

**Uni-Seals Product Catalog**  
**Category: Thermal Insulation Material**



**UNI-SEALS**

**Unimax Seals Company Limited**  
**[www.uniseals.com](http://www.uniseals.com)**

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**Woven Graphite Cloth****CL1020 Woven graphite cloth**

Woven from graphite yarns. It has all the advantages of expanded graphite, such as good flexibility and excellent heat resistant properties.

Available to be reinforced with stainless steel wire, nickel wire or copper wire (style number: CL1020R).

**Applications:**

Used as fireproof sealing material for expansion joints, valve stems, furnace doors, etc., as a substitute for asbestos cloth.

**Specifications:**

Temperature:  $-200^{\circ}\text{C}\sim+550^{\circ}\text{C}$ .

Pressure: 25bar.

PH value: 0~14.

**Normal Dimensions:**

Thickness: 2~5mm;

Width: 1000mm.

**Woven Graphite Tape****TA1020 Woven graphite tape**

The tape is woven from graphite yarns. It has all the advantages of expanded graphite, with high strength and good flexibility.

**TA1027 Woven graphite tape with self-adhesive**

With self-adhesive tape backed on one side of TA1020 woven graphite tape. The self-adhesive makes it easy to fix the tape onto the sealing surface. Can be used as emergency gasket replacement.

Available to be reinforced with stainless steel wire, nickel wire or copper wire (style number: TA1020R, TA1027R).

**Applications:**

Used as sealing material for expansion joints, valve stems, furnace doors, etc.

**Specifications:**

Temperature: -200°C~+550°C.

Pressure: 25bar.

PH value: 0~14.

**Normal Dimensions:**

Thickness: 2~5mm;

Width: 20~1000mm.

**Dusted Asbestos Cloth****CL2020 Dusted asbestos cloth**

Interwoven from warp and weft dusted asbestos yarns.

Available to be laminated with aluminum foil on one side of the cloth (style number: CL2020AL).

Available to be reinforced with stainless steel wire (style number: CL2020R).

**Applications:**

Used as thermal insulating materials for boilers and pipe lines in factories, buildings, power stations and steamers. The cloth is also an ideal material for making protective gloves, working clothes and gasket materials.

**Specifications:**

Maximum temperature: 250°C~550°C, depending on different grades of dusted asbestos yarn material selected.

**Normal Dimensions:**

Thickness: 2mm, 3mm;

Width: 1000mm.

**Normal Packing:**

50kgs/woven bag.

**Remarks:****Grades for dusted asbestos yarns:**

The dusted asbestos yarns are divided into different grades with different asbestos contents and maximum temperature resistance as below:

| Grade                   | C         | B         | A         | AA        | AAA       | AAAA   |
|-------------------------|-----------|-----------|-----------|-----------|-----------|--------|
| <b>Asbestos content</b> | ≥75%      | ≥83%      | ≥86%      | ≥93%      | ≥97.5%    | ≥99.6% |
| <b>Ignition loss</b>    | 32.1%~35% | 28.1%~32% | 24.1%~28% | 19.1%~24% | 15.1%~19% | ≤15%   |
| <b>Max. temperature</b> | 250°C     | 300°C     | 350°C     | 400°C     | 450°C     | 550°C  |

**Dusted Asbestos Tape****TA2020 Dusted asbestos tape**

Interwoven from warp and weft dusted asbestos yarns.

Available to be laminated with aluminum foil on one side of the tape (style number: TA2020AL).

Available to be reinforced with stainless steel wire (style number: TA2020R).

**Applications:**

Used as thermal insulating materials for boilers and pipe lines in factories, buildings, power stations and steamers.

**Specifications:**

Maximum temperature: 250°C~550°C, depending on different grades of dusted asbestos yarn material selected.

**Normal Dimensions:**

Thickness: 2mm, 3mm;

Width: 20~200mm.

**Normal Packing:**

25m or 30m/roll, then 50kgs/woven bag.

**Dusted Asbestos Rope****PA2000 Square braided dusted asbestos rope (packing)**

Square braided from long fiber dusted asbestos yarns.

**PA2010 Round braided dusted asbestos rope (packing)**

Round braided from long fiber dusted asbestos yarns.

