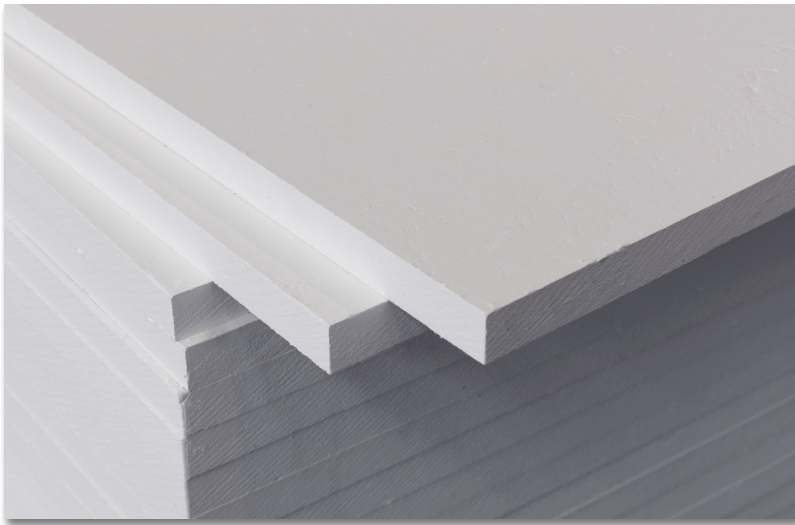


PROMATECT[®]-MST



Structural calcium silicates

PROMATECT[®]-MST materials are rigid insulation boards with a low thermal conductivity. They are specifically formulated without asbestos and mineral fibres.

PROMATECT[®]-MST products have low shrinkage and high strength and therefore provide effective and stable insulation solutions for industrial applications.

PROMATECT[®]-MST is a rigid machinable insulation used as a thermal break in process plants and as single skin insulation in ovens and dryers.

Technical data

| | | |
|---|-------------------|----------------------|
| Colour | | white/beige |
| Building material class | EN 13501 | A1, non-combustible |
| Classification temperature | °C | 1000 |
| Nominal density | kg/m ³ | 750 |
| Cold compressive strength | N/mm ² | 18 |
| Bending strength | N/mm ² | 6 |
| Shrinkage 1000 °C - 24h | % | 0.9 |
| Breakdown voltage and electric strength EN 60243-1 | kV/mm | 2.6 |
| Thermal conductivity | | |
| 200 °C | W/m K | 0.22 |
| 400 °C | W/m K | 0.20 |
| 600 °C | W/m K | 0.20 |
| 800 °C | W/m K | 0.22 |
| Specific heat capacity | kJ/kg K | 0,96 |
| Reversible thermal expansion 20-800 °C - 2 nd heating | K ⁻¹ | 7.4x10 ⁻⁶ |
| Chemical analysis | | |
| SiO ₂ | % | 49 |
| CaO | % | 48 |
| Fe ₂ O ₃ | % | 1.2 |
| LOI | % | 11 |
| Alkalinity | pH value | approx. 10 |
| Moisture content (air-dry) | % | < 5 |

Delivery sizes

| | | |
|-----------|----|------------------------------------|
| Length | mm | 2500 |
| Width | mm | 1200 |
| Thickness | mm | 12.7 / 20 / 25 / 30 / 40 / 50 / 60 |

Production tolerances

| | | |
|------------------|----|-------|
| Length and width | mm | ± 1 |
| Thickness | mm | ± 0.4 |

PROMATECT[®]-MST

Properties & advantages

- Low thermal conductivity
- High mechanical strength
- Resistant to moisture and chemicals
- Excellent machinability to close tolerances
- Strong and durable
- Dust free surface
- Asbestos free

Application areas

OIL AND GAS

- Load bearing pipe supports

HEAVY INDUSTRY

- Heat shields
- Structural thermal breaks
- Furnace bottom boards



Working & processing

PROMATECT[®]-MST products can be accurately machined with special processing machinery and appropriate tools. The fine material structure allows the production of precision machined parts.

To avoid water absorption and to protect against aggressive atmospheres, Promat[®]-Impregnations are available.

When cutting to size, the maximum workplace concentration values for inhalable dust must be observed. Dust extraction is recommended. See product safety information sheet.

Thermal conductivity

