

1. Product Description

ETERPAN® MD is manufactured through flow-on production method from a homogeneous mixture of cement, organic cellulose fibres and selected mineral fillers. The asbestos-free board is autoclaved to form a highly dimensional stable board ideal for both internal and external applications such as cladding, partitions, ceilings, stone/tile/brick backer board, rigid air barrier, in situ formwork concrete etc.

ETERPAN® MD comes in thicknesses ranging from 6 to 20mm in lengths of 2,400mm, 2,700mm or 3,000mm.

2. Benefits

ETERPAN® MD is an advanced building material, serving as the best alternative to conventional wood, plasterboard or other wood/ cement based products;

- a. Wide variety of thicknesses and applications
- b. Dimensionally stable
- c. Impact resistant
- d. Moisture, mould and water resistant
- e. Resistant to attack of termites, insects and other vermin
- f. Easy to install and work with
- g. Environmental-friendly, no harmful gas emission
- h. Non-combustible

3. Technical Properties

Test Method: ASTM C1185 :	Standard Test Methods for Sampling and Testing Non- Asbestos Fiber-Cement Flat Sheet, Roofing and Siding Shingles, and Clapboards
ASTM C1186 :	Standard Specification for Flat Fiber Cement Sheets Non-Asbestos Fiber-Cement Flat Sheet, Roofing and Siding Shingles, and Clapboards
BS 476 Part 4 :	Fire Tests on Building Materials and Structures Part 4: Non-combustibility tests for materials
BS 476 Part 7 :	Part 7: Method of test to determine the classification of the surface spread of flames of products
ASTM C518 :	Standard Test Method for Steady-State Thermal Transmission Properties by Means of the Heat Flow Meter Apparatus

Physical Properties

Property	Value	Unit	Standard
Density (not less than)	1300	kg/m ³	ASTM C1185
Moisture Content (at EMC)	10% by Weight	%	ASTM C1185
Water Absorption	33 ± 2 %	%	ASTM C1186
Moisture Movement			
- Normal to Oven Dry	0.80	mm/m	ASTM C1185
- Normal to Saturated	0.45	mm/m	
Thermal Expansion	5 x 10 ⁻⁶	m/mK	-
Thermal Conductivity	0.28	W/mK	ASTM C518
Thermal Shrinkage (4ht/ 500°C)			
- Length	0.56	%	-
- Thickness	0.78	%	
- Weight loss	10.50	%	
Resistance to Continuous Freezing	-30	°C	-
Resistance to Continuous Heating	150	°C	-

Mechanical Properties

Property	Value	Unit	Standard
Modulus of Rupture			
- Longitudinal (Oven-Dry)	12.0	N/mm ²	ASTM C1185
- Transverse (Oven-Dry)	9.0	N/mm ²	
Modulus of Elasticity			
- Longitudinal (Oven-Dry)	7500	N/mm ²	ASTM C1185
- Transverse (Oven-Dry)	9500	N/mm ²	
Delamination Strength (Air-Dry)	1.0	N/mm ²	-

Durability

Property	Value	Standard
Heat-rain performance – Category A : 50 Cycles	Passed	ISO 8336
Warm water performance	Passed	ISO 8336
Soak-dry performance – Category A : 50 Cycles	Passed	ISO 8336
Freeze-thaw performance – Category A : 100 Cycles	Passed	EN 12467
Type A : 50 Cycles	Passed	AS/ NZS 2908.2

Reaction to Fire

Property	Value	Unit	Standard
Non-combustibility	Non-combustible	-	BS 476 Part 4
Surface Spread of Flame	Class 1	-	BS 476 Part 7
Building Regulation Classification	Class 0	-	-
Heat Release Smoke Production and Mass Loss	Group 1	-	ISO 5660 Part 1:2015

All material properties and physical performance are mean values given for information only. If certain properties are critical for particular application, it is advisable to consult Eternit Guangzhou Building Systems Co. Ltd.

Eternit Guangzhou Building Systems Co. Ltd reserves the right to amend this information sheet without prior notice.

4. Health and Safety Aspects

During the mechanical machining of panels, airborne dust which may be hazardous to health, may be released.

Avoid direct contact of dust with skin and eyes as they may cause irritation.

The use of dust extraction equipment is advised. Respect regulatory occupational exposure limits for total inhalable and respirable dust.

For more information, please check the Material Safety Data Sheet before working with the product.

5. Certification

All Eternit Guangzhou Building Systems Co. Ltd products are manufactured in line with the ISO standards. Eternit Guangzhou Building Systems Co. Ltd manufacturing facility achieved the certificates of ISO 9001:2015, ISO 14001:2015 and OHSAS 18001:2007. These certificates can also be downloaded from <http://www.eternit.com.cn/Abouts/index.html>