



Green Solutions

Durable Green Material
for Energy Efficient Buildings

EVEREST

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EVEREST



EVEREST



TRUSTED FOR 75 YEARS

Since 1934, people have trusted Everest for making their most valuable asset - their homes, factories and warehouses.

Today, we provide building products and building solutions for housing, commercial and industrial sectors. Our dynamic product line comprises a range of fibre cement products covering both roofing as well as boards. The durability and versatility of these eco-friendly products, makes them widely accepted in 25 countries in Asia, Africa, South Pacific and Europe.

Everest range of products includes

- Fibre Cement Board
- Solid Wall Panel
- Hi-Tech Roofing
- Smart Steel Building

Everest Building Solutions. For **Strength, Speed and Safety.**

EVEREST FIBRE CEMENT BOARDS



Everest Fibre Cement Boards are manufactured using state-of-the-art Hatschek manufacturing process using basic mix of raw materials cement, cellulose pulp fibres and additives. Raw material composition for each Batch Board is controlled using Microprocessor based Batch Controllers and Programmable Logic Controllers. Everest Fibre Cement Boards are manufactured in various thicknesses ranging from 3.2 mm to 25 mm with the help of Online Thickness Control System.



Everest Heavy Duty Fibre Cement Boards are manufactured using Hydraulic Press which increases strength, density and durability of the Boards.



Everest Boards for ceiling and wall solutions are manufactured in various textured surface finishes and flat surface with variety of paint coated surface finishes, using state-of-the-art paint coating technology on an automatic paint coating line. These boards are cured in Autoclaves at high temperature and under high pressure steam.

After curing, boards are tested for performance quality parameters as per Indian/International Standards and/or Customer's Specifications, before they are released for finishing, packaging and dispatch from the factory.

MANUFACTURING FACILITIES



Everest Industries has five ultra-modern manufacturing units strategically located across India. All plants are IS/ISO 9001:2000 certified and manufacture the following products - Roofing Sheets, Everest Fibre Cement Boards, Steel Buildings and Smart Steel Buildings.



Everest Industries has its export facility at Lakhmapur, situated at 220 km from Mumbai, in Nashik. Equipped with state-of-the-art technology, the unit today delivers products of international standards including Flat Boards, Compressed Boards and Solid Wall Panels amongst others. The company believes in conserving the environment and hence, there are several trees planted in the factory premises. The factory has made arrangement for water harvesting and does not discharge any of its waste in the environment.

MANUFACTURING PROCESS

The Fibre Cement Boards are manufactured using the Hatschek process, which involves several laminations of slurried mix of core ingredients on a large steel cylinder known as the 'BOLE' (with a specific embossed pattern for Designer Boards). When the desired thickness is achieved, the 'green/wet' board is cut and put on a conveyer where it is trimmed to size and then stacked and left for a short period of pre-curing.

The final curing is done through autoclaving that involves High Pressure Steam Curing (HPSC). This hydration process changes the chemical structure of the cement/silica & quartz and selected mineral fibre matrix to produce a highly durable and versatile fibre cement building board. After autoclaving, the boards are allowed to go through a short stabilisation period to bring about equilibrium with the ambient moisture content a controlled environment.

Everest Designer Boards come with a unique self-embossed design and at least 2 coats of 100% water based acrylic cement primer on both surfaces and all edges, so that they are ready to paint for your interiors.

Everest Heavy Duty Fibre Cement Board is compressed in a 12000 MT Hydraulic Press to make it compact and rigid. The end product is a dense, flat compressed cement board with a smooth surface and neat square edges, making it suitable for a variety of exterior, flooring and wet-area cladding applications.



WHY GREEN?

The built environment has a vast impact on the natural environment, human health and the economy. By adopting green building strategies, we can maximise economic, social and environmental performance.

Green construction methods can be integrated into buildings at any stage, from design and construction, to renovation and deconstruction. However, the most significant benefits can be obtained if the design and construction team takes an integrated approach towards going green, from the initial stages of a building project.

