



Applications

- Ceilings
- Partitions

Static Values

Modulus of elasticity E (BS EN 310: 1993)	Longitudinal N/mm ²	4599
	Transverse N/mm ²	3817
Flexural strength F _{rupture} (BS EN 310: 1993)	Longitudinal N/mm ²	9.78
	Transverse N/mm ²	8.31
Tensile strength T _{rupture} (BS5669: Part 1: 1989)	Longitudinal N/mm ²	5.99
	Transverse N/mm ²	5.17
Compressive strength (average, perpendicular to board face) (BS5669: Part 1: 1989)	N/mm ²	7.76

For PROMALINE®, the longitudinal direction is identical with the direction of manufacture. In order to calculate permissible loading, application of the following values is recommended:
Flexion ≤ /250
Bearing safety factor ≥ 3

In the following work sheets, certain makes of screws may be specified as being preferential in order to ensure a certain level of quality of installation. The physical properties given in the tables on this page are mean values given for information and guidance only. If certain properties are critical for a particular application, it is advisable to consult your nearest Promat Technical Department.

General Technical Data

Neutral designation	Asbestos free matrix engineered mineral		
Material class	Non-combustible, according to BS 476: Part 4		
Surface spread of flame	Class 1 to BS 476: Part 7		
Building regulations classification	Class 0		
Raw density (average)	kg/m ³	1000	
Alkalinity (approximate)	pH	11	
Thermal conductivity (approximately) at 40°C (ASTM C518: 1991)	W/m ² k	0.218	
Coefficient of expansion	m/mk	-7.5 x 10 ⁻⁶	
Nominal moisture content at EMC*	%	8	
Thickness tolerance of standard boards	mm	± 0.5 + 1	
Length x Width tolerance of standard boards	mm	± 5	
Surface condition	Front face smooth, back face dimple pattern.		
Thickness (mm)	Length x Width (mm)	Approx. Weight (Kg/m ²)	
		Dry	At 20°C, 65% RH
6	2440 x 1220	5.93	6.48
9	2440 x 1220	8.91	9.72
12	2440 x 1220	11.88	12.96

Screw Draw-Out Resistance

Screw designation & dimensions	Arrangement	Screw depth (mm)	Draw-out resistance T _{rupture} (N)
Quick-fix screws 3.9 x 45	in board face	20	–
	in board edge	20	–
	in board edge	30	–
Quick-fix screws 3.9 x 55	in board face	15	527
Timber construction screws 4.2 x 45 (Hi-Lo thread)	in board face	15	500
Quick-fix screws 4.0 x 40	in board face	15	510
Quick-fix screws 4.5 x 50	in board face	15	505
Screw inserts (Type B 3815) RAMPA	in board face	15	305

*EMC: Equilibrium moisture content. The properties in above tables are mean values given for information and guidance only. If certain properties are critical for a particular application, it is advisable to consult your nearest Promat Technical Department.

PROMATECT®-N is manufactured under a quality management system certified in accordance with ISO 9001: 2000 Certification and in accordance with the environmental standards of ISO 14001.