces, high-temperature pipelines, thermal equipment, and other high-temperature systems. According to application requirements, the board surface can be laminated with aluminum foil, fiberglass cloth, or other protective layers to improve installation convenience and service stability.



KEY ADVANTAGES



Ultra-Low Thermal Conductivity
Effectively reduce heat loss



3–4 Times Higher Insulation Efficiency
Achieve better insulation with thinner thickness



Lightweight Structure
Reduce equipment load and installation cost



High Compressive Strength
Provide excellent mechanical performance



Space-Saving Design
Ideal for space-limited applications



Long-Term Reliability
Stable performance with extended service life



Advanced Thermal Engineering
& Fabrication Solutions

CCEWOOL® 650°C Calcium Silicate Board

- Classification Temperature: 650°C (1202°F)
- Chemistry: Silica, Calcium, Fiber

CCEWOOL® 650°C Calcium Silicate Board features a uniform structure, lightweight properties, high strength, and low thermal conductivity. It is suitable for medium- and low-temperature industrial insulation applications requiring both mechanical stability and thermal insulation performance.



CCEWOOL® 1000°C Calcium Silicate Board

- Classification Temperature: 1000°C (1832°F)
- Chemistry: Silica, Calcium, Fiber

CCEWOOL® 1000°C Calcium Silicate Board is an inorganic rigid high-temperature insulation product with lightweight properties, high strength, low thermal conductivity, and excellent high-temperature resistance. The product can be cut, sawed, and drilled, making it convenient for on-site fabrication and installation.



CCEWOOL® HD Calcium Silicate Custom Shapes

- Classification Temperature: 1000°C (1832°F), 1100°C (2012°F)
- Chemistry: Silica, Calcium, Fiber

CCEWOOL® High-Density Calcium Silicate Custom Shapes are fabrication components designed for non-ferrous metal conveying, transfer, forming, and glass mold systems.

Made with an asbestos-free formulation, they provide excellent insulation performance, high mechanical strength, and good dimensional stability. They are suitable for molten aluminum, other non-ferrous metal processes, and high-temperature components in the glass industry.

KEY FEATURES



Low Thermal Conductivity
Reduce heat loss and save energy



High Strength & Stability
Ensure reliable structural performance



Heat Resistance
Stable performance at high temperatures



Lightweight
Easy to handle and install



Easy Fabrication
Cut, saw, drill, and shape on site



Environmentally Friendly
Asbestos-free formulation

CCEWOOL® HD Calcium Silicate Board

- Classification Temperature: 1000°C (1832°F)
- Chemistry: Silica, Calcium, Fiber

CCEWOOL® HD Calcium Silicate Board is a high-density, heat-resistant structural insulation product designed for non-ferrous metal applications and high-temperature load-bearing conditions. With a density of up to 1000 kg/m³ and room-temperature compressive strength of up to 20 MPa, it maintains excellent structural stability and mechanical strength in high-temperature environments.



CCEWOOL® Calcium Silicate Custom Shapes

- Classification Temperature: 1000°C (1832°F)
- Chemistry: Silica, Calcium, Fiber

CCEWOOL® Calcium Silicate Custom Shapes are high-performance rigid insulation components developed for fabrication-customized insulation and structural applications.

They are not simply cut from standard calcium silicate boards, but are engineered fabrication products designed around specific equipment structures, installation interfaces, and project operating conditions.



CCEFIRE® DJM Insulating Fire Brick

Classification Temperature:
1260°C (2300°F), 1300°C (2400°F),
1430°C (2600°F), 1540°C (2800°F),
1650°C (3000°F), 1760°C (3200°F)

Chemistry: Alumina, Silica

CCEFIRE® DJM Series Insulating Fire Brick is a lightweight refractory product developed for high-temperature insulation applications. It is suitable for industrial furnace systems requiring a balance of thermal insulation performance, structural stability, and energy efficiency.

The bricks can be used in direct flame contact and feature low weight, low thermal conductivity, and low heat storage, helping reduce heat loss, shorten heating cycles, and improve furnace thermal efficiency.

In addition to standard brick shapes, CCEFIRE® also offers fabrication customization. Custom-shaped and high-precision bricks can be manufactured according to customer drawings, furnace lining designs, and installation requirements, providing ideal solutions for furnace doors, arches, corners, transition zones, and other special structural areas.



CCEFIRE® LCHA Insulating Fire Brick

Classification Temperature:
1150°C (2100°F) – 1400°C (2550°F)

Chemistry: Alumina, Silica

CCEFIRE® LCHA Series Lightweight Clay Insulating Fire Brick generally contains more than 40% alumina, with ferric oxide controlled below 2.0%–3.0%.