GO GREEN WITH EVEREST

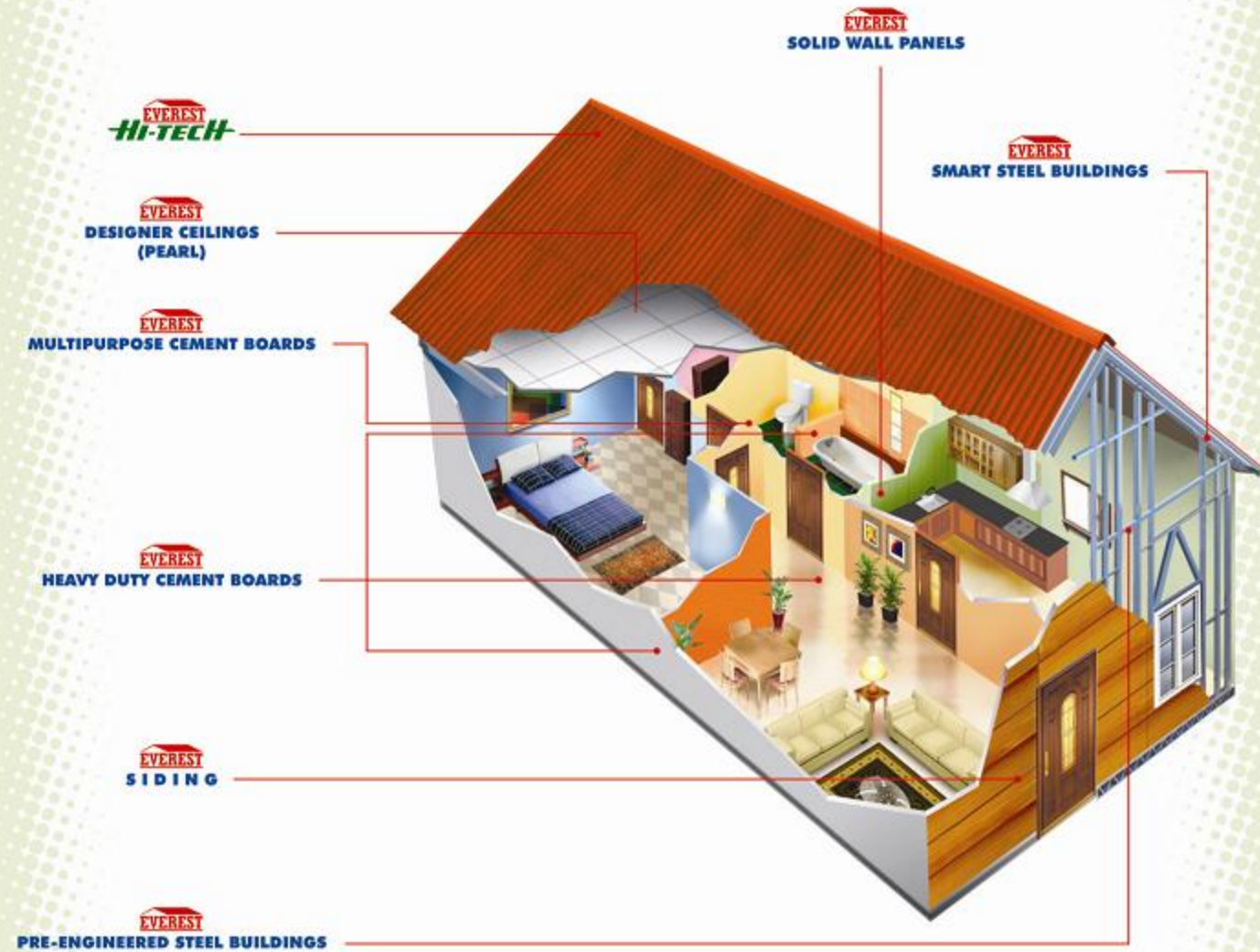
At Everest, we cater to the changing needs of modern day architecture through our dynamic product line. 'Green Solutions' is our endeavour to save the planet by lowering the carbon footprint caused during construction. At the core of the solution are Everest Smart Steel Building Systems, that are made from green material like Light Gauge Steel Frames. These are strong, relocatable and can withstand adverse weather conditions. To complement Smart Steel Buildings are Everest Fibre Cement Roofing and Fibre Cement Boards, both advanced and green materials. Everest Fibre Cement Board, in fact, is the best substitute to natural wood and wood based products as it is relocatable and made from 40% recycled content.

Everest Roofing Solutions earnestly take the endeavour to newer heights with over 1 billion sq. m of roofing in India. The corrugated sheets are made from the finest quality of cement and fibre through a specially developed fibre orientation process, followed by rigorous quality control standards to give you a product of lasting value.

Everest Solid Wall Panels offer revolutionary dry wall solutions by facilitating rapid construction and maximum space utilization. Besides, they maintain the solid effect of a conventional brick or block wall, even being 90% lighter in nature.

These contemporary green building materials are suitable for all modern and conventional constructions, and contribute in earning significant LEED points. The simplicity and embedded beauty with added resistance against moisture, fire and termite makes them a perfect material for applications ranging from roof sarking to flooring.





FIBRE CEMENT BOARDS

Everest has vast experience in producing over 1 billion sq. m. of roofing and over 48 million sq. m. of fibre cement boards. The current capacity for producing non-asbestos fibre cement roofing and boards is 14 million sq. m. and 16 million sq. m. per annum respectively. All products conform to International Standards and are manufactured using the latest European Technology. The combination of clean, green, innovative building solutions along with trained manpower enables Everest to provide excellent pre and post-sales service. Everest Fibre Cement Boards are available in the following variants:

- Everest Multipurpose Cement Boards
- Everest Heavy Duty Cement Boards
- Everest Designer Cement Boards
- Everest Pearl-Designer Ceiling
- Everest Siding

COMPOSITION

Everest range of Fibre Cement Boards is manufactured from a homogeneous mixture of Portland cement, treated cellulose fibres, finely ground silica quartz and other selected mineral fillers in a state-of-the-art unit using sophisticated, digitally controlled processes. The principle components of the mixture are cement and cellulose fibre. Cement acts as a hydraulic binder and the cellulose fibres interlock with the cement and quartz matrices to add strength to the boards. No asbestos is used during the entire process, making Everest products 100% asbestos free and environment friendly.



MULTIPURPOSE CEMENT BOARDS

The new age Everest Multipurpose Cement Board is made using the revolutionary HPSC technology. This unique technology makes these boards totally moisture resistant, termite and fire resistant. These boards are ideal for residential, commercial and industrial usage.

Everest Multipurpose Cement Board, in combination with different substrate framework like timber, steel and aluminum, offers unique advanced dry wall constructions, which leverage space utilisation to the maximum along with substantial savings on time. It gives the architects major flexibility of changing designs with thermal & acoustic insulation besides being maintenance free and highly durable.

Everest Multipurpose Cement Boards provide both uniform gap/groove and monolithic joint less finish (using specially made beveled-edges boards). These boards allow you to build your imagination through a range of finishes with paints, wall papers, texture coating, veneers etc.

