



VIVA BOARD

The Best Combination of Wood & Cement



TIS. 878-2537



Thailand's Brand



ISO 9001:2008



gentleglory.com



VIVA BOARD

VIVA BOARD is a wood cement board or cement bonded particle board. It has unique smooth grey cement surface. Combining strength and durability of cement with flexibility and easy workability of wood, VIVA BOARD offers an efficient and versatile solution for variety of applications such as exterior and interior wall, decorative wall, cladding, ceiling, floor, roof decking and many more.

VIVA BOARD is made from planted Eucalyptus particles, Portland Cement, and mineralizing agents. Wood is processed into coarse and fine flake and thoroughly mixed with cement, mineralizing agent, and water in computer-controlled mixer. The required amount of mixed material is laid continuously on carrier plates using unique process which distributes coarse material in the middle and fine material on the two surfaces. The carrier plates with the formed mat are stacked and compressed using very high pressure to convert the formed mat into boards of required thickness with high strength and grey, smooth, cement-like surfaces. Once the boards are cured and conditioned, they are trimmed to the finished size, thoroughly inspected for quality, and packed for dispatch.

VIVA BOARD is ideally suited for all applications where durability, weather and fire resistance, sound and heat insulation, termite and fungus resistance are required. Being asbestos and crystallized silica free, and having no hazardous content, Viva Board proves not only an environmental friendly product but health friendly one.



SIZE, THICKNESS AND WEIGHT

Standard Size	1200 mm x 2400 mm and 1220 mm x 2440 mm					
Thickness (mm)	8	10	12	16	20	24
Weight (kg./m ²)	10.4	13.0	15.6	20.8	26.0	31.2
Special Size	1200/1220 mm x 2650 mm, 1200/1220 mm x 3000 mm, 1200/1220 mm x 3050 mm					
Special Thickness	6 mm, 18 mm, 28 mm, 30 mm					

TECHNICAL DATA SHEET

Specific Properties		Thai Industrial Standard	VIVA BOARD
		(TIS. 878-2537)	Average Test Result
Density	Kg./m ³	1100 - 1300	1300
Moisture Content	%	9 - 15	9 - 15
Bending Strength	N/mm ²	≥9	12
Modulus of Elasticity	N/mm ²	≥3000	5000
Tensile Strength Perpendicular to Plane	N/mm ²	≥0.5	0.7
Thermal Conductivity (K Value)	W/m ² c	≤0.25	0.1
Thickness Swelling after 24 hours immersion in water	%	≤2	1
Other Properties		Unit	VIVA BOARD (Average Test Result)
Surface Alkalinity		pH	12
Length Change after 24 hours immersion in water		%	0.12
Water Absorption after 24 hours immersion in water		%	12

Dimensional Tolerance (mm)

- Diagonal	± 4.0 mm
- Length/ Width	± 2.0 mm
- Thickness 8 - 12 mm	± 1.0 mm
- Thickness 16 - 20 mm	± 1.5 mm
- Thickness 24 mm	± 2.0 mm



VIVA BOARD
The Best Combination of Wood & Cement

FEATURES AND BENEFITS



Durable



Weather Resistance



Fire Resistance



Safe from Termites and Fungus



Low Water Absorption



Not Delaminate



Heat Insulation



Sound Insulating



Easy Workability



Economical



Asbestos Free



Eco-Friendly

Fire Resistance Properties

- Viva Board contains high percentage of cement content permitting it to be highly fire-resistant. Viva board passed BS 476 Part 6 and 7 and is classified as virtually non-combustible or class 'O' material and it was independently tested for class 'B' according to BS EN 13501-1
- Viva Board partition system also passed the 1-hour, 2-hour, and 4-hour fire rating test according to BS 476 Part 22, proving its fire prevention capability.

Fire Rated Partition System

1 hour	2 hours	4 hours
Viva Board 12 mm Viva Strip Thickness 16 mm Width 100 mm. Rock Wool 50 mm Viva Board 12 mm	Viva Board 12 mm Viva Strip Thickness 12 mm Width 100 mm. Rock Wool 25 mm Rock Wool 50 mm Viva Board 12 mm	Viva Board 16 mm Viva Strip Thickness 20 mm Width 100 mm. Rock Wool 50 mm Rock Wool 50 mm Viva Board 16 mm
Specifications: Viva Board 12 mm, each side of galvanized steel frame of 75 mm x 38 mm x 1 mm thick set at 60 cm x 120 cm centre faced with Viva Board strips 16 mm thick x 100 mm width Viva Board strips with one layer of rock wool, high temp 50 mm thick (110 kg/m³) to cavity.	Specifications: Viva Board 12 mm, each side of galvanized steel frame of 75 mm x 38 mm x 1 mm thick set at 60 cm x 120 cm centre faced with Viva Board strips 12 mm thick x 100 mm width Viva Board strips with two layers of rock wool, high temp 50 mm and 25 mm thick. (110kg/m³) to cavity.	Specifications: Viva Board 16 mm, each side of galvanized steel frame of 75 mm x 38 mm x 1 mm thick set at 60 cm x 120 cm centre faced with Viva Board strips 20 mm thick x 100 mm width Viva Board strips with two layers of rock wool, high temp 50 mm thick x 2, (110kg/m³) to cavity.