CCEFIRE® LHA Insulating Fire Brick

Classification Temperature:
1200°C (2192°F) – 1400°C (2550°F)

Chemistry: Alumina, Silica

CCEFIRE® LHA Series High-Alumina Lightweight Insulating Fire Brick contains ≥48% alumina and features mullite, corundum, and glass phase as its main structure.

It is typically installed behind the hot-face refractory layer to reduce furnace shell temperature, minimize heat loss, and improve lining system efficiency.



CCEFIRE® LI Insulating Fire Brick

Classification Temperature:
1300°C (2372°F), 1350°C (2462°F)

Chemistry: Alumina, Silica

CCEFIRE® LI Series Low-Iron Mullite Insulating Fire Brick features low iron content, helping reduce carburization risk in reducing or carbon-containing atmospheres.

It is suitable for atmosphere-sensitive industrial furnaces and kilns.



KEY FEATURES

- Low Thermal Conductivity**
Reduce heat loss and save energy
- High Strength & Stability**
Ensure reliable structural performance
- Heat Resistance**
Stable performance at high temperatures
- Lightweight**
Easy to handle and install
- Easy Fabrication**
Cut, saw, drill, and shape on site
- Environmentally Friendly**
Asbestos-free formulation

TYPICAL APPLICATIONS

- Industrial Furnaces and Kilns**
- High-Temperature Pipelines**
- Thermal Equipment**
- Heat Treatment Systems**
- Energy-Saving and Retrofit**



CCEFIRE® DCHA Series Refractory Fire Brick

 **Classification Temperature:**
1580°C (2876°F) – 1750°C (3182°F)

 **Chemistry:** Alumina, Silica

CCEFIRE® DCHA Series Fireclay Refractory Brick is a classic refractory product made from high-quality fireclay clinker as aggregate and refractory clay as binder.

It is widely used in low-temperature and transition zones of industrial furnaces and kilns, commonly serving as a basic material for permanent linings.



CCEFIRE® DEHA Series Refractory Fire Brick

 **Classification Temperature:**
1750°C (3182°F) – 1790°C (3254°F)

 **Chemistry:** Alumina, Silica

CCEFIRE® DEHA Series High-Alumina Refractory Brick is made from high-quality bauxite and high-alumina raw materials through high-temperature calcination, precise batching, forming, and tunnel kiln sintering.

With Al₂O₃ content ≥48%, it features dense structure and high strength, making it suitable for structural and load-bearing areas of furnace linings.



CCEFIRE® DECOR Series Corundum Brick

 **Classification Temperature:**
1800°C (3272°F)

 **Chemistry:** Alumina, Silica

CCEFIRE® DECOR Series Corundum Brick is a high-performance refractory product made from high-purity alumina, with corundum as the main crystalline phase.

With Al₂O₃ content ≥90%, it is designed for extreme high-temperature, high-load, and highly corrosive operating conditions.



CCEFIRE® DEM Series Mullite Brick

 **Classification Temperature:**
1790°C (3254°F)

 **Chemistry:** Alumina, Silica

CCEFIRE® DEM Series Mullite Brick is a high-alumina refractory product with mullite as the main crystalline phase.

With Al₂O₃ content of approximately 60%–75%, it offers high refractoriness, good structural stability, and reliable thermal performance for demanding high-temperature applications.



KEY FEATURES

- | | | | | |
|--|--|---|--|---|
| 
High Refractoriness
Withstand extreme high temperatures | 
Excellent Stability
Ensure structural integrity and long service life | 
Dense Structure
Low porosity and high strength | 
Corrosion Resistance
Resist chemical erosion and slag penetration | 
Custom Solutions
Various shapes and sizes available for special needs |
|--|--|---|--|---|

TYPICAL APPLICATIONS

- | | | | | |
|---|---|---|--|--|
| 
Industrial Furnaces and Kilns | 
Metallurgy Industry | 
Cement Industry | 
Glass Industry | 
Thermal Power Industry |
|---|---|---|--|--|





CCEFIRE® LPD Series Low Porosity Dense Brick

 **Classification Temperature:** 1750°C (3182°F)

 **Chemistry:** Alumina, Silica

CCEFIRE® LPD Series Low Porosity Dense Brick is based on a traditional fireclay brick formulation, with a controlled proportion of coke particles added to optimize porosity.

It features fewer pores, finer pore size, and more uniform pore distribution, improving overall density and service performance.



CCEFIRE® SIC Series Silicon Carbide Products

 **Classification Temperature:** ≥1900°C (3452°F)

 **Chemistry:** Silicon Carbide

CCEFIRE® SIC Series Silicon Carbide Refractory Products are made from black silicon carbide as the main raw material, using optimized particle grading, mature forming, and firing processes. Different silicon carbide contents and structural forms are available according to specific operating conditions.