AREAS OF APPLICATION

- False Ceiling
- Internal Walls - Half Height/Full Height
- Internal Wall Lining
- Eaves and Soffit Lining
- Pre-fabricated Shelter - Internal/External walls

FINISHING CHOICES



Paint



Wall Paper



Texture Coating



Veneer

* We can also provide factory finished primer or painted variant of board on request, as per international RAL chart





HEAVY DUTY CEMENT BOARDS

Whenever your concern is durability, strength and prolonged exposure of walls to weathering elements like sun, rain and UV rays, think of Everest Heavy Duty Cement Boards.

Everest Heavy Duty Cement Boards help create both internal and external walls which are impact resistant, load bearing and require minimal maintenance. They are ideally suited for commercial and industrial applications.

These Boards are exceptionally stable in dimension and offer resistance to damages caused by permanent dampness or seepages. They are excellent for all kinds of internal wet area lining especially in the residential segment.

Everest Heavy Duty Cement Boards can be combined with a wide range of surface finishes like laminates, ceramic / vitreous tiles, paints, render etc. which allows you to "Build your imagination".

AREAS OF APPLICATION

- Internal Walls - High traffic/Impact prone areas Residential/Commercial/Industrial
- Wet Area Lining - Kitchen, Bathrooms
- Commercial Flooring
- Rain Screening/Substrate for Render
- External Wall Cladding/Bracing Non Load Bearing/Load Bearing Walls/Residential/Commercial/Industrial/Cladding Walls in Warehouses/Factories
- Pre-fabricated Shelter - Internal/External walls

FINISHING CHOICES



Laminate



Ceramic/Vitreous Tiles



Paint



Render

* We can also provide factory finished primer or painted variant of board on request, as per international RAL chart



DESIGNER CEMENT BOARDS



Design plays a vital role in creating the ambience of a house, office or any other commercial place. Designer Cement Boards help in bringing out the best of walls and ceilings. Everest Designer Cement Boards provide solutions along with strength and durability. Walls and cements made out of Everest Designer Cement Boards are fire and moisture resistant, termite proof, self-embossed, pre-primed and ready to paint, making them unique walling and paneling solutions for residential, commercial and institutional use.

Everest Designer Cement Boards offer a surface which can be painted or polished in a variety of choices. These environment - friendly Designer Cement Boards along with flexibility of various finishing options help designers and architects to create a unique space character.

AREAS OF APPLICATION

- Internal Walls - Half Height/Full Height
- Internal Wall - Lining*/Paneling
- Ceilings

* Wall lining - to cover damp/seepage prone walls.