Dusted asbestos rope impregnated with graphite (style number: PA2000G, PA2010G) or PTFE (PA2000P, PA2010P) are also available (see details in Uni-seals catalogue for "Packing" category).

Available to be reinforced with stainless steel wire (style number: PA2000R, PA2010R).

**Applications:**

Extensively used as insulation and sealing materials in thermal installations and heat conducting systems.

**Specifications:**

Maximum temperature: 250°C~550°C, depending on different grades of dusted asbestos yarn material selected.

**Normal Dimensions:**

5~50mm.

**Normal Packing:**

5kgs or 10kgs/roll, then 50kgs/woven bag.

**Dust Free Asbestos Cloth****CL2120 Dust free asbestos cloth**

Interwoven from warp and weft dust free asbestos yarns.

Available to be laminated with aluminum foil on one side of the cloth (style number: CL2120AL).

Available to be reinforced with stainless steel wire (style number: CL2120R).

**Applications:**

Used as thermal insulating materials for boilers and pipe lines in factories, buildings, power stations and steamers. The cloth is also an ideal material for making protective gloves, working clothes and gasket materials.

**Specifications:**

Maximum temperature: 550°C.

**Normal Dimensions:**

Thickness: 2mm, 3mm;

Width: 1000mm.

**Normal Packing:**

50kgs/woven bag.



**Dust Free Asbestos Tape****TA2120 Dust free asbestos tape**

Interwoven from warp and weft dust free asbestos yarns.

Available to be laminated with aluminum foil on one side of the tape (style number: TA2120AL).

Available to be reinforced with stainless steel wire (style number: TA2120R).

**Applications:**

Used as thermal insulating materials for boilers and pipe lines in factories, buildings, power stations and steamers.

**Specifications:**

Maximum temperature: 550°C.

**Normal Dimensions:**

Thickness: 2mm, 3mm;

Width: 20~200mm.

**Normal Packing:**

25m or 30m/roll, then 50kgs/woven bag.

**Dust Free Asbestos Rope****PA2100 Square braided dust free asbestos rope (packing)**

Square braided from dust free asbestos yarns.

**PA2110 Round braided dust free asbestos rope (packing)**

Round braided from dust free asbestos yarns.

**Applications:**

Extensively used as insulation and sealing materials in thermal installations and heat conducting systems.

**Specifications:**

Maximum temperature: 550°C.

**Normal Dimensions:**

5~50mm.

**Normal Packing:**

5kgs or 10kgs/roll, then 50kgs/woven bag.

### Twisted Dust Free Asbestos Rope



#### **PA2120 Twisted dust free asbestos rope**

Twisted from two or more strands of dust free asbestos yarns.

#### **Applications:**

Extensively used as caulking, sealing and heat insulation materials in thermal installations and heat conduction systems.

#### **Specifications:**

Maximum temperature: 550°C.

#### **Normal Dimensions:**

5~50mm.

#### **Normal Packing:**

5kgs or 10kgs/roll, then 50kgs/woven bag.

### Glass Fiber Cloth



#### **CL6120 Glass Fiber cloth**

Woven from texturized fiberglass bulk yarns. The product offers superior insulating and heat resistant properties, withstanding high temperature in continuous service. It is resistant to many acids and alkalis, and most bleaches and solvents.

#### **CL6120AL Glass fiber cloth with aluminum foil**

The cloth laminated with aluminum foil can be used as outer cover of heat piping, chemical industry.

Available to be coated with graphite (style number: CL6120G), silicone rubber (style number: CL6120E), or vermiculite (style number: CL6120V).

Available to be reinforced with stainless steel wire (style number: CL6120R).

Non-texturized fiberglass cloth (style number: CL6220) is also available on request.

#### **Applications:**

Used as welding blankets and curtains, fire blankets, expansion joints, insulation pad covers and gasket materials.

#### **Specifications:**

Maximum temperature: 450°C~550°C, depending on different types of glass fiber used.

Chemical incompatibilities: Hydrofluoric acid, hot phosphoric, acid and wet hydrogen chloride.

#### **Normal Dimensions:**

Thickness: 1.5~3.2mm;

Width: 1000mm, 1200mm.

#### **Normal Packing:**

30m/roll, in woven bag.

