



PROMAFOUR® boards are cement bonded calcium silicate based insulation boards and are asbestos free. These large-sized multi-purpose boards are easy to handle and offer a superior combination of enhanced technical properties for building strong, mechanically self-supporting constructions.

**PROMAFOUR®** boards are hygroscopic and vapour permeable. Moisture content is therefore automatically regulated by the application environment. Water vapour absorption can slightly affect the strength and thermal performance characteristics of these materials.

### Properties & advantages

- Large-sized, self-supporting
- High mechanical strength
- Good thermal insulation
- Good sound insulation properties
- A1, non-combustible to DIN 4102
- Easy to shape and work
- Good chemical resistance
- Hygroscopic and vapour-permeable
- Unaffected by humidity
- Retains shape stability and load capacity in humid conditions

### Typical applications

- Chimney casings
- Mantelpieces of fireplaces and stoves



### Surface treatment

The physical properties and the surface structure of PROMAFOUR® boards make them ideally suited to the application of decorative finishes.

The boards are alkaline, therefore they must be treated using alkali-resistant paints, bonding agents and decorative systems. To avoid water absorption and to protect against aggressive atmospheres, Promat® -Impregnations are available.

### Working & processing

Woodworking machinery with hard metal-tipped tools can be used for producing and shaping cut sections. When shaping, the maximum allowable workplace concentration for inhalable dust generation must be observed. Dust extraction is recommended.



**Promafour®**   
for Fireplaces



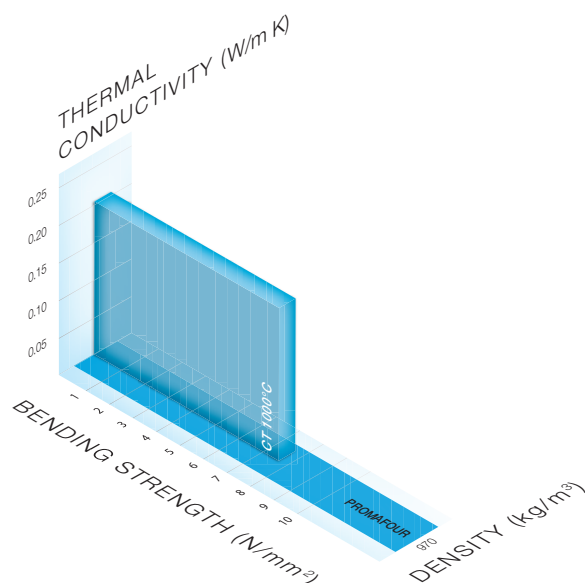
A PRODUCT OF THE PROMAFOUR® SYSTEM



### Technical data

Brand		PROMAFOUR®
Colour		Grey
Building material class (DIN 4102)		A1, Noncombustible
Classification temperature	°C	1000
Nominal density	kg/m³	970
Shrinkage @ CT °C, 24 h	%	1.41
Thermal conductivity		
100 °C mean	W/m K	0.183
200 °C mean	W/m K	0.185
400 °C mean	W/m K	0.192
600 °C mean	W/m K	0.204
Specific heat capacity	kJ/kg K	0.93
Linear change in length (20 - 600 °C)	m/m K	6.4x10 <sup>-6</sup>
Alkalinity	pH-value	approx. 12
Water vapour diffusion value	μ	51
Moisture content (air dry)	%	5.7
Modulus of Elasticity E	Mpa	2845
Bending strength	Long./Lat.	N/mm²
		7.6/4.8
Tensile strength	Long./Lat.	N/mm²
		4.8/2.6
Cold compressive strength		N/mm²
		11

### Graph: Thermal conductivity vs. bending strength vs. density (Thermal conductivity @ 600 °C)



### Product dimensions & sizes availability

	Length [mm]	Width [mm]	Thickness [mm]
PROMAFOUR®	2500	1250	12-15-18
	3000	1250	12-15-18

### Production tolerances

	PROMAFOUR®
Length [mm]	± 3.0
Width [mm]	± 3.0
Thickness [mm]	
6-12 mm	± 0.5
15-20 mm	± 1.0
25 mm	± 1.5

[www.promat-hpi.com](http://www.promat-hpi.com)

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