AVAILABLE RANGE*



Brick**



Cascade



Lake & Hill

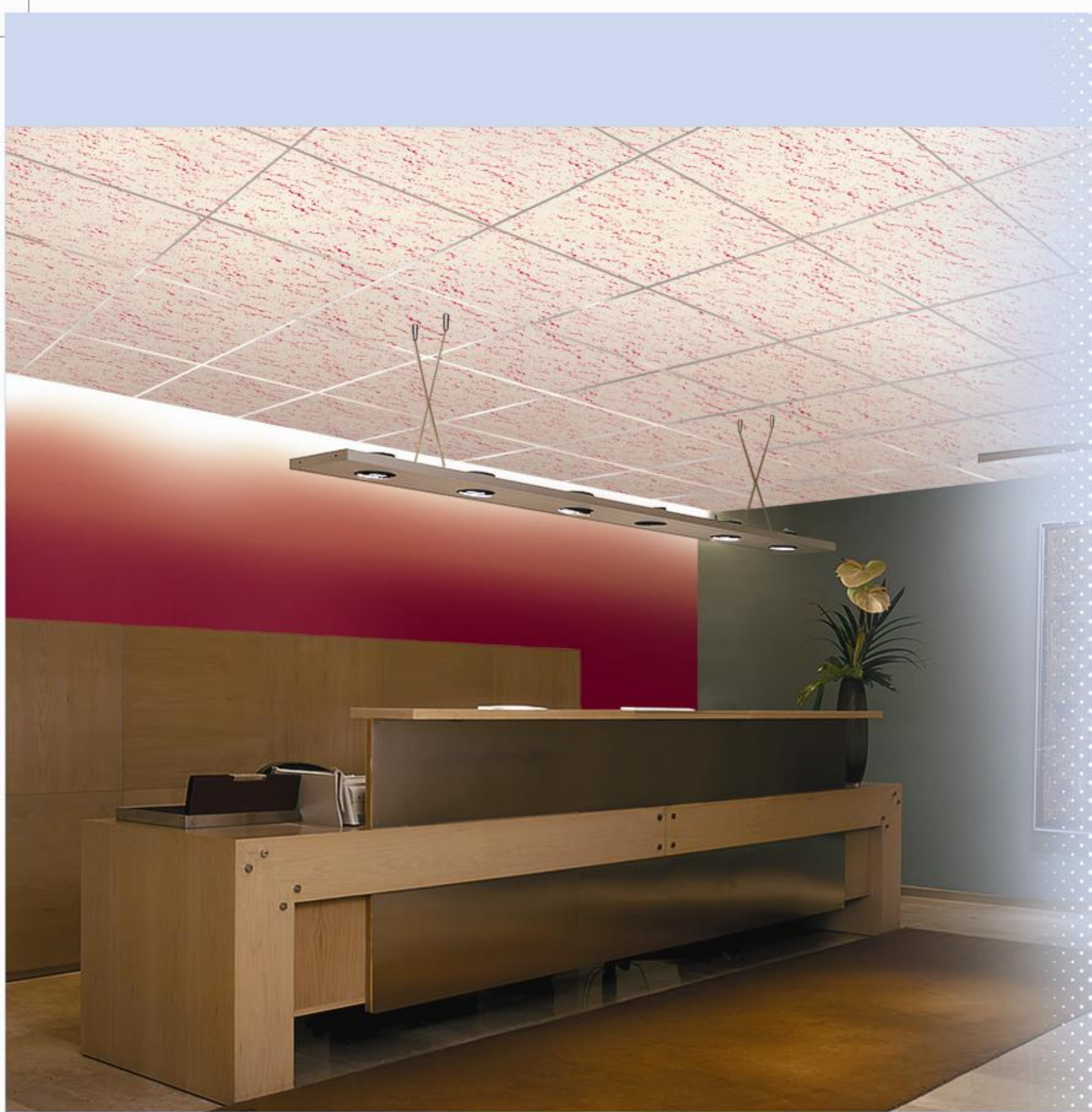


Polygon

* Cascade, Lake and Hill and Polygon are only available in white pre-primer finish

** Brick is available in above indicative finish, ready to install for exterior applications





EVEREST PEARL - DESIGNER CEILING TILES

Everest Pearl is yet another innovative and exemplary product from Everest Industries Limited, designed to give your dream interior its deserved elegance and beauty.

Everest Pearl is made with HPSC (autoclave), fibre cement reinforced multi-purpose cement board, finished with a superior PVC paint with UV coating of overall thickness of 300 microns, making it the most sought - after product for both residential and commercial usage.

These ready to install tiles are available in a wide range of attractive textures and finishes. Pearl Designer Ceiling Tiles ensure long term performance to help you enjoy exquisite interiors forever.

AREAS OF APPLICATION

- Kitchens
- Toilets
- Washrooms
- Laboratories
- Health care facilities



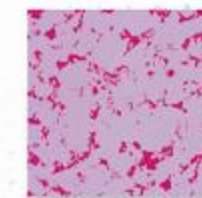
Clear White



Ocean Blue



Brick Red



Purple Shine

** The above designs are only indicative and actual colours may vary from the above.*

SUPERIOR ATTRIBUTES



Humidity Resistant



Washable



Light Reflection





EVEREST SIDING

Everest Siding is an attractive and aesthetically pleasing fibre cement product, manufactured in our state-of-the-art ultra modern plant. Everest Siding comes in many different sizes and smooth or textured surfaces, and gives a perfect wood appearance without any flaws and knots.

Everest Siding comes in yellow pre primed (exterior grade) with deep wood grain texture which can be finished with Burma Teak, Golden Beech and Walnut finishes.

AREAS OF APPLICATION

- External Wall
- Eaves and Soffit Lining
- Fascias

PRIMER



FINISHING CHOICES*



Burma Teak



Golden Beech



Walnut

**These are indicative finishes*





SOLID WALL PANELS

In today's fast paced world, time is of the essence. Everest Solid Wall Panels enable efficient construction with the promise of Strength, Speed and Safety. Everest Solid Wall Panels are sandwich panels made out of Fibre Reinforced Aerated Cement Concrete (FRACC) and Everest Wall Boards.

These panels maintain the solid effect of a conventional brick or block wall and stand as an epitome of speedy and elegant wall solution that is compatible with a host of surface finishing choices like paint, veneers, texture coating and wallpaper. Their unique tongue and groove joining system facilitates rapid construction and maximises space utilisation.

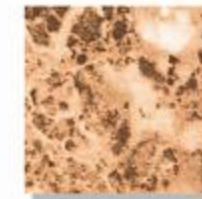
ADVANTAGES

- Speed - 20 times faster
- Space - 3 to 5% additional
- Light Weight - 90% lighter than brick/block wall
- Fire Rating > 2hours

FINISHING CHOICES



Texture Coating



Veneer



Wallpaper



Paint

SUPERIOR ATTRIBUTES



Quick Installation



Strength



Lightweight

AREAS OF APPLICATION

- Internal Walls - Residential/Commercial/Industrial
- External Walls - Cladding Walls in Warehouses/Factories
- Pre-fabricated Shelter - Internal/External Walls

* Technical details available on request





EVEREST HI-TECH

Everest Hi-Tech is a modern and highly advanced non-asbestos roofing system. Along with HIPP technology (High Impact Poly Propylene), Everest Hi-Tech also exploits technology imported from Brasilit, a division of Saint Gobain. Manufactured in a world-class production facility, it conforms to the highest international standards, while meeting all the international norms of safety, environment and pollution control for building products.

Everest Hi-Tech is available in a range of colours. These pre-painted sheets require low maintenance and resist the impact of weather, UV rays, algae and chemical corrosion.

Everest Hi-Tech is the most suitable cladding and roofing solution for factories and warehouses. It is widely used in sectors such as Petrochemicals, Food, Pharmaceuticals, Automobiles, Engineering, Metallurgy, Chemicals, Textiles among others.

SUPERIOR ATTRIBUTES



Durable



Weather Resistant



Aesthetics



Protection and Comfort

AVAILABLE COLOURS OF HI-TECH



Terracotta Red



Tropical Green



Ivory White



Grey

* Technical specifications and dimensional data available on request





SMART STEEL BUILDINGS



SMART STEEL BUILDINGS

Everest understands and recognises the needs of various market sectors and delivers smart and flexible solutions.

Steel buildings don't have to be dull boxes. Modern businesses need modern buildings equipped with the latest in environment friendly features. Everest provides flexibility for the future and ensures that all of this is achievable with the added benefit of speed of construction and improved health and safety, with its 100% customised Smart Steel Buildings. Their innovative best-in-class technology is the fastest for manufacturing and erecting buildings. The incredible strength of Light Gauge Steel Frames contribute to safer structures that require less maintenance and last longer. Besides design flexibility, these buildings are also resistant to moisture, adverse weather conditions, earthquakes, termites and fire.



