

Cement-Bonded Particleboard



Another essential boards by

SRW
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Smile Board

In today's construction and interior projects, Cement bonded particle board is a versatile composite panel used widely around the world. Its advantages give industrial users the design flexibility that is highly efficient and productive in all scale projects.

Smile board is a superior quality cement-boned particleboard, wood replacement products ideally suited for residential, commercial and industrial applications such as flooring, wall partition, roof sarking, decking, fencing, lath and other decorative elements. Today, Smile board is well accepted in Thailand, Malaysia and exporting to all continents across the globe. The products are available through out Peninsular Malaysia as well as East Malaysia.



Advantages



Plantation



High Sound Insulation



Ease of Workability



Fire Resistance



Thermal Insulation



Asbestos Free



Weather Proof



Termite/Fungus Resistance

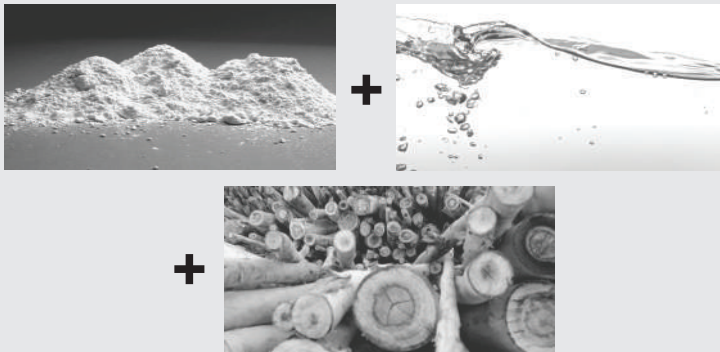


Economical



Durability

Physical Composition



Standard Size : 1,220 x 2,440 mm

Thickness (mm.)	8	12	16	18	20	24
Decorative Interior Wall	●					
Constructive Interior Wall	●					
Decorative Exterior Wall	●	●				
Constructive Exterior Wall		●	●			
Interior / Exterior Wall				●	●	●
Ceiling						
Laths			●	●	●	●

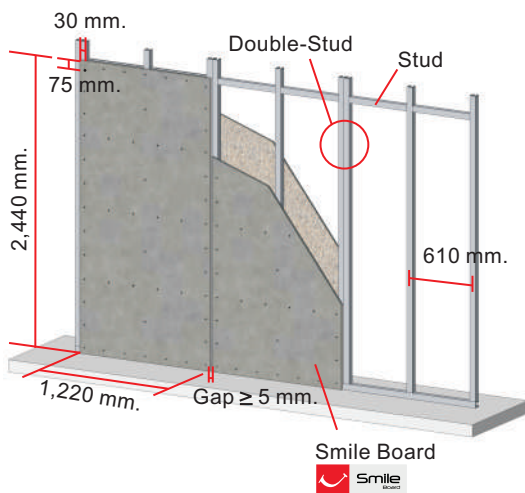


Wall Application

Thickness	: 8 - 16 mm
Size	: 1,220 x 2,440 mm
Board Colour	: Natural Cement - Grey Colour
Studding	: Galvanized Steel
Tools for Installation	: Staple Gun, Nails, Self-Drilling Screw
Sealant & Finishing	: Clear or Matted Primer, Water-base Paint, Acrylic-base Paint, Ceramic Tiles, Parquet, Wood Planks, Carpeting

Installation

- For stud frame, interval between two stud are 610mm. Double stud used to connect board joint.
- Align the board along the stud frame. Leave 5-10 mm gap between the boards.
- Recommended screw length;
 - 35 mm screw : 8 - 12 mm thickness board.
 - 45 mm screw : 16 mm thickness board.
- Pilot holes are needed to drill first for screws.
- To avoid splitting the boards, leave a spacing of
 - 75-80 mm (between the screws from top and bottom edge of the panel)
 - 30-35 mm (between the screws from the left and right edges).
- Clean panel surfaces and fill the gaps with Polyurethane Sealant. For panels thicker than 8 mm, backing rod is needed before filling sealant.
- Apply primer and decorate the panels with water-base or acrylic base paint, ceramic tiles, or wallpaper.

