* Catalouge taken from Hume Cemboard Berhad

Product Specifications

Acoustic Properties

The average Sound Transmission Class (STC) for **CEMBOARD** panels has been derived from the mass energy law. The approximate STC values given are based on the mass per unit area of the board, for a frequency range of 100 to 3150 Hz.

Thickness (mm)	**Sound Insulation** (dB)	**Mass Per Unit Area** (kg/m²)
8	24	10.0
10	25	12.5
12	26	15.0
16	28	20.0
20	30	25.0
24	31	30.0

pH Factor

Surface Alkalinity	pH=12

Durability

CEMBOARD is highly resistant to fungus and termite attacks.

Fungus Attack	Highly Resistant
Termite Attack	Highly Resistant

CEMBOARD retains its integrity and properties after being subjected to many cycles of soaking, freezing and heating.

- **CEMBOARD** complies with the V313 Three Cycle Tests.**
- **CEMBOARD** complies with BS 5669 : Part1 : 1989 Clauses 16 and 19 (Durability & Water Absorption)

** *BS 5669 : Part 1: 1989: Clauses 16 (V-313 Accelerated Ageing Test:*

Three cycles of :
72 hours soaking in water @ 20° C
24 hours; freezing @ -12° C
72 hours heating @ 70° C

Standard Product Sizes and Mass

Nominal Thickness (mm)	8	10	12	16	18	20	24
Mass per Unit Area (kg/m²)	10.0	12.5	15.0	20.0	22.5	25.0	30.0
Size (mm)	**Mass per Board** (kg)						
1220 x 2440	29.8	37.2	44.6	59.5	67.0	74.4	89.3
1220 x 3050	37.2	46.5	55.8	74.4	83.7	93.0	111.6

Packing Quantity

CEMBOARD is packed on wooden pallet in standard packs of approximately 2.0 metric tons. The quantity per standard pack for the standard thickness and sizes is shown below:

Number of Boards per pallet of approx. 2.0 metric tons		
Board Thickness (mm)	1220mm x 2440mm (pieces)	1220mm x 3050mm (pieces)
8	60	50
10	50	40
12	40	35
16	30	25
18	27	22
20	25	20
24	20	16

Product Specifications

Material

CEMBOARD is manufactured under pressure and temperature-controlled conditions from wood and Portland Cement.
It is available in smooth or coarse surface finish.

Standards & References

- MS 934 : 1986 Specifications for Wood Cement Board.
- BS 5669 : Part 4 : 1989 Specifications for Cement Bonded Particle Board.
- BS 476 : Part 5, Part 6, Part 7 & Part 22 Fire Tests on Building Materials & Structures.
- AS 1526 One part Polysulphide-based Sealing Compounds for the Building Industries.
- AS 2339 Mastic Adhesive for fixing Wall Board.
- AS/NZS 1859 : 1997 Reconstituted wood based panels.
- AS 3566 Screws, Self Drilling for Building & Construction Industry.
- BS 5975 : 1982 Code of Practice for Falsework.
- AS 1530 : Pt 3 : 1999 Simultaneous Determination of Ignitability, Flame Propagation, Heat Release and Smoke Release.

Local Building By-Laws

CEMBOARD fufills the requirements of the Malaysian Uniform Building By-Laws.

Prior to commencing any work, ensure that all the necessary approvals have been obtained from the local building regulation authorities.

Fire Resistance Properties

CEMBOARD complies with the following tests and is classified as a Class 'O' Material

- BS 476 : Part 5 (Ignitability) ..... "P" (Passed)
- BS 476 : Part 6 (Fire Propagation) ..... I < 12, i < 6
- BS 476 : Part 7 (Surface Spread of Flame) ..... Class 1

Mechanical Properties

The following tables show the mechanical & physical properties of **CEMBOARD**.

Description	Values
Nominal Density (kg/m³)	1250
Bending Strength (MoR) (N/mm²)	9.0
Modulus of Elasticity (MoE) (N/mm²)	4500
Thermal Conductivity (K-Value) (W/m.K)	0.26
Moisture Content (%)	12 ± 3
Thickness Swelling after 24 hours' soaking (%)	<1.8

Dimensional Tolerance

Description	Tolerance (mm)
Length	± 4.0
Width	± 3.0
Thickness:	
Up to 16mm	± 1.0
Over 16mm	± 1.3
24mm & above	± 2.0
Sanded (all thickness)	± 0.4