A VARIETY OF APPLICATIONS

- Rooftop Extensions
- Site Offices
- Resorts
- Restaurants/Cafeterias
- Residential Complexes



HOW IT WORKS...

Design Phase



Building details are entered in a customised software



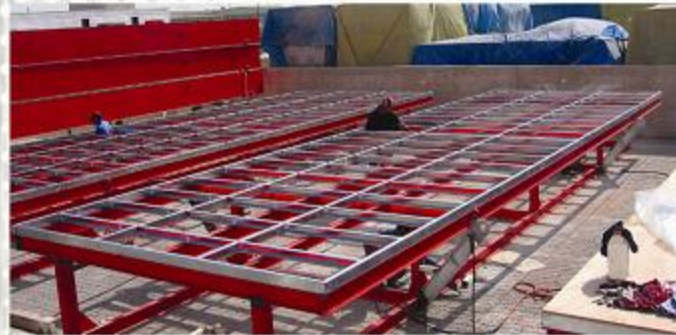
- Software creates building design
- 3D model created for visual confirmation
- Complete plan electronically downloaded for manufacturing

Manufacturing

- Steel drawn into machine
- Holes punched at precise location
- Frame rolled into shape
- Location labels printed on each frame section
- Frame components cut to exact lengths
- Frame components made in the assembly sequence
- Framing all of the same width and in line for superior strength



Factory Assembly



- Simple and strong screw connection
- Frame assembly pace matches machine speed

On-Site Installation



- Simple assembly on-site requiring small crew and simple tools

ADVANTAGES

- Great looking permanent structures with in-built stability
- No compromise on strength and stability
- Fast construction
- Design flexibility
- Great seismic resistance
- Multiple and wide applications
- No contingency cost
- Easy logistics, even in hilly areas
- Single source responsibility
- No deep civil foundation is required



IT PAYS TO BE GREEN

Everest Fibre Cement Boards helps in contributing towards the LEED-India (Leadership in Energy and Environmental Design), IGBC Green Homes and IGBC Green Factory credit points, as specified by the Indian Green Building Council (IGBC).

ENERGY AND ATMOSPHERE

Credit	Intent	Requirement	Everest Contribution
Minimum Energy Performance	Establish the minimum level of energy efficiency for the base building and systems	Design the building project to comply with ASHRAE standard 90.1-2004 or final version of ECBC	Everest Boards (Plain and Designer) have better thermal insulation properties, therefore will help in reducing air-conditioning load Thermal conductivity 0.14 W/ m/ °K Credit Potential 1 point

MATERIALS AND RESOURCES

Credit	Intent	Requirement	Everest Contribution
Construction Waste Management	Redirect recovered resources back to manufacturing process Redirect reasonable material to appropriate site	Reduce and/or salvage at least 50% (by wt.) of construction demolitions & packaging debris Reduce and/or salvage an additional 25% (totally 75% by wt. of construction, demolition and debris)	Everest Boards (Plain and Designer) and all metal sections are relocatable Credit Potential 1 to 2 points
Resource Reuse	Reuse building material and products in order to reduce demand for virgin material and reduce waste, thereby reducing impact associated with the extraction and processing of virgin resources	Use salvaged refurbished or reused material products and furnishing for at least 5% and 10% of building materials (by value)	Everest Boards (Plain and Designer) can be reused from one project to another, thus helping in conserving the precious virgin resources The company is consciously enlightening customers on reuse of salvaged products Credit Potential 1 to 2 points

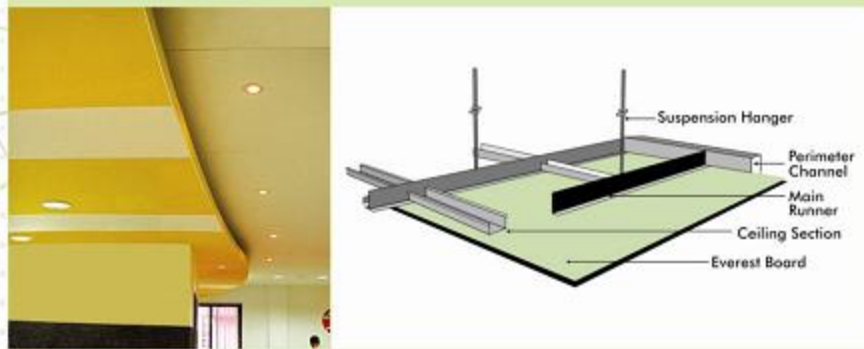
MATERIALS AND RESOURCES

Credit	Intent	Requirement	Everest Contribution
Recycled Content	Increase demand for building products that incorporate recycled content materials, thereby reducing impact resulting from extraction and processing of new virgin material	Use materials with recycled content such that the sum of post consumer recycled content plus one half of the post industrial content constitutes at least 5% and 10% of the total value of the materials in the project	Everest Boards have the following post industrial recycled content materials: At least 35% of Fly ash (waste from coal based thermal power stations) At least 5% of recycled pulp Therefore, the use of post industrial recycled content materials in Boards is at least 40%. Thus helping in conserving the new virgin material Credit Potential 1 to 2 points (Certificates are available upon request)
Regional Materials	Increase demand for building materials and products that are extracted and manufactured within the region, thereby supporting the regional economy and reducing the environmental impacts resulting from transportation	Use a minimum of 20% of building materials and products that are manufactured regionally within a radius of 800 km of the regionally manufactured materials, use a minimum of 50% of building materials and products that are extracted, harvested or recovered as well as manufactured within 800 km of the project site	Everest Industries has two manufacturing facilities for Boards in Nashik (Maharashtra) and Roorkee (Uttarakhand). These plant locations enable the company to cover nearly 60% of India's geographical area The raw materials (cement and fly ash) are procured from within 800 km of the manufacturing plant Credit Potential 1 to 2 points

Everest Fibre Cement Boards provide creative freedom to architects and designers to focus more on aesthetics along with functional attributes. With Everest Fibre Cement Boards, you can create more innovative designs in finishes like wood/stone/brick... the possibilities are endless. These boards offer various advantages, from aesthetic appearance to durability when compared with traditional building materials. For wet area lining, we recommend Heavy Duty Cement Boards and for dry walls, we recommend Multi Purpose Cement Boards.