Acoustic Performance

- Due to its high density, Viva Board contributes significant acoustic performance than any other types of building boards.
- Sound transmission class (STC) of Viva Board:

Thickness (mm)	STC Rating
8	28
10	29
12	30
16	31
20	32

Acoustic Partition System

STC 41	STC 50	STC 55
Viva Board 8 mm Viva Board 8 mm	Viva Board 8 mm Glass Wool 60 mm Viva Board 8 mm	Viva Board 8 mm Glass Wool 60 mm Viva Board 12 mm
Specifications: Viva Board, each side of galvanized steel frame of 75 mm x 32 mm x 0.5 mm thick.	Specifications: Viva Board, each side of galvanized steel frame of 75 mm x 32 mm x 0.5 mm thick with one layer of glass wool 60 mm thick to cavity.	Specifications: Viva Board, each side of galvanized steel frame of 75 mm x 32 mm x 0.5 mm thick with one layer of glass wool 60 mm thick to cavity.

Acoustic Roof

Viva Board has been extensively used as part of acoustic roof system in world-class projects.





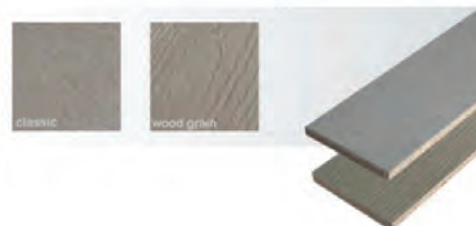
VIVA SOLUTION

VIVA FENCE



Available in smooth and wood grain, unpainted finish

Finish	Thickness (mm)	Width (mm)	Length (mm)
Classic	16	100	1000, 1200, 1500
Wood Grain			



VIVA SOFFIT



Available in unpainted finish

Finish	Thickness (mm)	Width (mm)	Length (mm)
Classic	10	75, 100	3000



VIVA EAVE



Available in unpainted finish

Finish	Thickness (mm)	Width (mm)	Length (mm)
Classic	16	150, 200	3000



VIVA PLANK



Available unpainted in wood grain texture

Finish	Thickness (mm)	Width (mm)	Length (mm)
Classic	30	200, 300	2400
Wood Grain			



VIVA DECOR

WOOD GRAIN & STONE PATTERN

Both Wood grain and Stone pattern are available in unpainted finish.

Thickness (mm)	Width (mm)	Length (mm)
8, 10, 12, 16, 20, 24	1200, 1220	2400, 2440, 3000 (wood grain)





DESIGNING WITH VIVA BOARD

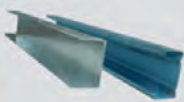
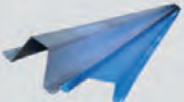
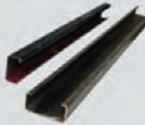
GENERAL

Viva Board is a combination of wood and cement. It inherits many properties of the two main components. Like any boards with wood or wood-derived fiber components, it has a degree of moisture movement, meaning that it may contract and expand in relation to changes in ambient moisture and temperature. The moisture movement of Viva Board is less than that of wood and more than that of set cement. The direction and amount of movement can be predicted, and the disadvantages can be prevented by painting and attaching method. The boards must be affixed by a method that will allow linear movement. This will completely prevent formal movements such as warping and bowling. The followings should be observed when designing the installation of Viva Board:

- Outdoor installation subjects the board to highest changes in temperature and moisture. Frame and installation design must allow highest degree of movement.
- The thicker the board is, the more slowly it loses and gains moisture. Therefore, thicker board has lower movement than thinner one.
- Paint or coating material diminishes the shrinkage and expansion by reducing moisture evaporation/uptake but does not completely erase it.
- Timber moves in the same direction as Viva Board and nailing allows additional movement.
- When the board is free to move such as in suspended ceiling application, different moisture evaporation/uptake on two surfaces may result in warping/bowling. This can be prevented by applying paint on both sides.
- When Viva Board is covered with surface material such as ceramic tile, PVC tile, or carpet, frame and fixing should minimize the movement of board in order to avoid damages of the covering material.

FRAME SELECTION

Frame shall be selected to match the installation type, the strength required, the amount of movement required/permitted, as well as thickness of board.

	Frame Type	Size and Thickness	Properties and Recommended Applications
WALL	Timber Frame	 $1\frac{1}{2}'' \times 3''$	Moves in the same direction as Viva Board. It is suitable for most applications including wall with covering materials.
	"C" and "U" Galvanized Steel	 C75	Allows movement. It is sufficiently strong for light duty applications, suitable for interior wall for low-rise residential building, interior wall, and ceiling.
		C75	
	Top Hat Section	 -	Allows movement. It is suitable for wall cladding and fascia.
FLOOR	"C" Light Gauge Steel	 75 x 45 x 15 mm	Allows limited movement. It is suitable for heavy duty exterior wall, and wall with covering materials. It is suitable for boards from 12 mm thick.
	"C" Light Gauge Steel	 100 x 50 x 20 mm	Allows limited movement. It is suitable for interior floor in natural finish, or with paint or clear coating.
		150 x 75 x 20 mm	
	Light Gauge Box Section	 100 x 50 mm	Allows no movement. It is suitable for floor with covering materials.
		150 x 50 mm	

NOTE*

The size of steel frame for floor and wall loading depend on desired strength, please consult structural engineer prior to usage.

"C" Light Gauge or Box Section is not suitable for wall applications.

FLEX FRAME

Frame is assembled to allow movement when board is exposed to high degree of changes in temperature and moisture.