**Heat Treated Glass Fiber Cloth****CL6120HT Glass fiber cloth with heat treatment**

Woven from texturized fiberglass bulk yarns. The cloth is then processed with heat treatment, and the color turns brown. The product offers superior insulating and heat resistant properties, withstanding high temperature in continuous service. It is resistant to many acids and alkalis, and most bleaches and solvents.

**Applications:**

Used as welding blankets and curtains, fire blankets, expansion joints, insulation pad covers and gasket materials.

**Specifications:**

Maximum temperature: 450°C~550°C, depending on different types of glass fiber used.

Chemical incompatibilities: Hydrofluoric acid, hot phosphoric acid and wet hydrogen chloride.

**Normal Dimensions:**

Thickness: 1.5~3.2mm;

Width: 1000mm, 1200mm.

**Normal Packing:**

30m/roll, in woven bag.

### Glass Fiber Tape

**TA6120 Glass fiber tape**

Woven from texturized fiberglass yarns. The product offers superior insulating and heat resistant properties, withstanding high temperature in continuous service. It is resistant to many acids and alkalis, and most bleaches and solvents.

**TA6127 Glass fiber tape with self-adhesive**

With self-adhesive on one side of TA6120 glass fiber tape.

**TA6120AL Glass fiber tape with aluminum foil**

With a layer of aluminum foil laminated on one side of TA6120 glass fiber tape.

Available to be coated with graphite (style number: TA6120G), silicone rubber (style number: TA6120E), or vermiculite (style number: TA6120V).

Available to be reinforced with stainless steel wire (style number: TA6120R).

**Applications:**

As an excellent substitute for asbestos tape, glass fiber tape is extensively used for wrapping of steam tracer line, hot pipe protection, exhaust manifold insulation, strip curtains for oven doors, and so on.

**Specifications:**

Maximum temperature: 450°C~550°C, depending on different types of glass fiber used.

Chemical incompatibilities: Hydrofluoric acid, hot phosphoric, acid and wet hydrogen chloride.

**Normal Dimensions:**

Thickness: 1.5~5.0mm;

Width: 20~300mm.

**Normal Packing:**

25m or 30m/roll, then 20kgs/woven bag.

**Glass Fiber Ladder Tape****TA6150 Glass fiber ladder tape**

Woven from texturized fiberglass yarns. The product offers superior insulating and heat resistant properties, withstanding high temperature in continuous service. It is resistant to many acids and alkalis, and most bleaches and solvents.

**Applications:**

Specially used in flange joints with bolts.

**Specifications:**

Maximum temperature: 450°C~550°C, depending on different types of glass fiber used.

Chemical incompatibilities: Hydrofluoric acid, hot phosphoric, acid and wet hydrogen chloride.

**Normal Dimensions:**

Thickness: 1.5~5.0mm;

Width: 20~300mm.

**Normal Packing:**

25m or 30m/roll, then 20kgs/woven bag.

**Braided Glass Fiber Rope****PA6100 Square braided glass fiber rope (packing)**

Square braided from texturized glass fiber yarns. The product offers superior insulating and heat resistant properties, withstanding high temperature in continuous service. It is resistant to many acids and alkalis, and most bleaches and solvents.

**PA6110 Round braided glass fiber rope (packing)**

Round braided from texturized glass fiber yarns.

Available to be treated with graphite (style number: PA6100G, PA6110G), or impregnated with PTFE (style number: PA6100P, PA6110P). See details in Uni-seals catalogue for "Packing" category.

Available to be reinforced with stainless steel wire (style number: PA6100R, PA6110R).

**Applications:**

It is a good heat insulation material and an excellent substitute for asbestos rope. Widely used as static door seals for boilers, ovens, furnaces, kiln cars, heat exchanger, filter elements, wrapping material for exhaust, etc.

**Specifications:**

Maximum temperature: 450°C~550°C, depending on different types of glass fiber used.

Chemical incompatibilities: Hydrofluoric acid, hot phosphoric, acid and wet hydrogen chloride.

**Normal Dimensions:**

5~50mm.

**Normal Packing:**

5kgs or 10kgs/roll, then 20kgs/woven bag.