MULTIPURPOSE CEMENT BOARDS

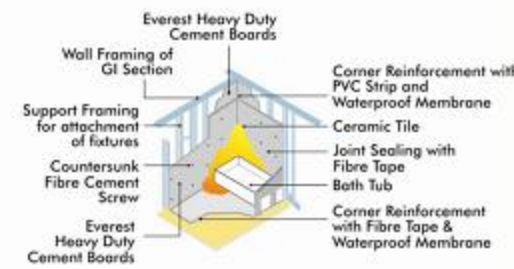
False Ceiling (4.5 mm, 6 mm)



Wet Area Lining

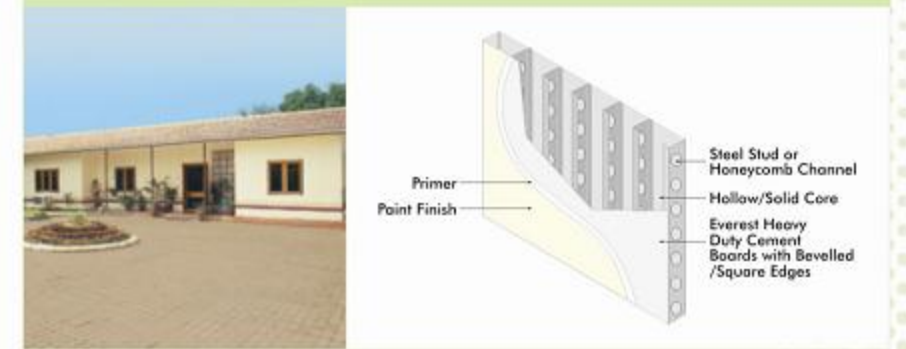


(6 mm, 9 mm)



HEAVY DUTY CEMENT BOARDS

Hollow/Solid Core Panels for Prefab Construction (9 mm, 12 mm)



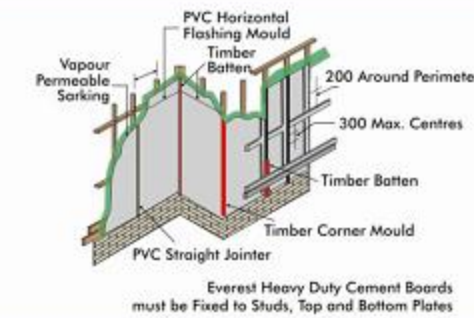
Dry Wall Partition (8 mm, 9 mm, 10 mm)



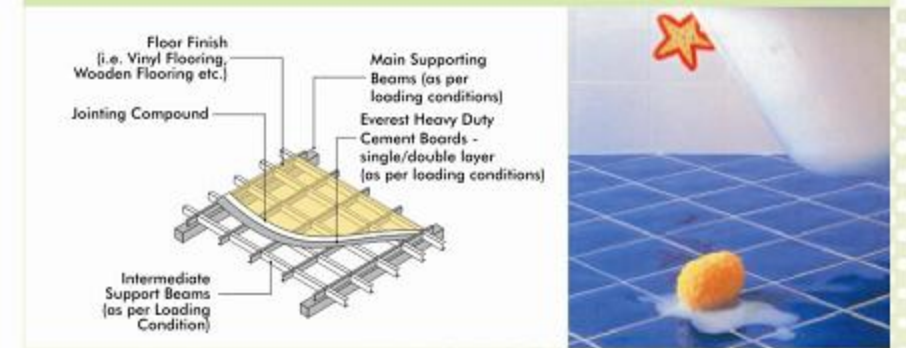
External Cladding/Bracing



(9 mm, 12 mm)



Commercial Flooring (15 mm, 18 mm)



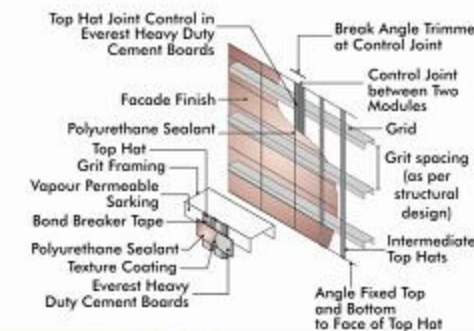
Internal Lining (8 mm, 9 mm, 10 mm)



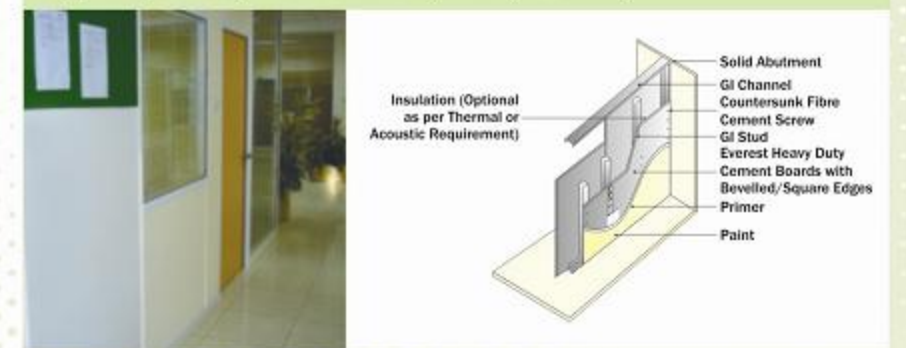
Facade



(9 mm, 12 mm)



