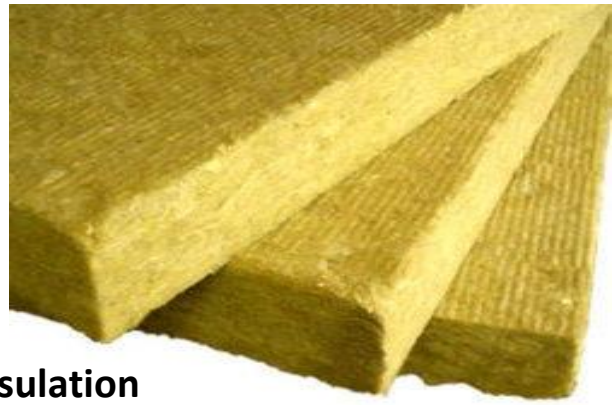




MW Board

Non Combustible, Acoustic & Thermal Insulation

Product Description

KM MW (Mineral Wool) Board are medium weight insulation for Thermal Reduction and Acoustic Control in buildings.

KM MW is created using our exclusive **RCS (Rapid Centrifugal Spinning)** technology, which produces a very thin and even fiber structure, bonded by thermosetting resins & water repellant. In addition, application of the Pendulum System forms thinner and more even air layers that effectively block off heat flow.

KM MW – Board is supplied in semi-rigid sheets for applications where a stiffer, more rigid product is desirable.

Benefits

- Lightweight highly durable insulation product
- Easily forms shape of equipment to be insulated
- Excellent and cost effective thermal insulation
- Performance is not adversely affected from moisture contact
- Fungi Resistant
- Vermin Resistant
- Non- Combustible
- Recycled Materials
- Zero HCHO, TVOC
- Zero Ozone Depletion Potential
- Zero Global Warming Potential
- Asbestos- Free

Applications

KM MW Board provides superior thermal and acoustic performance when installed under metal deck roofing, ACMV, Façade, Partition system.

KM MW can be used to insulate concrete soffits, external walls, spandrel panels, and cavity partitions, and as sound absorbent lining of plant rooms and machinery enclosures. The choice of product depends on whether a flexible or rigid product is more suitable for the particular application.

KM MW – Board may also be used as the resilient layer in a floating floor. The natural resilience of KM MW absorbs impact which would otherwise be transmitted through the building structure.

Environmentally- Friendliness

Health and Safety

By recycling byproducts of mineral extraction, KM MW plays its part in the protection of the environment and preservation of energy resources.

KM MW emits virtually no HCHO, TVOC , or other pollutants and significantly lowers the possibility of sick house syndrome.

With Zero HCHO, TVOC, or other pollutants, hence, Zero ODP and Zero GWP.

Technical Parameters

Submittal Selection				
Nominal Density [kg / m ³]	64	80	100	120
Nominal Density [lb / ft ³]	4.00	4.99	6.25	8.00
Thermal Conductivity @ 20°C [W/mK]	0.034	0.034	0.034	0.034
Fire Performance	Non – Combustible : BS 476 Part 4			
Moisture Resistance	Absorb less than 0.01 % by Volume			

Compliance

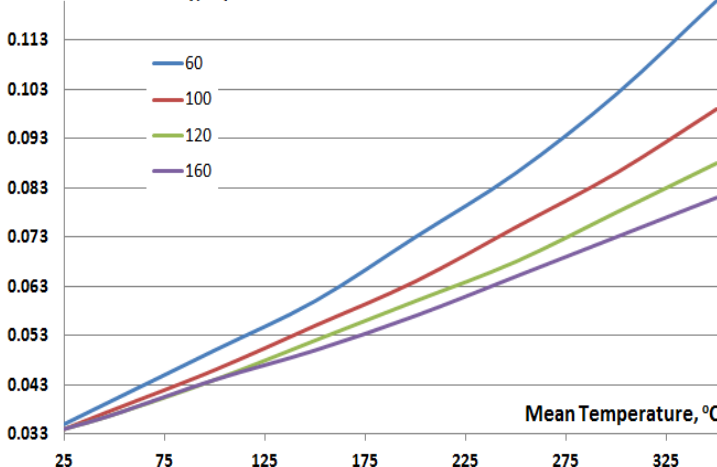
Tested and approved in accordance to SIRM and PSB.
KM MW conforms to BS 4958 : Part 5 'Specification for bonded man-made mineral fibre slabs' and can be used to satisfy BS 5422 'Thermal insulating materials on pipes, ductwork and equipment'.
KM MW conforms to ASTM C 612 'Standard Specification for Mineral Fiber Block and Board Thermal Insulation'