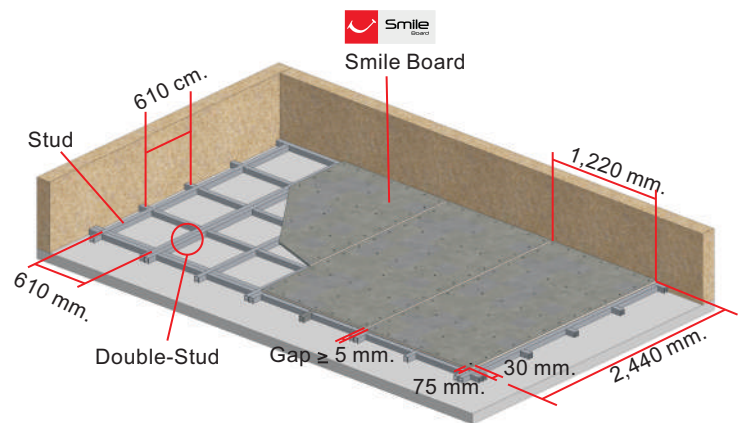


Floor Application

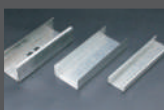
Thickness	: 18 - 24 mm
Size	: 1,220 x 2,440 mm
Board Colour	: Natural Cement - Grey Colour
Studding	: Steel
Tools for Installation	: Staple Gun, Self-Drilling Screw
Sealant & Finishing	: Clear or Matted Primer, Water-base Paint, Acrylic-base Paint, Ceramic Tiles, Parquet, Wood Planks, Carpeting

Installation

- For stud frame, interval between two stud are 610 mm. Double stud used to connect board joint.
- Align the board along the stud frame. Leave 5-10 mm gap between the boards.
- Recommended screw length is 45 mm. and spacing between screw is around 20-30 cm along the central area of the board. Pilot holes are needed to drill first for screws.
- To avoid splitting the boards, leave a spacing of
 - 75-80 mm (between screws from top and bottom edge panel)
 - 30-35 mm (between screws from the left and right edges).
- Clean panel surfaces. Insert backing rod to the gap and fill with Polyurethane Sealant.
- Apply primer and decorate the panels with water-base or acrylic base paint, ceramic tiles, parquet, wood planks or carpets.



STUDDING



Galvanized Steel Studs



Steel Stud

Studding in building frames is one of the important elements in construction and the application of Smile Boards. Typically, there are three types of materials used for studding - wood studs, steel studs, and galvanized steel studs.

■ Steel Stud : C 100 x 50

Thickness	Beam Span	Frame Span	Uniform Load
20 mm.	3 m.	60 cm.	150 - 250 Kg/m ²
		40 cm.	250 - 300 Kg/m ²
		30 cm.	400 - 500 Kg/m ²
24 mm.	3 m.	60 cm.	200 - 300 Kg/m ²
		40 cm.	300 - 500 Kg/m ²

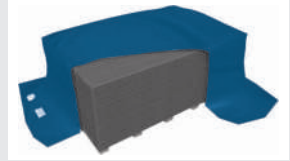
■ Steel Stud : C 200 x 75

Thickness	Beam Span	Frame Span	Uniform Load
20 mm.	5 m.	60 cm.	150 - 250 Kg/m ²
		40 cm.	250 - 300 Kg/m ²
		30 cm.	400 - 500 Kg/m ²
24 mm.	5 m.	60 cm.	200 - 300 Kg/m ²
		40 cm.	300 - 500 Kg/m ²