High Impact Dry Wall Partition (9 mm, 12 mm)



TECHNICAL & PHYSICAL SPECIFICATIONS OF FIBRE CEMENT BOARDS

I. Physical Properties	Results	Standards
Flexural Strength		ASTM C1185
a. Flexural Strength (Along the Fibre)	14.0 N/mm ²	
b. Flexural Strength (Across the Fibre)	8.1 N/mm ²	
Modulus of Elasticity		ASTM C1185
a. Modulus of Elasticity (Along the Fibre)	8726.3 N/mm ²	
b. Modulus of Elasticity (Across the Fibre)	6557.2 N/mm ²	
Adhesion / Lamina (Bond) Strength, average	15 N/mm ²	ASTM D 1037
Screw Withdrawal Strength		ASTM D 1037
a. Perpendicular to the Surface (Dry Condition)	1243.2 N	
b. Parallel to the Surface (Dry Condition)	791.2 N	
Compressive Strength, average	2.6 N/mm ²	ASTM D 1037
Apparent Density	1355.8 kg/m ³	ASTM C1185
II. Moisture Resistance Properties	Results	Standards
Moisture Content(at EMC)*	6-8%	ASTM C1185
Impact Strength	15600 N.mm	ASTM C1185
Thermal Conductivity	0.14 w/m ² k	ASTM C518
Moisture Movement	6% - 8%	ASTM C1185
a. Length	-0.02%	
b. Width	-0.02%	
Water Absorption, average	31.30%	ASTM C1185
Water Tightness underside of sample	No water droplets at the	ASTM C1185
III. Durability	Results	Standards
Water Impermeability	No drops after 24 hrs	ISO:8336 (Part E)
Frost Resistance (Freeze / Thaw Tests)	Passes in 25 cycles	ISO:8336 (Part E)
Warm Water	Passes in 25 cycles	ISO:8336 (Part E)
Soak Dry	Passes in 25 cycles	ISO:8336 (Part E)
Heat Rain	Passes in 25 cycles	ISO:8336 (Part E)
IV Fire Resistance Properties	Results	Standards
(a) Surface Burning Characteristics		ASTM E 84
Time to Ignition (in sec)	No Ignition	"0" - is the best result
Flame Spread Index	0	
Smoke Developed Index	0	
(b) Resistance to Fire		BS: 476
Combustibility	Non-Combustible	Part 4
Ignitability	Class "P" - not easily ignited	Part 5
Fire Propagation Index	<3	Part 6 (Limit <12)
Surface Spread of Flame	Class-I	Part 7 (Class 1-4: 1=excellent)
Specific Optical Density of Smoke	<5	ASTM E 662
UK Building Regulations	Class "0"	

Note: *ASTM - American Standard; **BS- British Standard; ***ISO - International Standards Organisation

* Test Condition-Temp 23±2°C & Relative Humidity - 50±5% to 65±5%

* EMC - Equilibrium Moisture Condition-i.e. Temp -23±2°C and Relative Humidity-70±15 Everest range of Fibre Cement Boards are also tested as per

****AS - Australian Standard & ***** EN-European Norm -selective Test Results available on request

* All the above tests can be provided for Heavy Duty Boards on special request.



Termite Proof

MULTIPURPOSE CEMENT BOARDS

Size

- 3000 mm x 1200 mm
- 2700 mm x 1200 mm
- 2400 mm x 1200 mm

Thickness

- 4.5 mm, 6 mm, 9 mm, 12 mm & 18 mm

Edge Profile

- Square • Beveled

Weight

- 6 mm (thickness) - 8.95 Kg/m²



Moisture Resistant



Impact Resistant

HEAVY DUTY CEMENT BOARDS

Size

- 3000 mm x 1200 mm
- 2700 mm x 1200 mm
- 2400 mm x 1200 mm

Thickness

- 4 mm, 6 mm, 9 mm, 12 mm, 15 mm & 18 mm

Edge Profile

- Square • Beveled

Weight

- 6 mm (thickness) - 10.15 Kg/m²



Weather Resistant



Fire Resistant

SIDING

Size

- 3000 mm x 225 mm
- 3000 mm x 210 mm
- 3000 mm x 150 mm

Thickness

- 7.5 mm (Texture Variant)
- 9 mm, 12 mm (Plain Variant)

Edge Profile

- Square



Eco-Friendly



Fire Resistant

DESIGNER CEMENT BOARDS

Size

- 2400 mm x 1200 mm
- 595 mm x 595 mm

Thickness

- 6 mm

Edge Profile

- Square

Weight

- 6 mm (thickness) - 8.95 Kg/m²



Termite Proof

- Both Metric and Imperial systems are available.
- Tolerance Limits are guided by ISO 8336 and BSEN 12467.
- Special Sizes, Thicknesses and Calibrations can also be made available to meet specific requirements.
- Sanding, Hydrophobating, Special Coating can be carried out as per order.