KM MW – SLAB / BLANKET

Thermal Conductivity

Mean Temp. °C	Thermal Conductivity, W/m°C			
	64 kg/m ³	100 kg/m ³	128 kg/m ³	160 kg/m ³
25	0.034	0.034	0.034	0.034
50	0.040	0.038	0.037	0.037
100	0.050	0.046	0.044	0.044
150	0.060	0.055	0.052	0.050
200	0.073	0.064	0.060	0.057
250	0.086	0.075	0.068	0.065
300	0.102	0.086	0.078	0.073
350	0.121	0.099	0.088	0.081

Thermal Conductivity, W/m°C



Apparent thermal conductivity curve determined in accordance with ASTM Practice C 1045 with data obtained by ASTM Test Method C 177. Values are nominal, subject to normal testing and manufacturing tolerances.

Acoustic Performance, ASTM C 423

KM MW is made out of thin and even fibers that form noise-absorbing interconnected microscopic pores. As sound pressure travels through these pores, the pores negate this energy by converting it into friction. When used in a standard Stud-Wall, or between floors, can increase the sound insulation performance by 3 to 5 dB. For fitting under Roof Constructions, KM MW provides a reduction in reverberant noise levels of up to 10 dB.

Density kg/m ³	Thickness (mm)	Sound Absorption Coefficients, Hz						
		125	250	500	1000	2000	4000	NRC
64	25	.13	.48	1.02	1.08	1.02	1.01	.90
	50	.20	.61	1.07	1.06	1.04	1.07	.95
	75	.43	.64	1.08	1.08	1.04	1.07	.95
	100	.88	1.14	1.17	1.08	1.06	1.10	1.10
	150	1.32	1.14	1.11	1.09	1.06	1.07	1.10
100	25	.18	.62	1.08	1.08	1.03	1.07	.95
	50	.25	.85	1.15	1.10	1.04	1.06	1.05
	75	.80	1.07	1.11	0.99	.98	.96	1.05
	100	.99	1.01	1.10	1.03	1.03	1.05	1.05
120	25	.13	.64	1.08	1.08	1.04	1.07	.95
	75	.32	.90	1.11	1.07	1.01	1.05	1.00
	100	1.11	.91	1.07	1.03	1.06	1.07	1.00

Values given are for design approximations only; production and test variabilities will alter results. Specific designs should be evaluated in end-use configurations. All tests were conducted in accordance with ASTM C 423, Mounting A (material placed against a solid backing).

Corrosion Resistance Performance (ASTM C 795; USAEC Regulation Compliance)

KM MW is made from chemically stable inorganic materials. Because of this, KM MW is strong against acid and alkaline chemicals and against degradation from weathering.

Fire Resistance

KM MW is non-combustible when tested in accordance with **British Standard 476: Part 4: 1970 "Fire Test on Building Materials and Structures – Non-Combustibility Test for Materials"**.

Maximum Service Temperature

* Dependence on Density Type

Continuous Safe Operating Temperature: 200°C to 649°C

Intermittent Temperature: 300°C to 1000°C

Moisture Resistance

Exposure to an atmosphere of 50°C and 95% relative humidity for four days results in moisture absorption of less than 0.1% by volume. Should the insulation become wet, full thermal efficiency will be restored on drying out.

Durability and Weatherability

Non-degrading and non-deteriorating, Mineral Wool is semi-permanent and very *Sanitary*.

KM MW – SLAB / BLANKET

Standard Sizes & Packaging

KM MW is available in a wide range of other thickness and densities.

Standard packaging is shrink-wrapped polyethylene.

Other sizes are available to order but may be subject to a minimum order quantity.

Available Facings

KM MW is available in Plain as Standard.

Faced lamination is available with Foil-Scrim-Kraft [FSK] Aluminium Foil

Installation Recommendations

KM MW insulation can be installed directly on heated flat and curved surfaces by attaching with welded pins or studs.

Unfaced insulations may be finished with reinforced silver foil, metal lath or wire mesh, and insulating cement, then canvassed and painted.

Pins with speed washers or studs and nuts should be installed on 400mm spacing (max.) and not more than 100mm from the edge of the insulation. The insulation is normally impaled over the pins or studs and the enclosing sheet metal or metal mesh is secured to the same fasteners. Joints of the sheet metal finish are offset from joints of the insulation.

With faced insulation boards, cover pins and clips with vapor- sealing pressure- sensitive patches matching the facing.

For temperatures over 204°C, good insulation practice suggests double layer application, regardless of insulation type. Single layer installation of any type of insulation material requires good workmanship to minimize heat loss and hot spots at insulation joints.

These insulations may be installed in either single or multiple layers at all temperatures up to 649°C. In multiple layer applications, use faced insulations on outer layer only.

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