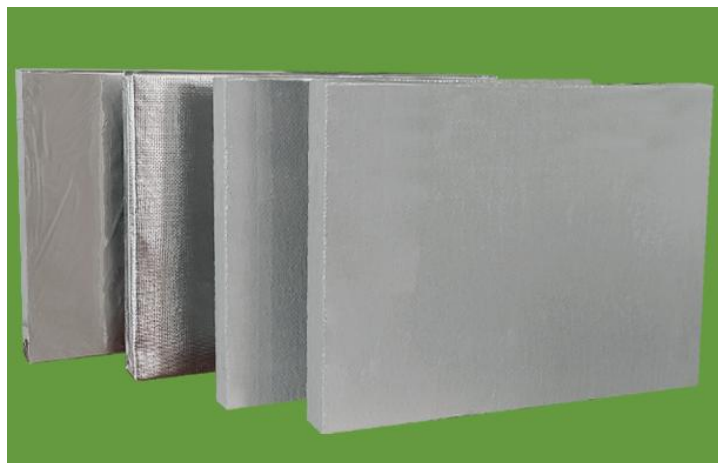


CCEWOOL® M90 Microporous Insulation Board



Classification Temperature: 900°C (1652°F)

Chemical Composition: Alumina, Silica

CCEWOOL® M90 Microporous Insulation Board is manufactured using advanced microporous insulation technology and features extremely low thermal conductivity. At lower temperatures, its thermal conductivity can be lower than that of still air, while at elevated temperatures it increases much more slowly than conventional insulation materials. At the same thickness,

CCEWOOL® M90 can typically provide 3–4 times the insulation performance of conventional insulation materials, making it particularly suitable for industrial furnaces and thermal equipment where installation space is limited and energy efficiency is critical.

The board offers good compressive strength and dimensional stability, making it suitable for use as backup insulation in high-temperature equipment. Aluminum foil, fiberglass cloth, or PE film facings can be supplied according to application requirements to improve handling, moisture protection, and installation reliability. With fiberglass reinforcement, M90 can also provide a degree of flexibility while maintaining low thermal conductivity, making it suitable for curved surfaces and complex structures.

CCEWOOL® M90 Microporous Insulation Board is an efficient insulation solution for lightweight furnace lining design, energy reduction, and improved thermal efficiency.

Characteristics:

- Extremely low thermal conductivity;
- Good conformity to curved surfaces;
- Excellent thermal shock resistance;
- Excellent thermal stability;
- Low heat storage;
- Non-combustible.

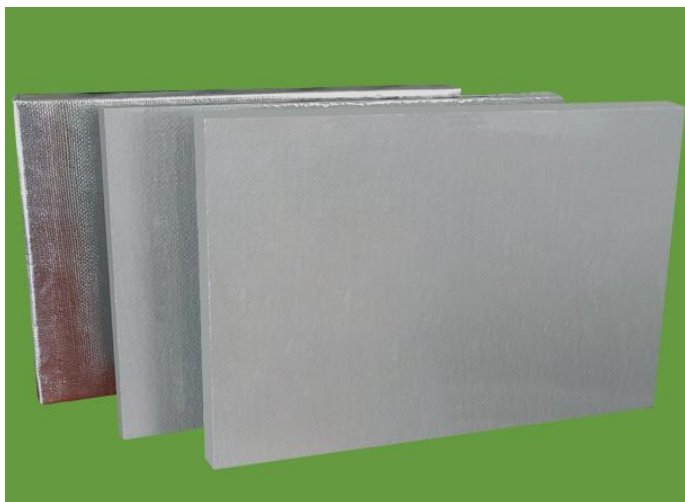
Applications:

Backup insulation in high-temperature furnaces;
Electrical insulation;
Fire-protection equipment;
Electronic equipment;
Non-ferrous metal electric furnaces;
Rotary kilns and shaft kilns;
Incinerators;
Heating furnaces;
Permanent linings for electric arc furnace ladles;
General industrial furnaces;
Aerospace applications.

TDS

CCEWOOL® M90 Microporous Insulation Board	
Description	M90 Board
Recommended Temperature of Use (°C)	900(1652°F)
Density (kg/m³)	280/300
Modules of Rupture (MPa)	≥0.15
Compressive Strength (MPa, 10% relative deformation)	≥0.3
Permanent Linear Shrinkage (%)	900°C x 24h ≤2.0
Thermal Conductivity (W/m·K)	
100°C	0.02
200°C	0.023
300°C	0.026
400°C	0.027
500°C	0.033
600°C	-
Covering Material	Aluminum Foil / PE Foil / Glass Fiber Cloth
Standard Size (mm)	600 x 400 x (10-50)
	1000 x 500 x (10-50)

CCEWOOL® M110 Microporous Insulation Board



Classification Temperature: 1100°C (2012°F)

Chemical Composition: Alumina, Silica

CCEWOOL® M110 Microporous Insulation Board is a nano-structured microporous insulation product developed for high-temperature applications requiring exceptional thermal efficiency and energy savings. Its microporous structure effectively suppresses gaseous heat transfer, providing thermal conductivity lower than still air at lower temperatures and only a limited increase as temperature rises.

While maintaining ultra-low thermal conductivity, CCEWOOL® M110 also provides good compressive strength, making it suitable as a high-efficiency backup insulation layer in high-temperature equipment. Aluminum foil, fiberglass cloth, or PE film facings are available to help reduce dust, improve mechanical stability, and enhance moisture protection.

With excellent insulation performance and long-term stability, CCEWOOL® M110 Microporous Insulation Board is widely used in industrial furnaces and other high-temperature systems for lightweight lining design, energy reduction, and efficient thermal management.

Characteristics:

- Extremely low thermal conductivity;
- Reduced insulation thickness with high thermal efficiency;
- Low heat loss and low heat storage;
- Supports faster heating and cooling cycles;
- Environmentally friendly and non-toxic;
- Good toughness and self-supporting capability;
- Excellent thermal stability;
- Excellent resistance to rapid heating and cooling.

Applications:

Backup insulation in high-temperature furnaces;
Electrical insulation;
Fire-protection equipment;
Electronic equipment;
Non-ferrous metal electric furnaces;
Rotary kilns and shaft kilns;
Incinerators;
Heating furnaces;
Permanent linings for electric arc furnace ladles;
General industrial furnaces;
Aerospace applications.

TDS

CCEWOOL® M110 Microporous Insulation Board	
Description	M110 Board
Recommended Temperature of Use (°C)	1100(2012°F)
Density (kg/m³)	320
Modules of Rupture (MPa)	≥0.15
Compressive Strength (MPa, 10% relative deformation)	≥0.3
Permanent Linear Shrinkage (%)	1050°C x 24h ≤2.5
Thermal Conductivity (W/m·K)	
100°C	0.022
200°C	0.024
300°C	0.031
400°C	0.036
500°C	0.04
600°C	0.048
Covering Material	Aluminum Foil / PE Foil / Glass Fiber Cloth
Standard Size (mm)	600 x 400 x (10-50)
	1000 x 500 x (10-50)