**Knitted Glass Fiber Rope****PA6140 Knitted glass fiber rope**

This elastic and flexible rope is knitted from texturized fiberglass yarns. The product offers superior insulating and heat resistant properties, withstanding high temperature in continuous service. It is resistant to many acids and alkalis, and most bleaches and solvents.

**Applications:**

It is a very flexible and easily compressible material mainly used in cast iron stove. Other applications include gasketing, caulking of oven and furnace doors, wood stoves and expansion joints.

**Specifications:**

Maximum temperature: 450°C~550°C, depending on different types of glass fiber used.

Chemical incompatibilities: Hydrofluoric acid, hot phosphoric, acid and wet hydrogen chloride.

**Normal Dimensions:**

5~30mm.

**Normal Packing:**

5kgs or 10kgs/roll, 20kgs/woven bag.

### Glass Fiber Sleeve



#### **TU6120 Glass fiber sleeve (tube)**

This elastic and flexible sleeve is obtained by tubular braiding from texturized fiberglass yarns. It can be operated in continuous high temperature. Its excellent insulation properties make it a good choice for an economical hose and cable protection material where molten splash is not a factor. It is resistant to many acids and alkalis, and most bleaches and solvents.

Available to be coated with silicone or other rubber (style number: TU6120E).

#### **Applications:**

Used as cable and wire insulation, hose covering to protect hydraulic and electrical cables, thermal insulation for tubes and pipes, and gaskets.

#### **Specifications:**

Maximum temperature: 450°C~550°C, depending on different types of glass fiber used.

Chemical incompatibilities: Hydrofluoric acid, hot phosphoric acid and wet hydrogen chloride.

#### **Normal Dimensions:**

Inner diameter: 10~100mm;

Wall thickness: 1.0~3.0mm.

#### **Normal Packing:**

25m or 30m/roll, then 20kgs/woven bag.

**Ceramic Fiber Cloth****CL6520 Ceramic fiber cloth**

Woven from ceramic fiber yarns and treated for dust control. The product has good insulation performance and high temperature durability. It resists most corrosive agents except hydrofluoric acid, phosphoric acid, and hot concentrated alkalis.

Available to be reinforced with metallic wire (such as stainless steel wire, nickel wire) (style number: CL6520R). The normal reinforcing material selected is stainless steel wire, which is of good performance and cost effective.

**CL6520AL Ceramic fiber cloth with aluminum foil**

With aluminum foil laminated on one side of CL6520 ceramic fiber cloth.

**Applications:**

Widely used as thermal insulation material in various applications, such as heat insulation curtain, large area thermal insulation, radiant heat shielding, flexible fabric expansion joints, etc.

**Specifications:**

Maximum temperature: 1000°C.

Chemical incompatibilities: Soluble in hydrofluoric acid, phosphoric acid and concentrated alkali chloride.

**Normal Dimensions:**

Thickness: 1.5~5.0mm;

Width: 1000mm.

**Normal Packing:**

30m/roll, in woven bag.

### Ceramic Fiber Tape



#### **TA6520 Ceramic fiber tape**

Woven from ceramic fiber yarns and treated for dust control. The product has good insulation performance and high temperature durability. It resists most corrosive agents except hydrofluoric acid, phosphoric acid, and hot concentrated alkalis.

Available to be reinforced with metallic wire (such as stainless steel wire, nickel wire) (style number: TA6520R). The normal reinforcing material selected is stainless steel wire, which is of good performance and cost effective.

#### **TA6520AL Ceramic fiber tape with aluminum foil**

With aluminum foil laminated on one side of TA6520 ceramic fiber tape.

#### **Applications:**

Widely used as thermal insulation tape in various applications, such as high temperature resistant electrical cable, wire covering and pipe wrapping.

#### **Specifications:**

Maximum temperature: 1000°C.

Chemical incompatibilities: Soluble in hydrofluoric acid, phosphoric acid and concentrated alkali chloride.

#### **Normal Dimensions:**

Thickness: 1.5~5.0mm;

Width: 10~150mm.

#### **Normal Packing:**

30m/roll, then 20kgs/woven bag.