CCEFIRE® Refractory Mortar

 **Classification Temperature:**
1260°C (2300°F), 1430°C (2600°F),
1540°C (2800°F), 1650°C (3000°F)

 **Chemistry:** Alumina, Silica

CCEFIRE® Refractory Mortar is a refractory masonry and bonding material designed for high-temperature furnace lining systems. It is mainly used for bonding and leveling insulating fire bricks.

CCEFIRE® Refractory Mortar is available in both dry powder and ready-to-use wet forms.



CCEFIRE® Refractory Castable

 **Classification Temperature:**
1710°C (3110°F) – 1790°C (3254°F)

 **Chemistry:** Alumina, Silica

CCEFIRE® Refractory Castable is an unshaped refractory material that requires no firing and can be installed after mixing with water.

It is suitable for the construction and repair of monolithic linings in high-temperature industrial equipment.



KEY FEATURES



High Refractoriness
Withstand extreme high temperatures



Excellent Stability
Ensure structural integrity and long service life



High Strength
Provide reliable mechanical performance



Thermal Shock Resistance
Maintain stability under rapid temperature changes



Custom Solutions
Various shapes and specifications available

TYPICAL APPLICATIONS



Industrial Furnaces and Kilns



Metallurgical Industry



Cement Industry



Glass Industry



Thermal Power Industry





CCEWOOL®'s manufacturing facility covers 80,000m² and is equipped with over 60 advanced high-temperature insulation fiber production lines, delivering an annual capacity in excess of 300,000 tons.



01

CCEWOOL® Ceramic Fiber Blanket Production Workshop

26 production lines dedicated to CCEWOOL ceramic fiber blankets. Products range from 1100–1430 °C ceramic fiber blankets to PUREWOOL ceramic fiber blankets, hydrophobic ceramic fiber blankets, and ceramic fiber aluminum foil blankets.



02

CCEWOOL® Bio Soluble Fiber Blanket Production Workshop

2 production lines for CCEWOOL bio-soluble (Low Biopersistent) fiber blankets, offering 1200°C low-bio-soluble blankets, an innovative 1300 °C grade, and aluminum foil fiber blankets.



03

CCEWOOL® Polycrystalline Fiber Blanket Production Workshop

1 production line for CCEWOOL polycrystalline wool fiber blankets, with products rated up to 1600 °C.



04

CCEWOOL® High Temperature Insulation Fiber Board Production Workshop

Equipped with three fully automated CCEWOOL ceramic fiber board production lines, one fully automated CCEWOOL bio-soluble fiber board line, and one CCEWOOL polycrystalline wool fiber board line, we have also independently developed a "2-hour deep-drying" system.



60+ Advanced
Production Lines



80,000 m²
Manufacturing Facility



300,000+ Tons
Annual Capacity



Strict Quality Control
System



Experienced R&D
and Technical Team



Global Supply
Capability



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CCEWOOL®



CCEWOOL®'s manufacturing facility covers 80,000m² and is equipped with over 60 advanced high-temperature insulation fiber production lines, delivering an annual capacity in excess of 300,000 tons.



01

CCEWOOL® High Temperature Insulation Fiber Paper Production Workshop

Equipped with two fully automated CCEWOOL high-temperature insulation fiber paper production lines, we offer a comprehensive range of papers to suit varying temperature requirements: standard ceramic fiber paper, high-alumina and zirconia-enhanced grades, and low-bio-soluble fiber paper.



02

CCEWOOL® High Temperature Insulation Fiber Module Production Workshop

Includes seven fully automated CCEWOOL high-temperature insulation fiber module production lines, capable of fabricating bespoke shapes per customer drawings—standard ceramic fiber modules, precision-cut blocks, and folded blocks. We further produce bio soluble fiber modules, polycrystalline wool fiber modules, composite fiber modules, and monolithic fiber modules, delivering a complete high-temperature insulation module system.



03

CCEWOOL® High Temperature Insulation Fiber Textile Production Workshop

With over ten CCEWOOL high-temperature insulation fiber textile production lines, we manufacture a wide variety of ceramic fiber and bio soluble fiber yarns, fabrics, tapes, and ropes to meet diverse application needs.



04

CCEWOOL® High Temperature Insulation Fiber Shapes Production Workshop

Our eight fully automated CCEWOOL high-temperature insulation fiber cutting and grinding machines, alongside five high-temperature curing kilns, enable the custom production of tubes, cones, domes, and box-shaped components per customer specifications.



60+ Advanced
Production Lines



80,000 m²
Manufacturing Facility



300,000+ Tons
Annual Capacity



Strict Quality Control
System



Experienced R&D
and Technical Team



Global Supply
Capability



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