

Mineral Wool/ Rock wool Board/ Block/ Slab

a. High Strength - Compression Resistant Mineral wool Slab.

The high strength mineral wool (rock wool) slab/ board, applies to the exterior of buildings for thermal insulation, like roof, external wall etc.. due to its property of compression resistance, it's suitable for steel sandwich panel's fabrication as well, and other industries where both insulation and mechanical strength are required.

There are various grades available, 30kpa, 40kpa, 50kpa, 60kpa etc. Properties: comply with ASTM C 612 / JIS A 9504.



Items	Value
Density tolerance, %	+15, -15
Shot content (dia.≥0.25mm). %	≤12.0
Average fiber diameter, μm	≤7.0
Heat load contraction Temp. (products with density over 60kg/m ³) °C	≥600
Thermal Conductivity (average temperatur70 °C±52 °C), W/(m.k)	≤0.044
Moisture content, %	≤0.5
Combustion property	Grade A Incombustible
Organic substance, %	≤4.0
Water repellence (water-proof), %	≥98

Availability:

Compression Resistance	Density(kg/m ³)	Thickness(mm)
30Kpa (against 10% of dimension compressed)	120	100~120
	130	80~100
	140	50~80
40Kpa (against 10% of dimension compressed)	140	80~100
	150	50~80
	160	30~80
	180	25~70
50Kpa (against 10% of dimension compressed)	150	80
	160	50~80
	180	30~70
	200	25~60
60Kpa (against 10% of dimension compressed)	160	60~80
	180	30~70
	200	25~60

b. Rigid board

The product is suitable for large vessels, tanks, ovens and ducts for its good load-bearing property. Board with wire mesh, kraft paper or aluminium foil facing is available.

They are water repellent and non-hygroscopic.

The wool is neutral or slightly alkaline, and normally not support the growth of molds, fungi and bacteria.



c. Flexible, semi-rigid board

The product is used in building walls/ roofs, elevator wells, flat or slightly curved surfaces and other industrial equipment for thermal and sound insulation.

Availability:

Flex semi-rigid board; Rigid board									
Thickness	40	50	60	80	100	120	140	150	200
mm	kg/m ³								
25									
30									
35									
40									
50									
65									
70									
75									
80									
90									
100									
110									
120									
130									
140									
150									

Length mm	910	1000	1200	1210
Width mm	600	605	630	910

Other size or density on request.

Thermal conductivity (typical figure)

Mean Temp °C	K-value W/m.k								
	Thickness	40	50	60	80	100	120	140	150
mm	kg/m ³								
50	0.043	0.041	0.039	0.038	0.037	0.037	0.037	0.037	0.039
100	0.054	0.049	0.046	0.044	0.043	0.042	0.043	0.042	0.045
150	0.068	0.061	0.058	0.053	0.051	0.050	0.049	0.049	0.052
200	0.086	0.074	0.071	0.064	0.060	0.059	0.057	0.057	0.060
250	0.106	0.090	0.088	0.076	0.071	0.069	0.066	0.066	0.069
300	0.131	0.109	0.106	0.091	0.084	0.082	0.081	0.080	0.079
350		0.131	0.127	0.107	0.099	0.096	0.095	0.094	0.090
400				0.126	0.107	0.111	0.109	0.107	0.102

Maximum Service Temperature

Flexible, semi-rigid board: 450 °C (850 °F) Rigid board: 650 °C (1200°F)

Sound Absorption:

Hz	Flexible, semi-rigid board (Thickness 75mm)	Rigid board (Thickness 75mm)
125	0.32	0.30
259	0.80	0.80
500	1.13	1.15
1000	1.09	1.12
2000	1.01	1.03
4000	1.02	1.02

Correlative page:<http://www.mowcoproducts.com/rock-mineral-wool-boards-slabs.html>