### Ceramic Fiber Rope

**PA6500 Square braided ceramic fiber rope (packing)**

Square braided from high quality ceramic fiber yarns which are manufactured mainly from alumina-silica materials. The rope offers characteristics of high temperature stability, low thermal conductivity, low heat storage, excellent thermal shock resistance, light weight, and good corrosion resistance. It resists most corrosive agents except hydrofluoric acid, phosphoric acid, and hot concentrated alkalis.

**PA6510 Round braided ceramic fiber rope (packing)**

Round braided from high quality ceramic fiber yarns which are manufactured mainly from alumina-silica materials.

Available to be impregnated with graphite (style number PA6500G, PA6510G).

Available to be reinforced with metallic wire (such as stainless steel wire, nickel wire) (style number: PA6500R, PA6510R).

The normal reinforcing material selected is stainless steel wire, which is of good performance and cost effective.

**Applications:**

It is an excellent heat insulation material and a good substitute for asbestos rope. Widely used as static seals for stoves, boilers, burners, industrial furnaces, coke oven doors, etc.

**Specifications:**

Maximum temperature: 1000°C.

Chemical incompatibilities: Soluble in hydrofluoric acid, phosphoric acid and concentrated alkali chloride.

**Normal Dimensions:**

5~50mm.

**Normal Packing:**

5kgs or 10kgs/roll, then 20kgs/woven bag.

### Ceramic Fiber Sleeve



#### **TU6520 Ceramic fiber sleeve (tube)**

This flexible sleeve is obtained by tubular braiding from ceramic fiber yarns. Its excellent insulation and high temperature resistant properties make it a good choice for an economical hose and cable protection material.

Available to be reinforced with metallic wire (such as stainless steel wire, nickel wire) (style number: TU6520R). The normal reinforcing material selected is stainless steel wire, which is of good performance and cost effective.

#### **Applications:**

Used for covering high temperature electric-insulating cables or wires, wrapping high temperature pipes.

#### **Specifications:**

Maximum temperature: 1000°C.

Chemical incompatibilities: Soluble in hydrofluoric acid, phosphoric acid and concentrated alkali chloride.

#### **Normal Dimensions:**

Inner diameter: 10~75mm.

#### **Normal Packing:**

10kgs/roll, then 20kgs/woven bag.

### Ceramic Fiber Paper



#### GS6510 Ceramic fiber paper

Our ceramic fiber paper is made from high quality ceramic fibers which contain little residue, through processes such as slurring, residue removing, slurry mixing, long-mesh shaping, vacuum dehydrating, drying, cutting and rolling.

The product offers characteristics of light weight, high temperature stability, excellent chemical corrosion resistance, good thermal shock resistance, low thermal conductivity, and excellent sound absorbing ability.

#### Applications:

It is used as general insulation, sealing and protective material for various applications, such as electrical insulation and thermal insulation materials for electro-thermal instruments and components; heat insulation material in automobile industry, etc.

#### Specifications:

|                                   |                                |                         |
|-----------------------------------|--------------------------------|-------------------------|
| <b>Classification temperature</b> |                                | 1260°C                  |
| <b>Working temperature</b>        |                                | 1000°C                  |
| <b>Density</b>                    |                                | 200±15kg/m <sup>3</sup> |
| <b>Thermal conductivity</b>       | 200°C                          | 0.075~0.085w/m.k        |
|                                   | 400°C                          | 0.115~0.121w/m.k        |
|                                   | 600°C                          | 0.165~0.175w/m.k        |
| <b>Organic content</b>            |                                | 6~8%                    |
| <b>Chemical content</b>           | Al <sub>2</sub> O <sub>3</sub> | 45~47%                  |
|                                   | SiO <sub>2</sub>               | 50~52%                  |

#### Normal Dimensions:

Width: 610mm, 1220mm;

Thickness: 1~12mm.

Size examples: 1mm x 610mm x 60m; 2mm x 610mm x 30m; 5mm x 610mm x 12m.

Other dimensions are also available on request.

## Ceramic Fiber Blanket



Our ceramic fiber blanket offers characteristics of light weight, good resiliency, high temperature stability, high tensile strength, excellent chemical corrosion resistance, excellent thermal shock resistance, low thermal conductivity, and excellent sound absorbing ability.