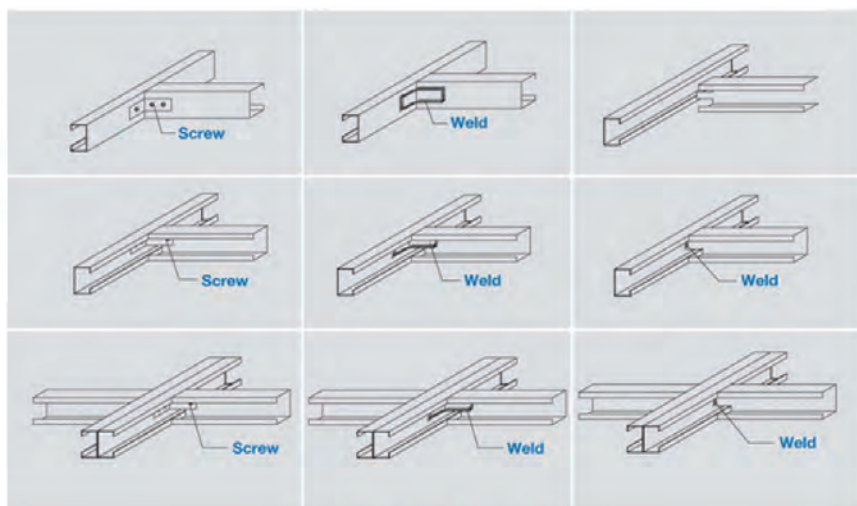
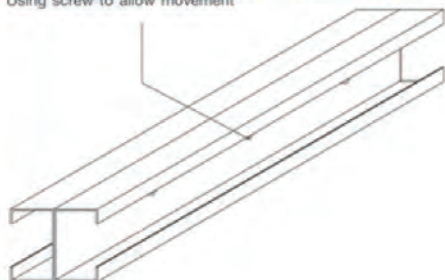
Frame assembly for interior and exterior wall with paint or natural finish

- Use only vertical frame. Attach frame to supporting structure by fixing it to L-shape bracket or "U" track.
- Apply two pieces of frame at joint between boards. Fix them together using screws to allow some movement. Avoid welding to create rigid frame.
- Recommend strengthen the frame by fixing "U" galvanized steel frame at every 0.6 m. or 1.20 m.

Frame assembly for interior decorative floor, roof decking and ceiling

- Set principal joist cross-wise from board direction at 30 cm, 40 cm, or 60 cm. Set common joist to support the long edges.
- Apply two pieces of frame at joint between boards. Fix joists together using screws to allow some movement. Avoid welding to create rigid frame.

Apply 2 pieces of frame at joint between boards
Using screw to allow movement



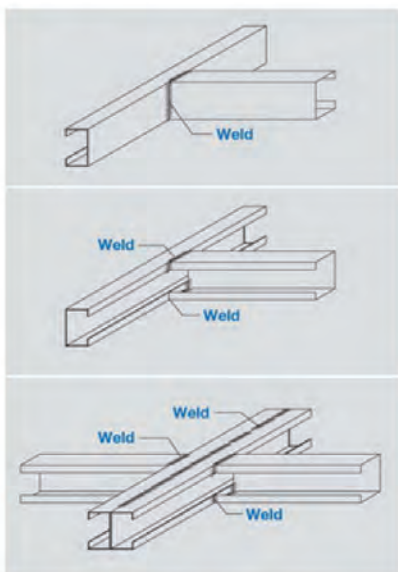
FLEX FRAME ASSEMBLY

RIGID FRAME

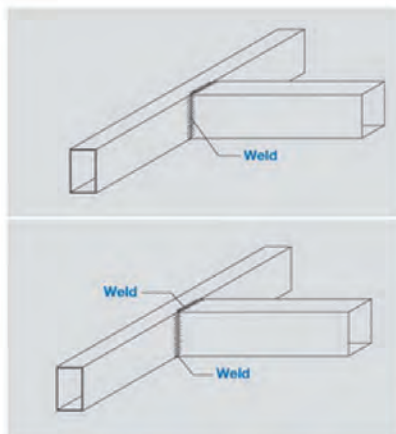
Frame is rigidly assembled to prevent untoward results due to board movement when a covering material such as ceramic tile or wood flooring is applied.

Frame assembly for wall and floor with covering materials

- Set frame at 30 cm x 30 cm, 40 cm x 40 cm, 60 cm x 60 cm, or 60 cm x 120 cm depending on required rigidity and load requirement.
- Rigidly construct the frame together by welding or screwing.
- If a single frame's width is insufficient, two frames at the joint between boards are recommended. Frame must be welded together to ensure that no movement is allowed.
- Provide movement joint (control joint) at every 4.8 - 6 meters and around the room's perimeter by using flex frame to allow movement.

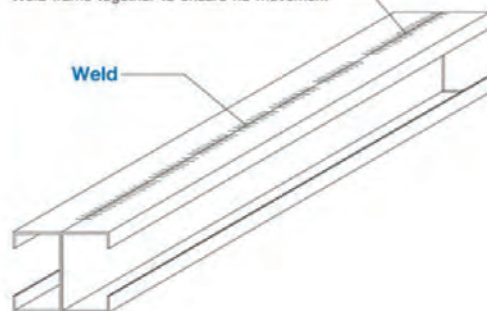


RIGID FRAME ASSEMBLY



RIGID FRAME ASSEMBLY
(BOX SECTION FOR FLOORING)

Apply 2 pieces of frame at joint between boards
Weld frame together to ensure no movement



Fixing Viva Board to Frame

Timber Frame

Recommended Applications: Exterior wall, interior wall, interior decorative wall and partition

- Viva Board up to 10 mm thick can be manually nailed onto timber frame without pre-drilling.
- If a single frame's width is insufficient for fixing, two studs at the joint are recommended.
- Leave a gap of 3 - 5 mm for interior and 5 - 10 mm for exterior between boards to allow for movement.

