

Mica Board can be utilized on a variety of applications due to its thermal and electric insulation properties: high voltage applications, extruders, and dies.



Unique properties include resistance to electric arc and erosion, pressure resistance, and its non-permeability to high-frequency waves. Mica Board is the ideal replacement for asbestos-cement plates.

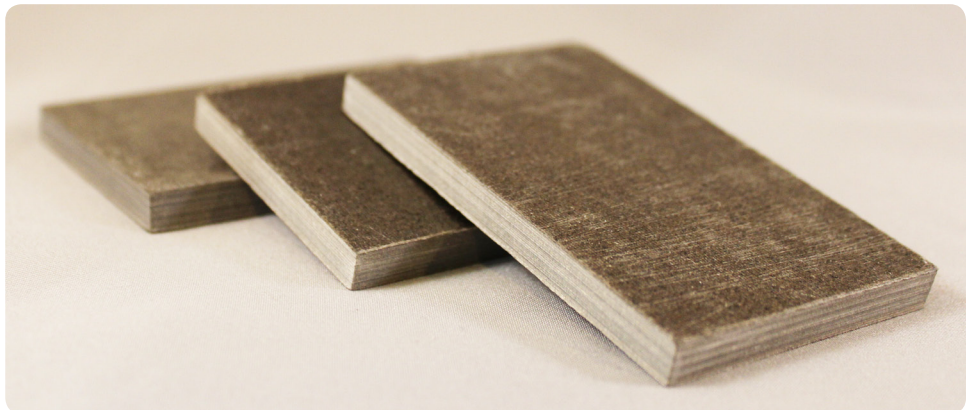
Mica Board provides rigid insulation around mold perimeters, between molds and platens, or on sheet dies.

Benefits

- » Heat & flame resistant up to 1832°F
- » High pressure resistant
- » Resists oil & moisture
- » Low thermal conductivity
- » Asbestos-free

Ideal for

- » Mold perimeters
- » Molds & platens
- » Sheet dies



General Information

	Thermboard Muscovite	Thermboard Phlogopite
Mina Content (IEC 60371-2)	80-90%	85-90%
Silicone Binder Content (IEC 60371-2)	10-15%	10-15%
Density (IEC 60371-2)	2.2 - 2.3g/cm ³	2.2 - 2.3g/cm ³
Heat Resistance:		
Continuous Service	932°F	1292°F
Intermittent Service	1472°F	1832°F
Tensile Strength (ISO 527)	150 N/mm ²	110 N/mm ²
Bending Strength (ISO 178)	230 MPa	170 MPa
Water Absorption (ISO 62)	<1% (24h/73°F)	<1% (24h/ 73°F)
Dielectric Strength: (IEC 60243)		
68°F	25 kV/mm	25 kV/mm
Volume Resistivity: (IEC 60093)		
73°F	>10 ¹⁶ B/cm	>10 ¹⁶ B/cm
1022°F	>10 ⁹ B/cm	>10 ⁹ B/cm
Heat Loss: (IEC 60371-2)		
932°F	<1%	<1%
1292°F		<2%
Thermal Expansion:		
Perpendicular	100 X 10 ⁻⁶ /°K	100 X 10 ⁻⁶ /°K
Parallel	10 X 10 ⁻⁶ /°K	10 X 10 ⁻⁶ /°K

White Board provides rigid insulation around mold perimeters, between molds and platens, or on sheet dies. White Board is high compression and heat tolerable, instantly reducing heat loss and increasing process efficiency.



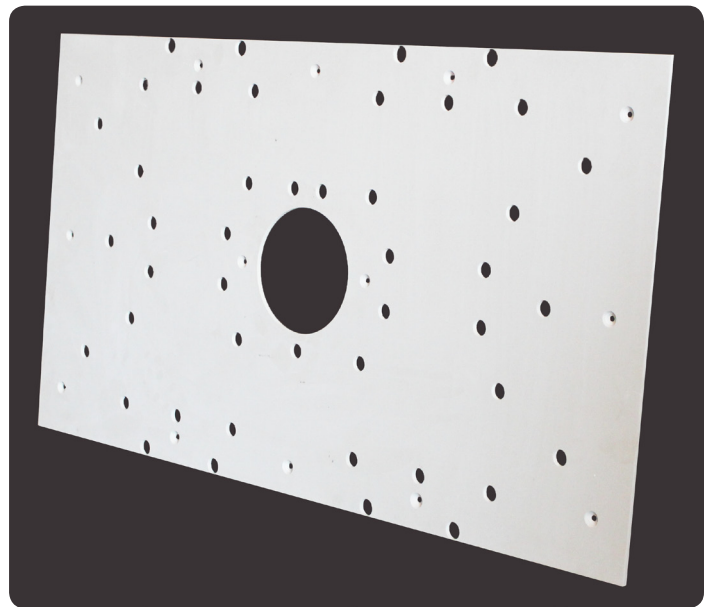
Insulation board is custom designed to fit each mold, die, or application and is pre-cut with precision CNC machinery.

Benefits

- » Heat resistant up to 550°F
- » Low thermal conductivity
- » Resists oil & moisture
- » High pressure resistant
- » Asbestos-free

Ideal for

- » Mold perimeters
- » Molds & platens
- » Sheet dies



General Information

General Information	Procedure	English Units	Typical Values	Metric Units	Typical Values
Part Number			3913		3913
Standard Color			White		White
Max Service Temp.		F	550	C	288
Standard Color	ASTM D 790	Psi	31,000	Mpa	214
Flexural Strength	ASTM D 695	Psi	49,000	Mpa	3.38
Compression Strength					
75°F/24°C	ASTM D 695	Psi	27,000	Mpa	186
302°F/150°C	ASTM D 695	Psi	18,000	Mpa	124
392°F/200°C	ASTM D 695	Psi	17,000	Mpa	117
550°F/288°C	ASTM D 695	Psi	18,000,000	Mpa	12,411
Compression Modulus	ASTM D 256	Ft./in.	8	J/cm	4.3
Izod Impact Strength Notched	ASTM D 149	Vpm	50	kv/mm	2
Electric Strength Perpendicular S/T in Air	UL 94	0.094in	HB	2.4mm	HB
UL Subject 94	ASTM D 570	% by Wt	0.02	% by wt	0.02
Water Absorption	ASTM D 792	lbs/ft sq	123	g/cm sq	1.97
Density		inches	0.002	mm	0.05
Thickness Tolerance	ASTM D 696	in/in/c X 10-5	6.43	10/k	64
Thickness Across	ASTM D 696	in/in/c X 10-5	1.24	10/k	12
Surface Across	ASTM D 177	BTU/HR/F1/ in F	1.9	W/m K	0.27
Thermal Conductivity	ASTM D 177	BTU/HR/F1/ in F	1.9	W/m K	0.27