**GS6525 Ceramic fiber blanket**

The blanket is made from spun refractory ceramic fiber, through process of needling, heat-shaping, cutting and rolling. Compared with traditional blown ceramic fiber blanket, spun ceramic fiber blanket has long and well interlaced fibers, low shot content, and therefore it has good performance of delamination resistance, anti-erosion, good flexibility and tensile strength.

**Applications:**

Used as lining of stoves, heating equipment and high temperature pipelines; thermal insulation material for electric boilers, gas engines and nuclear power; lining of high temperature reacting and heating equipment in chemical industry; heat insulation material of kiln doors and covers; fireproofing and heat insulation material for buildings; etc.

**Specifications:**

| Grade                                                       |                                                                    | ST<br>(Standard)          | HP<br>(High purity)   | HA<br>(High aluminum)      | HAZ<br>(With aluminum & zirconium) | HZ<br>(With zirconium) |
|-------------------------------------------------------------|--------------------------------------------------------------------|---------------------------|-----------------------|----------------------------|------------------------------------|------------------------|
| Classification temperature                                  |                                                                    | 1260°C                    | 1260°C                | 1360°C                     | 1360°C                             | 1430°C                 |
| Working temperature                                         |                                                                    | 1050°C                    | 1100°C                | 1200°C                     | 1280°C                             | 1350°C                 |
| Density                                                     |                                                                    | 96 / 128kg/m <sup>3</sup> |                       | 128 / 160kg/m <sup>3</sup> |                                    |                        |
| Thermal conductivity                                        |                                                                    | 0.09w/m.k<br>(400°C)      | 0.09w/m.k<br>(400°C)  | 0.132w/m.k<br>(600°C)      | 0.132w/m.k<br>(600°C)              | 0.16w/m.k<br>(600°C)   |
|                                                             |                                                                    | 0.176w/m.k<br>(800°C)     | 0.22w/m.k<br>(1000°C) | 0.22w/m.k<br>(1000°C)      | 0.22w/m.k<br>(1000°C)              | 0.22w/m.k<br>(1000°C)  |
| Liner shrinkage<br>(24hours, density 128kg/m <sup>3</sup> ) |                                                                    | 3%<br>(1000°C)            | 3%<br>(1100°C)        | 3%<br>(1200°C)             | 3%<br>(1280°C)                     | 3%<br>(1350°C)         |
| Tensile strength<br>(128kg/m <sup>3</sup> )                 |                                                                    | 0.08~0.12<br>Mpa          | 0.08~0.12<br>Mpa      | 0.08~0.12<br>Mpa           | 0.08~0.12<br>Mpa                   | 0.08~0.12<br>Mpa       |
| Chemical content                                            | Al <sub>2</sub> O <sub>3</sub>                                     | 45~46%                    | 47~49%                | 52~55%                     | 45~46%                             | 39~40%                 |
|                                                             | Al <sub>2</sub> O <sub>3</sub> +SiO <sub>2</sub>                   | 97%                       | 99%                   | 99%                        | -----                              | -----                  |
|                                                             | Al <sub>2</sub> O <sub>3</sub> +SiO <sub>2</sub> +ZrO <sub>2</sub> | -----                     | -----                 | -----                      | 99%                                | 99%                    |
|                                                             | ZrO <sub>2</sub>                                                   | -----                     | -----                 | -----                      | 5~7%                               | 15~17%                 |
|                                                             | Fe <sub>2</sub> O <sub>3</sub>                                     | <1.0%                     | 0.2%                  | 0.2%                       | 0.2%                               | 0.2%                   |
|                                                             | Na <sub>2</sub> O+K <sub>2</sub> O                                 | ≤0.5%                     | 0.2%                  | 0.2%                       | 0.2%                               | 0.2%                   |

**Normal Dimensions:**

13 x 610 x 14400mm; 25 x 610 x 7200mm; 50 x 610 x 3600mm.

Other dimensions are also available on request.



## Ceramic Fiber Board

**GS6530 Ceramic fiber board**

Our ceramic fiber board is produced from blowing fibers with vacuum formed technology. In addition to the typical features of ceramic fibers, the board also has a hard texture, good toughness and strength. It has excellent fire performance and heat preservation properties, low thermal conductivity and low heat storage, excellent thermal stability and thermal shock resistance, and outstanding acoustic insulation.

