

Insulation Calcium Silicate Board



Rose wool calcium silicate heat insulation board is a kind of new-type board dominated by siliceous and calcareous materials and made by such working procedures as pulping, shaping, steam curing, drying and post processing etc. It is prefabricated to shape up with good trampling resistance and has the same service life with buildings; it is resistant to fire, water and moisture, and also resistant to radiation and climate changes. The product has the advantages including light weight, high intensity, fire protection, heat insulation and nice processability etc.

- **Advantages**

Outstanding Waterproofing Performance

No oil and water absorption enables the product to maintain stable insulating performance.

Asbestos Free

Rose wool calcium silicate board is entirely asbestos-free and non-poisonous to human body.

Superior Strength

With similar density, the strength of this material is the highest among all the inorganic rigid insulation materials with better compressive performance and is not easy to bend, Hence this product has better physical strength.

Good Anti-corrosion

The super low chloride ion content and alkalescence have good protection for metal pipes, which greatly prolongs the service life of pipes and equipment and greatly reduces maintenance cost, bringing lasting protection and better durability.

Excellent Soundproofing Performance

Great soundproofing effectively reduces industrial noises.

• Application

It is widely used for the roof and wall heat insulation board, ceiling board, air channel of high rises and public buildings, the partition board of various vessels and fire prevention doors etc.

Technical Data

| Item | UNIT | ASTM C533 | Rosewool |
|------------------------------------------------|-------------------|-----------|----------|
| Density | Kg/m ³ | ≤240 | ≤240 |
| Maximum Service Temperature | °C | 650 | 650 |
| Thermal Conductivity | (38°C) | ≤0.059 | ≤0.050 |
| | (93°C) | ≤0.065 | ≤0.0535 |
| | (204°C) | ≤0.079 | ≤0.054 |
| | (371°C) | ≤0.102 | ≤0.0923 |
| Linear Heat Shrinkage | % | ≤2.0 | ≤1.8 |
| Flexural Strength | MPa | ≥0.344 | ≥0.389 |
| Compressive Strength | MPa | ≥0.688 | ≥0.894 |
| Weight Loss by Tumbling (First 10 minutes) | % | ≤20 | ≤17 |
| Weight Loss by Tumbling (Second 10 minutes) | % | ≤40 | ≤32.1 |

| | | | |
|--------------------------|----|------|-----------------------|
| Hot Surface Performance | CM | ≤0.6 | ≤0.6 |
| Moisture Content | % | ≤20 | ≤4 |
| Non-Combustible Property | ● | Pass | Non-combustible level |
| Water Repellency | % | ● | 99.4 |

| Item | Slab | Curved | Pipe |
|----------------|---------|---------|-----------------------------|
| Length (mm) | 600 | 600 | 600 |
| Width (mm) | 300/150 | 150/100 | 0.5"– 60" (inside diameter) |
| Thickness (mm) | 25–100 | 25–100 | 25–100 |

High temperature Calcium Silicate Board



In order to cater for the use demand of high temperature pipes, the company has taken the initial to create the high temperature resistant calcium silicate heat

insulation material which has quartz sand and lime as the basic materials and made by using the dynamic hydrothermal synthesis method. It is resistant to the high temperature of 1000°C, with extremely high void ratio and currently it is one of the inorganic rigid heat insulation materials that have the smallest volume and the lowest heat conductivity coefficient.

• **Advantages**

Asbestos Free

Rose wool calcium silicate board is entirely asbestos-free and non-poisonous to human body.

Superior Strength

With similar density, the strength of this material is the highest among all the inorganic rigid insulation materials with better compressive performance and is not easy to bend, this product has better physical strength.

Good Anti-corrosion

The super low chloride ion content and alkalescence have good protection for metal pipes, which greatly prolongs the service life of pipes and equipment and greatly reduces maintenance cost, bringing lasting protection and better durability.

Wonderful Non-combustibility

The product passed the EC certificate and has been identified as non-combustible material. It also passed the test by National Center for Quality Supervision and Testing of Fire Building Materials which identifies it as Grade A1 incombustible material.