VIVA BOARD	Fixing distance from edge	Fixing distance from corner	Distance between edge fixing "A"	Distance between centre fixing "B"
8 - 16 mm	20 - 30 mm	75 mm	150 - 200 mm	200 - 300 mm
20 - 24 mm			200 - 300 mm	300 - 400 mm

Galvanized Steel Frame / Light Gauge Steel Frame

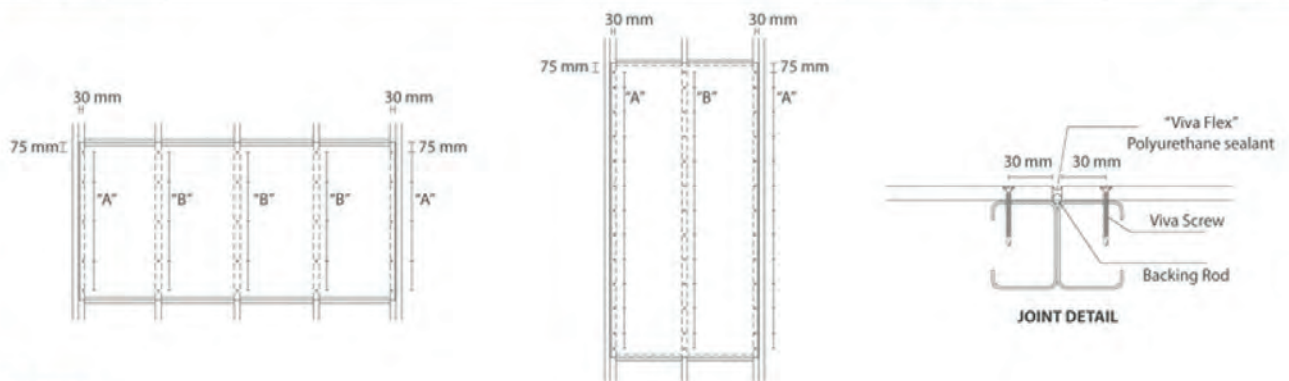
Flex Frame

Recommended Applications: Wall and Floor in natural finish or paint, Roof decking and Ceiling

Wall: Fix boards along principal stud.

Floor, Roof decking and Ceiling: Fix boards crosswise from frame along principal joist / frame.

VIVA BOARD	Fixing distance from edge	Fixing distance from corner	Distance between edge fixing "A"	Distance between centre fixing "B"
8 - 16 mm	30 mm	75 mm	150 - 200 mm	200 - 300 mm
20 - 24 mm			200 - 300 mm	300 - 400 mm



Rigid Frame

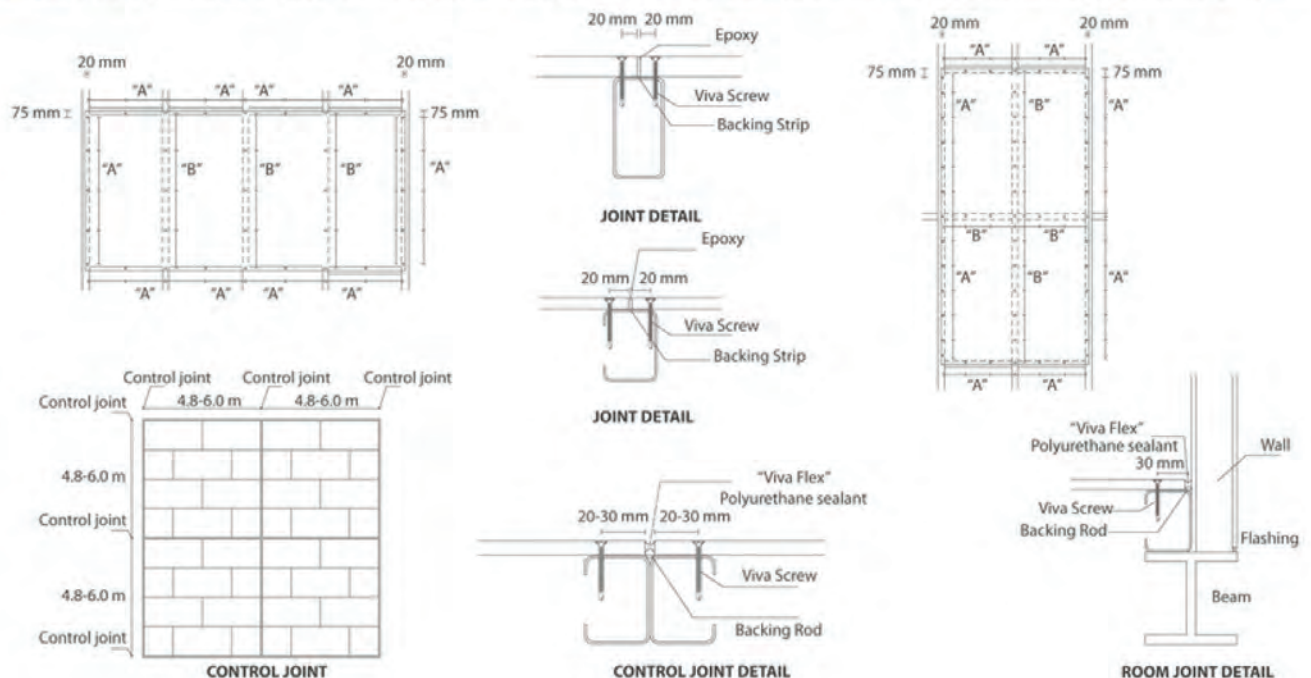
Recommended Applications: Wall and Floor with covering materials

Wall with covering materials: Fix boards on both vertical and horizontal direction along principal and common studs.