**Applications:**

Used as liner for high temperature kiln cars, baffle and disjunctive board of furnace doors; heat preservation and insulation material for high temperature equipment; thermal, acoustic insulation and fireproof material for space and shipbuilding.

**Specifications:**

| Grade                                                       |                                                                    | ST<br>(Standard)         | HP<br>(High purity) | HA<br>(High aluminum) | HZ<br>(With zirconium) |
|-------------------------------------------------------------|--------------------------------------------------------------------|--------------------------|---------------------|-----------------------|------------------------|
| Classification temperature                                  |                                                                    | 1260°C                   | 1260°C              | 1360°C                | 1430°C                 |
| Working temperature                                         |                                                                    | 1050°C                   | 1100°C              | 1200°C                | 1350°C                 |
| Density                                                     |                                                                    | 220~360kg/m <sup>3</sup> |                     |                       |                        |
| Compressive strength                                        |                                                                    | ≥0.5Mpa                  | ≥0.5Mpa             | ≥0.5Mpa               | ≥0.5Mpa                |
| Thermal conductivity                                        | 400°C                                                              | 0.085w/m.k               | 0.085w/m.k          | 0.085w/m.k            | 0.085w/m.k             |
|                                                             | 800°C                                                              | 0.132w/m.k               | 0.132w/m.k          | 0.132w/m.k            | 0.132w/m.k             |
|                                                             | 1000°C                                                             | 0.180w/m.k               | 0.180w/m.k          | 0.180w/m.k            | 0.180w/m.k             |
| Liner shrinkage<br>(24hours, density 320kg/m <sup>3</sup> ) |                                                                    | 3% (1050°C)              | 3% (1100°C)         | 3% (1200°C)           | 3% (1350°C)            |
| Chemical content                                            | Al <sub>2</sub> O <sub>3</sub>                                     | 46%                      | 47~49%              | 52~55%                | 39~40%                 |
|                                                             | Al <sub>2</sub> O <sub>3</sub> +SiO <sub>2</sub>                   | 97%                      | 99%                 | 99%                   | -----                  |
|                                                             | Al <sub>2</sub> O <sub>3</sub> +SiO <sub>2</sub> +ZrO <sub>2</sub> | -----                    | -----               | -----                 | 99%                    |
|                                                             | ZrO <sub>2</sub>                                                   | -----                    | -----               | -----                 | 15~17%                 |
|                                                             | Fe <sub>2</sub> O <sub>3</sub>                                     | <1.0%                    | 0.2%                | 0.2%                  | 0.2%                   |
|                                                             | Na <sub>2</sub> O+K <sub>2</sub> O                                 | ≤0.5%                    | 0.2%                | 0.2%                  | 0.2%                   |

**Normal Dimensions:**

600 x 400mm; 900 x 600mm; 1000 x 600mm; 1200 x 600mm; 1200 x 1000mm; 1220 x 610mm;  
Thickness: 10~50mm.

Other dimensions are also available on request.

### Calcium Silicate Board



#### BD6930 Calcium silicate board-300

Our BD6930 Calcium silicate board is a high temperature resistant calcium silicate board. The main component of it is xonotlite ( $6\text{CaO} \cdot 6\text{SiO}_2 \cdot \text{H}_2\text{O}$ ), which has higher temperature resistance than ordinary calcium silicate materials. Each xonotlite molecule contains only one crystal water, so even if the temperature exceeds the limit, there is only a small amount of crystal water escape without causing serious damage to the material. Because of its excellent comprehensive properties, this material is widely used in the field of high temperature and energy saving.

#### Characteristics:

Excellent thermal resistance, can withstand continuous thermal load within the limit of service temperature.

Low thermal conductivity in any temperature interval.

Light weight, high specific strength. It has the best strength in the field of rigid insulation materials.

Good durability, no chalking after long-term use.

Nontoxic and physically safe. It does not contain asbestos, sulfur, chlorine and other toxic substances.

Not afraid of moisture, the product performance does not change after drying.

