

UltraBoard YOUR PARTNER WHERE IT MATTERS

Insulation boards made of polycrystalline mullite/alumina wool (PCW) up to **1.800 °C (3.272 °F)** application temperature



UltraBoard are rigid high-temperature fibrous insulation materials made of polycrystalline mullite/alumina wool (PCW) and special inorganic fibres and binders.

As they have high flexural strength under high temperature, are light in weight and strong against thermal shock, they are suitable as an insulation material for fast heating and cooling condition such as furnace linings in high-temperature electrically heated furnaces. The insulation boards are suitable for application temperatures up to **1.800 °C**.



UltraBoard are being very widely used in heat processing equipment in e.g. the production of various technical ceramics, ceramic powders (oxides/non-oxides), electronic parts and in the dental industry.

Keeping abreast of demands for not only larger sizes but also complicated shapes or cuttings, our ability to meet precise custom designs and specifications has been significantly enhanced through the use of today's most advanced machine tools, giving more freedom to the design of heating equipment.

YOUR BENEFITS WITH ULTRABOARD AT A GLANCE

- ✓ Low thermal conductivity
- ✓ Good machinability (homogeneous structure)
- ✓ Excellent spalling resistance in rapid heating
- ✓ Very good high temperature resistance
- ✓ Low heat storage
- ✓ Excellent thermal shock resistance

MATERIAL PROPERTIES OF ULTRABOARD

UltraBoard	UV 1500-3	1500-300	UV 1600-4	1600-400	UV 1750-4	1750- 400P	1850-400	1850-500	1850-700
SiO ₂ [%]	25	30	20	28	17	22	20	15	15
Al ₂ O ₃ [%]	75	70	80	72	83	78	80	85	85
Classification temperature [°C] [°F]	1500 2732	1500 2732	1600 2912	1600 2912	1750 3182	1750 3182	1850 3362	1850 3362	1850 3362
Max. service temperature (perm.) [°C] [°F]	1500 2732	1450 2642	1600 2912	1500 2732	1750 3182	1700 3092	1780 3236	1800 3272	1800 3272
Density [kg/m ³]	300	300	400	400	400	400	400	500	700
Loss of ignition [%]	-	3.0	-	3.0	-	4.0	6.0	4.0	-
Thermal conductivity [W/mK]									
1400 °C (2552 °F)	0.50	0.50	0.42	0.47	0.35	0.27	0.34	0.38	0.39
Linear change, 24h at [%]									
1200 °C (2192 °F)	.....	.....	.....	.....	.....	.....	.....	.....	.....
1400 °C (2552 °F)	.....	-0.4	.....	.....	.....	.....	.....	.....	.....
1500 °C (2732 °F)	-0.22	-1.2	.....	0.0	.....	.....	.....	.....	.....
1600 °C (2912 °F)	.....	.....	+0.14	-0.5	.....	.....	.....	+0.3	.....
1700 °C (3092 °F)	.....	.....	.....	.....	.....	-0.4	+0.5	+0.2	+0.1
1750 °C (3182 °F)	.....	.....	.....	.....	-0.13	.....	.....	-0.7	.....

All boards are also available as pre-fired boards. Pre-firing qualities: low fired (LF), middle fired (MF), high fired (HF).
Densities are available up to 700 kg/m³.

AVAILABLE TYPES OF ULTRABOARD

Standard thickness	20, 25, 40, 50 mm*
Standard dimension	900 mm x 600 mm*

* Customised thickness and dimensions on request.