Floor with covering materials: Lay boards crosswise in staggered pattern and fix boards on both principal and common joists.

VIVA BOARD	Fixing distance from edge	Fixing distance from corner	Distance between edge fixing "A"	Distance between centre fixing "B"
8 - 16 mm	20 mm	75 mm	150 - 200 mm	200 - 300 mm
20 - 24 mm			200 - 300 mm	300 - 400 mm

Remark: If the application is exposed to high degree of changes in temperature and moisture, the fixing distance from edge should be at 30 mm.





WORKING WITH VIVA BOARD

Cutting: VIVA BOARD can be cut with most traditional wood working tools. A circular electric saw of 1,800W power or 5,800 RPM speed is recommended for cutting. For large volume, VIVA BOARD should be cut on a stable sawing bench for better cutting quality and safety. Cutting blade should be of more than 40 straight-set teeth with tungsten carbide-tipped and its diameter should be $7\frac{1}{4}$ or 185mm. It is recommended that the board is firmly held down when cutting to avoid vibrations and consequent damages. Boards can be trimmed with a jig saw. A hand saw can also be used.

Drilling: Normal or high speed drills with HSS steel drill bits is recommended when drilling onto VIVA BOARD.

Milling: VIVA BOARD can be milled for half-lap, tongue and groove, tapered, and etc. by using a common milling machine. The milling machine should be made of tungsten carbide. The recommended cutting speed should be at 25 to 35 meters per second. Please note that minimal thickness of board should be considered when milling.

Grinding: Manual grinding or electric hand-held grinding tools with abrasive paper of 40-80 granularity can be used at joint areas of boards when boards' evenness is needed or the board surface should be coarsened.

Screwing: Viva Screw is recommended. It allows self-drilling and countersinking in one step. For galvanized steel frame of 0.7-1.0 mm thickness, Viva Screw G#7 is recommended. For steel frame of 1.2-3.2 mm thickness, Viva Screw S#8 is recommended. When using conventional self-tapping screw, pre-drilling with a slightly oversize hole is required. This allows some board movement and prevents cracking at fixing points. Excessive force should not be applied in order to fasten the screw since it may run the risk of cracking the board, cause the screw to get jammed and prevent the movement of the boards.

Covering Screw Heads: Touch-up the screw heads with acrylic filler or epoxy putty. To match the screw heads color with Viva Board, use a mixture of Portland cement, adhesive, saw dust, and pigment. It is recommended that screw heads on exterior applications should always be filled to prevent corrosion.

Nailing: VIVA BOARD up to 10mm can be manually nailed onto timber frame without pre-drilling.

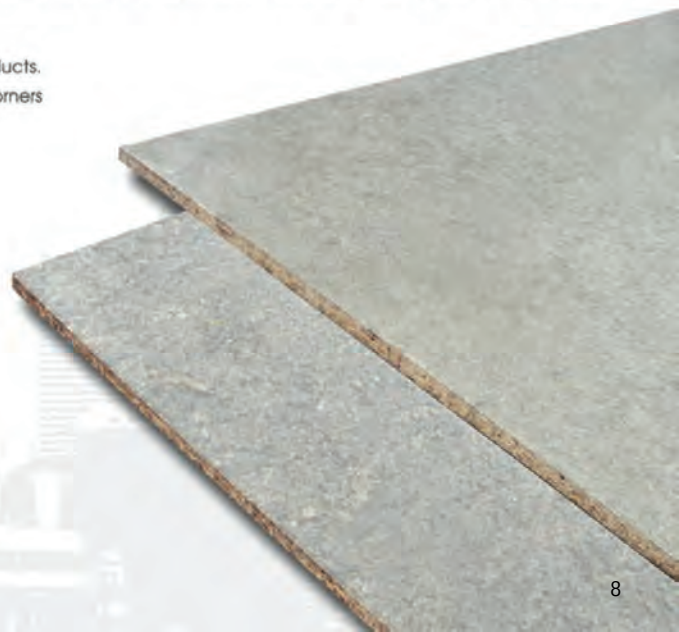
Joint: VIVA BOARD requires gaps of 3-5 mm between boards for typical interior use and 5-10 mm for exterior use.

Caulking: It is recommended to fill board's joint with polyurethane sealants such as Viva Flex. Viva Backing Rod is recommended for use in order to reduce the amount of polyurethane sealant and also prevent the boards attaching to the frame directly. For interior uses, the joint can be left open or be covered with a wooden, or metal sheet profile depending on customer's requirements.

Control Joint: A movement joint of 5-10 mm must be constructed when VIVA BOARD attaches with covering material such as wood flooring, carpet or ceramic tile. The movement joint should be spaced at 4.8-6 meters and around the room's perimeter. It is recommended to fill the movement joint with polyurethane sealant over foam backing rod.

Wide Opening: In cutting a wide opening such as doors or windows, studs should be placed around the perimeter of the opening to sufficiently reinforce the opening.

Flashing: Flashing should be installed for all exterior applications of VIVA products. Locations such as window and door frame, adjoining walls, openings, and top corners should be covered with flashing to prevent water leakage.





FINISHING

PAINTS AND COATINGS

Due to the Alkalinity of the Viva board (pH 12), paints and coatings used must be stable in alkaline environment. Alkaline resisting primer should always be applied as base before painting. The boards' surface should be clean and dry. Refer to the table below for recommended paints and coatings.