Good Stability

Long time soaking in water will not lead to pulverization. Various performance remains stable after drying. **Excellent Soundproofing Performance**

Great soundproofing effectively reduces industrial noises.

• Application

It is widely used for heat insulation of the high temperature processing equipment and pipes in such industrial sectors as electricity, metallurgy, petroleum, glass and cement etc.

Technical Data

| PROPERTIES | | UNIT | ASTM C533 | Rosewool |
|-------------------------------------------------|-------------|-------------------|-----------|----------|
| Density | | Kg/m ³ | ≤352 | ≤270 |
| Maximum Service Temperature | | °C | 1000 | 1000 |
| Flexural Strength | | MPa | ≥0.344 | ≥0.36 |
| Compressive Strength per | | MPa | ≥0.689 | ≥0.85 |
| Soaking Heat Linear Shrinkage (927°C) | S length | % | ≤2.0 | ≤0.8 |
| | S width | | | ≤1.0 |
| | S thickness | | | ≤1.4 |
| Weight Loss by Tumbling per (First 10 minutes) | | % | ≤20 | ≤3.7 |
| Weight Loss by Tumbling per (Second 10 minutes) | | % | ≤40 | ≤5.6 |
| Thermal Conductivity | (93°C) | W/m. k | ≤0.078 | ≤0.0690 |
| | (100°C) | | ● | ● |

Company Profile

Rose wool Insulation Refractory Co.,Ltd ,was founded in 1982 and located in Xinmi, Henan Province, China. It is a comprehensive company, integrating manufacture, sales and construction into one. It is the thermal and insulation materials recommended supply unit of Chinese electric power ministry, metallurgical industry, cement industry, national petroleum industry and chemical industry. It is also the experimental base of China Academy of Building Research and Tianjin Chemical Research and Design Institute.



The company covers an area of 35,000 square meters, located in the intersection of the Longhai Railway, Jingguang Railway and 107 National Road, the traffic is very convenient. The company has modern production equipment and detection means: 16 sets 30 cubic meters type reactor, 8 sets 100 tons type hydraulic press, 6 lines of 60 meters type tunnel kiln, and rely on 4.0Mpa superheated steam of the power plant. With stable quality and an anti-corrosion insulation construction team, the company yearly produce 36,000 cubic meters non-asbestos high-temperature calcium silicate products and 40,000 cubic meters rock wool board. With well equipment, advanced technology and strong technical force, the company is one of the largest private enterprises in the field of calcium silicate, one of the earliest enterprises to research and develop calcium silicate products, and also the largest insulation materials enterprise in Henan Province.

The company has 200 employees, including 85 professional technician, well-known experts

and engineers in calcium silicate research field. With independent research, development and innovation ability, the company can provide users technical advice and services for kiln project and materials selection. The main production are: Non-asbestos high-temperature calcium silicate products (1050°C, 850°C, 650°C), aluminum silicate fiberboard and blankets, needled felts, mechanism asbestos, asbestos rope, asbestos cloth, asbestos belt, asbestos yarn, centrifugal glass products, rock wool products, refractory fiber rope and so on. With complete specifications, high quality and reasonable price, the products sell to more than 200 users at home and abroad, perennial exports to Russia and Southeast Asian countries, widely used in cement kilns furnace, electrolytic cell, steel, chemical, power, glass and ceramic manufacturing industry.

The company implement quality commitment system, the product pass the test of China Building Materials Research Institute, the National Refractory Materials Quality Supervision, Inspection and Testing Center and other authoritative tests. The product quality exceed GB / T10699-1998 state-owned standards, is significantly better than Japan's industrial standards, and pass the ISO9001: 2000 international quality system certification.

"Survival on Quality, Develop on Prestige" is our aim. "Service, Integrity and Efficiency" is our management theory. We are using high-quality products and services to meet the requirements of users and looking forward to cooperating with new and old customers at home and abroad.

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