#### Specifications:

|                             |                         |                              |
|-----------------------------|-------------------------|------------------------------|
| <b>Working temperature</b>  |                         | $\leq 1050^{\circ}\text{C}$  |
| <b>Maximum temperature</b>  |                         | $1100^{\circ}\text{C}$       |
| <b>Bulk density</b>         |                         | $300 \sim 360 \text{kg/m}^3$ |
| <b>Compressive strength</b> |                         | $\geq 2.0 \text{Mpa}$        |
| <b>Flexural strength</b>    |                         | $\geq 1.2 \text{Mpa}$        |
| <b>PH range</b>             |                         | $7 \sim 9$                   |
| <b>Thermal conductivity</b> | $20^{\circ}\text{C}$    | $\leq 0.068 \text{w/m.k}$    |
|                             | $200^{\circ}\text{C}$   | $\leq 0.087 \text{w/m.k}$    |
|                             | $400^{\circ}\text{C}$   | $\leq 0.113 \text{w/m.k}$    |
|                             | $600^{\circ}\text{C}$   | $\leq 0.139 \text{w/m.k}$    |
|                             | $800^{\circ}\text{C}$   | $\leq 0.170 \text{w/m.k}$    |
| <b>Chemical content</b>     | $\text{SiO}_2$          | $\geq 52\%$                  |
|                             | $\text{CaO}$            | $\geq 40\%$                  |
|                             | $\text{Al}_2\text{O}_3$ | $\leq 0.3\%$                 |
|                             | $\text{Fe}_2\text{O}_3$ | $\leq 1\%$                   |

#### Normal Dimensions:

1080 x 950mm; 1200 x 600mm; 1200 x 1200mm;

Thickness: 25~60mm.

Other dimensions are also available on request.

### Calcium Silicate Board



#### BD6950 Calcium silicate board-500

Our BD6950 Calcium silicate board is mixed and pressed with xonotlite and reinforced with glass fiber. It has high service temperature, low thermal conductivity, long durability and widely used in the field of high temperature and energy saving.

#### Characteristics:

Excellent thermal resistance, can withstand continuous thermal load within the limit of service temperature.

Low thermal conductivity in any temperature interval.

Light weight, high specific strength. It has the best strength in the field of rigid insulation materials.

Good durability, no chalking after long-term use.

Nontoxic and physically safe. It does not contain asbestos, sulfur, chlorine and other toxic substances.

Not afraid of moisture, the product performance does not change after drying.

Simple and easy to use under construction. The product can be cut at will with ordinary woodworking tools

#### Specifications:

|                             |                                |                                                  |
|-----------------------------|--------------------------------|--------------------------------------------------|
| <b>Working temperature</b>  |                                | $\leq 1000^{\circ}\text{C}$                      |
| <b>Maximum temperature</b>  |                                | $1050^{\circ}\text{C}$                           |
| <b>Bulk density</b>         |                                | $500 \pm 10\% \text{kg/m}^3$                     |
| <b>Compressive strength</b> |                                | $\geq 5.0 \text{Mpa}$                            |
| <b>Flexural strength</b>    |                                | $\geq 4.0 \text{Mpa}$                            |
| <b>PH range</b>             |                                | 7~8                                              |
| <b>Thermal conductivity</b> | 600°C                          | $\leq 0.110 \text{w/m.k}$                        |
| <b>Linear Shrinkage</b>     |                                | $\leq 1.5\% (1000^{\circ}\text{C}, 3\text{hrs})$ |
| <b>Chemical content</b>     | SiO <sub>2</sub>               | $\geq 48\%$                                      |
|                             | CaO                            | $\geq 38\%$                                      |
|                             | Al <sub>2</sub> O <sub>3</sub> | $\leq 1\%$                                       |
|                             | Fe <sub>2</sub> O <sub>3</sub> | $\leq 0.5\%$                                     |

#### Normal Dimensions:

1080 x 950mm; 1200 x 600mm; 1200 x 1200mm;

Thickness: 10~60mm.

Other dimensions are also available on request.

**Note:**

1. All technical details quoted throughout this catalogue are based on our extensive tests and years of experience, however, they can only serve as guide values. Your specific application should not be undertaken without independent study and evaluation for suitability. Failure to select proper products and specifications could result in property damage and/or personal injury.
2. Technical details subject to change without notice. This edition cancels all previous issues.

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