Application	Paint	Coating
Interior uses	Acrylic paint, Epoxy paint	Lacquer spray, Gloss epoxy, Gloss/Matte polyurethane
Exterior uses	Exterior acrylic paint Polyurethane paint Wood stain	Siloxane water repellent Clear/Matte polyurethane

NOTES:

- Each paint and coating type has its special properties; please consult the paint manufacturer for more details.
- Oil-Based paint is not recommended to use with Viva Board.
- Applying paint or primer on the back of the board will ensure that the board is better conditioned for use where there are changes in moisture content and temperature of the board or where conditions on two sides of the boards differ substantially e.g. T-Bar ceiling.
- For applications in high humidity area, moisture resistant coating should be applied to both surfaces before applying covering materials.

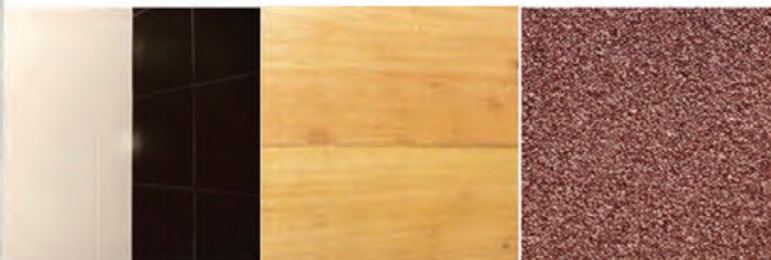


Tiling

Viva Board can be tiled using flexible tile adhesive. Avoid tiling over board joint.

Floor Covering

Carpet, Laminated flooring, and wood parquet can be used. If the surface material is thin, care should be taken to level the boards first.





WALL CONSTRUCTION

Wall Types	VIVA BOARD	Installation	Details
Building Wall	Interior: 10 mm Exterior: 12 mm	Flex Frame - "C" and "U" Galvanized steel of 75 mm x 0.75 - 1.0 mm or "C" Light gauge steel frame of 75 x 45 x 15 x 1.6 mm - Set stud at 60 cm x 240 cm or 40 cm x 120 cm. - One-way fixing on principal studs only - Coat surface with exterior acrylic paint or clear coatings	
Exterior Wall for Residential	Interior: 8 mm Exterior: 10 mm	Flex Frame. - "C" and "U" Galvanized steel of 75 mm x 0.5 mm or Timber frame 1 1/2" X 3" - Set stud at 40 cm x 120 cm or 40 cm x 40 cm. - One-way fixing on principal studs only - Coat surface with exterior acrylic paint	
Exterior Wall for Public Building (Maximum height 20 meters)	12 to 16 mm	Flex Frame - "C" and "U" Galvanized steel of 75 mm x 0.75 - 1.0 mm or "C" Light gauge steel frame of 75 x 45 x 15 x 1.6 mm - Set stud at 60 cm x 120 cm or 40 cm x 40 cm. - One-way fixing on principal studs only - Coat surface with exterior acrylic paint	

Wall Types	VIVA BOARD	Installation	Details
Exterior Wall in Natural Finish	16 mm	Flex Frame - Timber frame 1 1/2" x 3" - Set stud at 60 cm x 60 cm - Or "C" and "U" Galvanized steel of 75 mm x 0.75 - 1.0 mm - Set stud at 60 cm x 120 cm or 40 cm x 40 cm. - One-way fixing on principal studs only - Coat surface with clear coatings e.g. gloss/matte polyurethane or siloxane water repellent.	



WALL CONSTRUCTION

Wall Types	VIVA BOARD	Installation	Details
Interior Partition	8 to 10 mm	Flex Frame - "C" and "U" Galvanized steel of 75 mm x 0.5 mm - Set stud at 60 cm x 240 cm. - One-way fixing on principal studs only - Coat surface with acrylic paint or clear coatings	
Interior Wall In Natural Finish	8 to 10 mm	- Timber frame 1 1/2" X 3" - Set stud at 60 cm X 60 cm. - Fix the boards on stud with compressed air nail. - Surface can be treated with lacquer spray or clear polyurethane.	
Tiled Wall - using mortar	12 mm	Fix Frame - "C" Light gauge steel frame of 75 x 45 x 15 x 1.6 mm - Set stud at 60 cm x 120 cm. - Two-way fixing on principal and common studs - Fix wire mesh onto Viva Board using screws then apply 1.5 - 2 cm thick mortar bed. - Attach ceramic tiles directly onto a graded mortar bed. - Tiling over joints is possible.	
Tiled Wall - using tile adhesive	12 mm	Fix Frame - "C" and "U" Galvanized steel of 75 mm x 0.75 - 1.0 mm - "C" Light gauge steel frame of 75 x 45 x 15 x 1.6 mm - Set stud at 30 cm x 30 cm to 60 cm x 60 cm. - Two-way fixing on principal and common studs - Lay ceramic tiles directly on board using highly elastic tile adhesive in accordance with adhesive manufacturer's recommendations. - Avoid tiling over joints. - Caulk boards joints with polyurethane sealant rather than a tile grout.	

For wall partition where two sides require different types of finishes, for example one side is tiled wall and another side is normal exterior wall, please consult the manufacturer.



FLOOR CONSTRUCTION

Floor Types	VIVA BOARD	Installation	Details
Interior Floor in Natural Finish	20 to 24 mm	Flex Frame - "C" Light gauge steel frame of 100 x 50 x 20 x 2.3 mm to 150 x 75 x 20 x 3.2 mm - Set principal joist at 40 or 60 cm, common joist at 120 cm - One-way fixing on principal joist only - Coat surface with clear epoxy or clear polyurethane.	