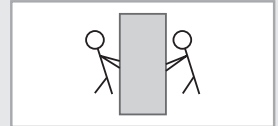
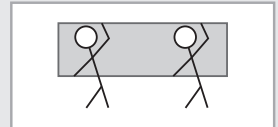
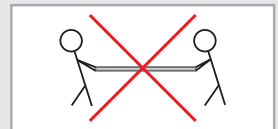
Physical Properties

Density	Kg./m ³	1,300 ± 10%
Modulus of Elasticity (MOE)	N/mm ²	> 4,500
Modulus of Rupture (MOR)	N/mm ²	> 9.0
Tensile Strength (Perpendicular to surface)	N/mm ²	> 0.5
Moisture Content	%	9 - 15
Thickness Swelling (after 24 hours immersion in water)	%	< 2
Water Absorption (after 24 hours immersion in water)	%	10.00
Coefficient in Heat Conductivity (k)	W/m ^{°c}	0.1
Acoustic Reduction Rating	dB	30-35
pH Measure	pH	12
Sound Insulation	-	PASS
Fire Resistance	-	Type O
Thermal Insulation	W/m ^{°c}	0.10
Dimensional Tolerance		
• Diagonal	mm	± 4.0
• Width / Length	mm	± 2.0
• Thickness 8 - 12 mm	mm	± 1.0
• Thickness 15 - 20 mm	mm	± 1.5
• Thickness 24 mm	mm	± 2.0

Storage & Handling



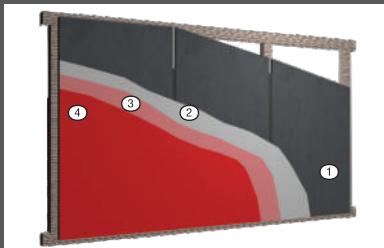
Store under shade, dry and leveling area on timber bases.



Handle vertically from both edges with two or more persons to prevent sagging of the board.

SURFACE FINISHING

● Painting

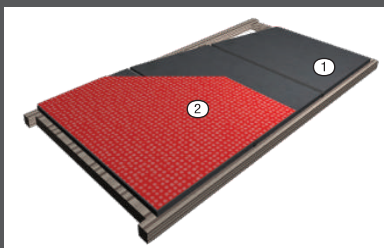


- ① Smile Board
- ② Primer Paint
- ③ Water/Acrylic Paint (1st Layer)
- ④ Paint (2nd Layer)

Instruction

1. Clean the surface with a damp cloth.
2. Apply primer evenly on the surface and let it dry.
3. Applying water/acrylic based paint to the panels evenly and waiting it dry.
4. Repeat painting for another layer for 2 - 3 more times.

● Carpeting

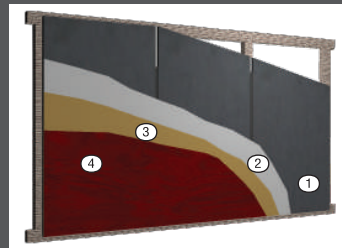


- ① Smile Board
- ② Carpet Material

Instruction

1. Clean the surface with a damp cloth.
2. Start layering the carpet.

● Wallpapering

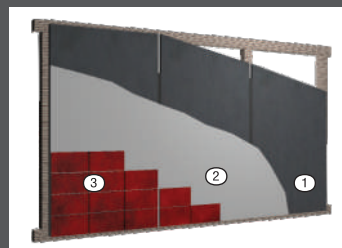


- ① Smile Board
- ② Primer
- ③ Wallpaper Adhesive
- ④ Wallpaper

Instruction

1. Clean the surface with a damp cloth.
2. Apply primer evenly on the surface and let it dry.
3. Apply wallpaper adhesive to the panel surfaces.
4. Place and hang the wallpaper.

● Tiling



- ① Smile Board
- ② Cement-based Glue
- ③ Tile

Instruction

1. Clean the surface with a damp cloth.
2. Apply cement-base glue or plaster evenly on the surface and full covered it.
3. Attach the tiles firmly.

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