Floor Types	VIVA BOARD	Installation	Details
Floor with Covering Material	20 to 24 mm	Fix Frame - Light gauge box section of 100 x 50 x 2.3 mm to 150 x 50 x 3.2 mm - Set joist at 40 x 40 cm to 60 x 120 cm. - A movement joint (control joint) must be provided at every 4.8 to 6 meters and around the room's perimeter by using flex frame to allow movement. - Lay the boards in staggered pattern and fix boards on principal and common joist. - Apply epoxy glue at joint between boards to minimize movement and caulk movement joint (control joint) with polyurethane sealant.	
Direction for Laying Surface Material 1. The boards should be leveled before laying covering materials according to its installation guide. 2. Tongue and groove board ensures more leveled deck. It is available as special order. 3. Wood flooring, Parquet or Laminate should be laid crosswise on Viva board. 4. Tiles can be fixed directly onto Viva board using highly flexible cementitious adhesive. Apply elastic tile grout. Fill movement joint (control joint) with polyurethane sealant. Or, tiles can also be bedded directly into a graded mortar bed applied over Viva board. The mortar bed should be at 3 cm thick and must be reinforced using wire mesh prior laying tiles. 5. Covering materials should not be attached over movable joints. 6. For wet area or exterior floor, water proofing membrane must be laid on Viva board before applying covering materials or mortar. The underside should be coated with water repelling material.			

MAXIMUM ALLOWABLE UNIFORMLY DISTRIBUTED LOADS

THICKNESS (mm)	SPAN/JOIST SPACING (cm x cm) AND LOADING (KG./SQ.M.)			
	40 x 40	40 x 120	60 x 60	60 x 120
20	960	550	410	230
24	1400	790	600	340

NOTES:

- Weight load shown in table is uniformly distributed without and does not include point load, vibration, moving load or impact.
- Frame must be of sufficient width to support all edges.
- Using entire boards for flooring to maximize weight load support.



FLOOR UNDERLAY CONSTRUCTION

Floor Types	VIVA BOARD	Installation	Details
Floor Underlay	8 to 10 mm	- Spread adhesive latex or polyurethane/epoxy glue on back of the board then lay boards in staggered pattern. - Directly fasten the board to existing concrete floor with concrete nails of $1\frac{1}{2}$" at every 20 cm. - The board should be fixed from centre outwards. - Lay water or sound proofing sheet before installing wood flooring or parquet in the perpendicular direction from the board.	

CEILING CONSTRUCTION

Ceiling Types	VIVA BOARD	Frames	Installation
Fixed Ceiling	8 mm	- Galvanized steel ceiling section or Timber Frame of $1\frac{1}{2}$" X 3" - Set frame at 40 to 60 cm along principal frame. - Use 2 pieces of frame at joint between boards. - Apply primer then coat with acrylic paint.	
Suspended Ceiling	8 mm	- T-Bar section - Viva board cut to size 60 cm x 60 cm or 60 cm x 120 cm. - Apply primer on both sides of the boards to prevent warping then coat front side with acrylic paint prior to installation.	

ROOF DECKING CONSTRUCTION

Types	VIVA BOARD	Installation	Details
Roof Decking	12 to 16 mm	- Fix the board on C steel purlin set at 60 cm. - Lay water proofing membrane and finish the decking with roof tiles or shingles.	

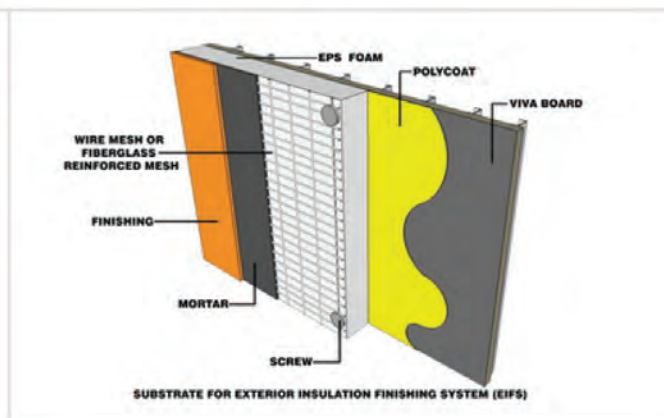
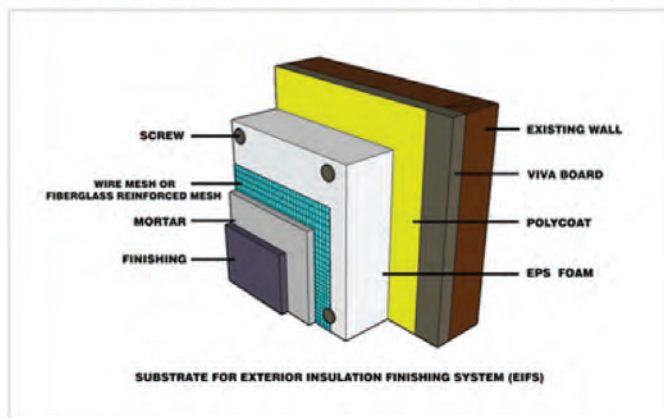


SPECIAL APPLICATIONS

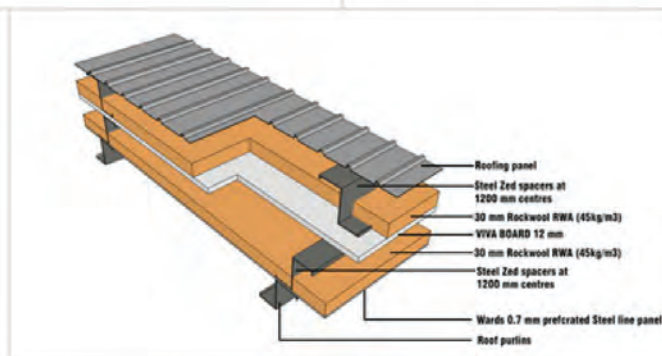
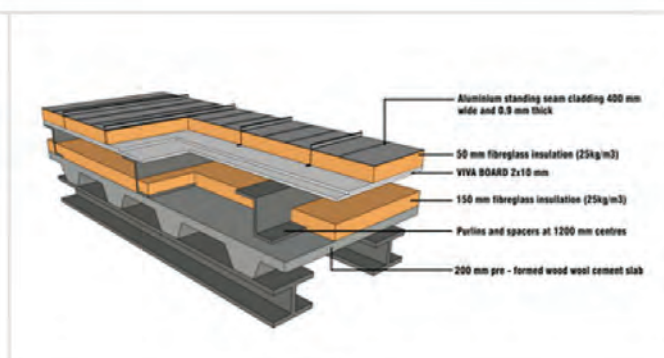
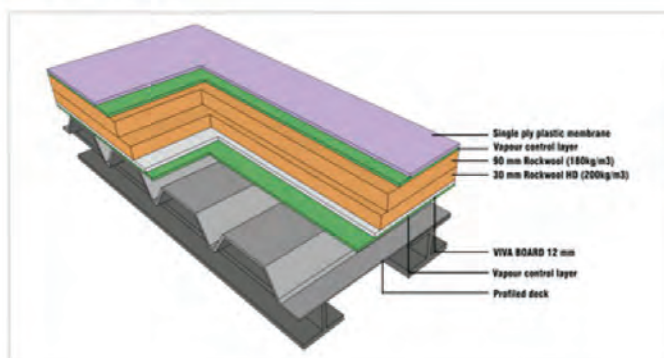
PERMANENT FORMWORK



SUBSTRATE FOR EXTERIOR INSULATION FINISHING SYSTEM (EIFS)



ACOUSTIC ROOF



NOTE: For special applications, please consult the manufacturer.

Storage

- Viva Board must be stored under a roofed area, in a dry environment and well protected from weather. Floor area should be leveled and solid. Uneven or tilting floor can cause damage to Viva Board.
- Viva Board should be stored in its original packing supplied.
- If taken out from the pallets, board can be stacked with the maximum height of 75 cm. The stack shall be laid flat on 5 bearing plates with maximum of 60 cm space among plates. The stack shall be covered with waterproof protective plastic sheet.
- Maximum of 4 pallets or stacks shall be laid on top of each other.
- It must never be stored on edge or upright. Outdoor storage is not recommended.

Transport

- Viva Board should be laid flat and be adequately protected during transportation by waterproof covering.
- Lifting the board from its stack should be done one piece at a time by sliding to the side. Never lift Viva Board from its both ends because it may cause the board to bend resulting in board breakage. Viva Board must be carried in a vertical position.

Conditioning

Viva Board has an ex-works moisture content of 12 + 3% and is in equilibrium when the temperature is 20°C with a relative air humidity of 50-60%. The board should be allowed 24-48 hours to adapt to the ambient humidity level prior fixing for its most capability working conditions. If the board gets wet, it should be allowed to dry individually prior to installation.



ACCESSORIES

Viva Screw

Viva Screws are made from steel and coated with rust protective of 25 micron thick in compliance to AS 3566 Class 3. Viva Screws can drill and countersink onto Viva Boards and studs without pre-drilling. They can be used with an electric drill with speed of over 2,700 rounds per minute.



Viva Screw	Screw Length (mm)	Viva Board thickness (mm)	Application	Type of Frame
G#7 - 28	28	8 - 10	Interior wall, Exterior wall, and Ceiling	Galvanized steel frame of 0.7 - 1.00 mm
G#7 - 35	35	12 - 16	Exterior Wall	Galvanized steel frame of 0.7 - 1.00 mm
S#8 - 35	35	8 - 16	Interior and Exterior wall	Steel frame of 1.2 - 3.2 mm
S#8 - 45	45	20 - 24	Floor	Steel frame of 1.2 - 3.2 mm

NOTE: Steel coating class 3 is suitable for use in moderate temperature. For harsh weather conditions, steel coating class 4 is highly recommended.



Viva Flex Polyurethane Sealant

Viva Flex PU Sealant conforms to SNJF, ASTM C920, ISO 8339 and ASTM D412 standard. Sausage package contains 600 ml and cartridge package 310 ml. It is available in two colors: white and light grey.



Viva Backing Rod

Viva backing rod are functioned to minimize the amount of polyurethane sealant required and used under joint sealants in order to give the sealant the correct dimensions to allow the maximum movement, and to act as a bond breaker between surfaces. Viva backing rod is available in two sizes; 3mm and 6mm. 3mm is suitable for Viva board 8mm and 6mm is suitable for Viva board above 8mm. Length of Viva backing rod is 50 meters per unit.

Usage Instruction of Viva Flex and Viva Backing Rod



Step 1: Properly clean gap between boards then apply masking tape along edges of both boards.



Step 2: Insert Viva Backing Rod into gap to prevent three-way joint and save the sealant.



Step 3: Fill the gap with Viva Flex sealant. The filling depth should equal the width of the gap.



Step 4: Clear any excess sealant on filled surface before removing masking tape. The filled gaps should never be exposed to water or humidity for at least 2 hours. Allow 24 hours for complete drying before painting.

Remark: Polyurethane will slightly shrink after hardening.



VIVA BOARD
THE ORIGINAL WOOD CEMENT BOARD