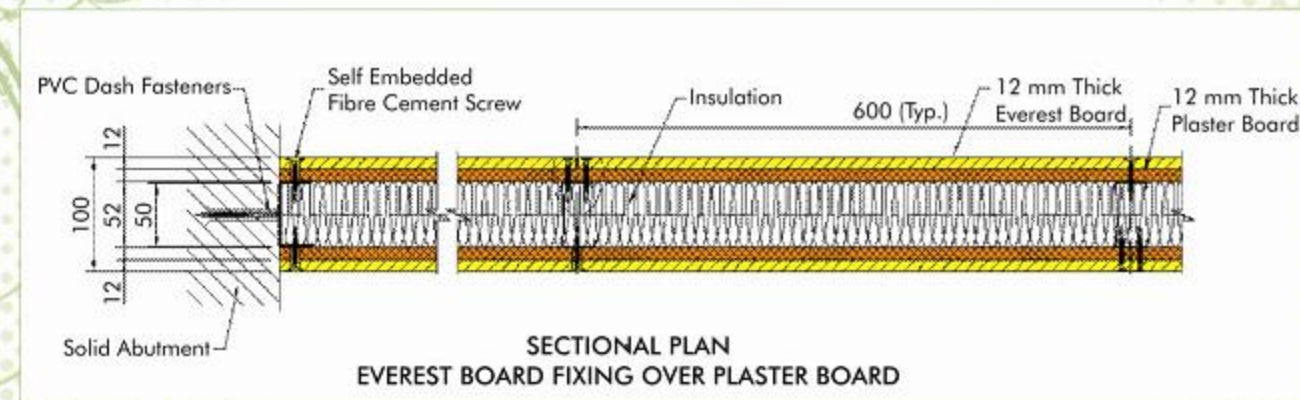
FIRE RATINGS

Performance Rating

A. Fire Rating (non load bearing) Dry Wall Construction As per BS-476, Part 20-22

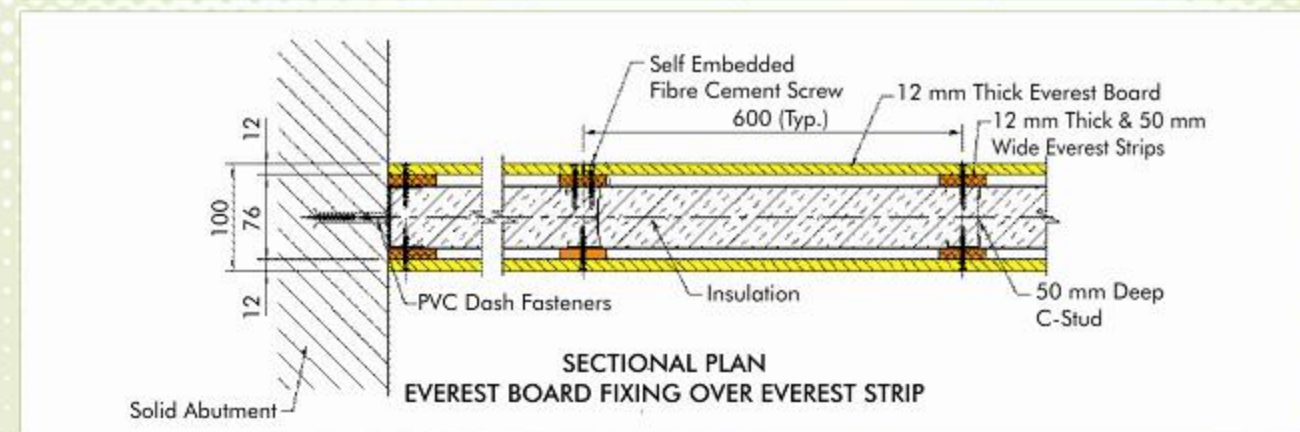
I Everest Board Fixing over Plaster Board

WALL THICKNESS	WALL CONFIGURATION	MAXIMUM HEIGHT	APPLICATION AREA	FIRE RATING
100 mm	Everest Board : 12 mm Plaster Board : 12 mm Insulation : 50 Kg/m ³ C-Stud : 50 mm	up to 4.2 m	High Performance Commercial and Official Partitions	Integrity & Insulation: More than 2 Hours



II Everest Board Fixing over Everest Board Strip

WALL THICKNESS	WALL CONFIGURATION	MAXIMUM HEIGHT	APPLICATION AREA	FIRE RATING
100 mm	Everest Board : 12 mm Everest Strips : 12 mm Insulation : 50 Kg/m ³ C-Stud : 50 mm	up to 4.2 m	Light Commercial Office Partitions (Where Fire Rating is mandatory)	Integrity & Insulation: More than 1 Hours



B. Strength and Robustness

Level impact energy, damage and depth of indentation:

Dimension of the Wall panel: Length - 2130 mm, Width - 1220 mm & Thickness: 99 mm

Sl No.	Test Conducted	Test Detail	Observation
1.	Small Hard Body Impact		
	a. Surface Damage	Impact energy applied -10 Nm Pendulum drop height - 0.33 m Angle of swing - 63.6°	No surface damage occurred Max, Depth of indentation - nil
2.	b. Perforation	Impact energy applied 30 NM Pendulum drop height - 1.0 m Angle of swing - 131.8°	No perforation of facing observed Max, Depth of indentation - nil
	Large Soft body Impact		
2.	a. Surface Damage	Impact energy applied - 100 Nm Angle of swing - 50°	No surface damage occurred
	b. Structural damage	Impact energy applied - 120 Nm Pendulum drop height - 0.245m	No surface damage occurred

Based on the performance criteria, the dry wall sample of Standard wall board with metal wall frame section supplied by M/s Everest Industrial Limited falls under "SEVERE DUTY" wall systems

Test temperature and Humidity Technical Reference -

Temperature - 25.6 C & Humidity - 70.0% RII BS 5234(2): 1992 Specification for performance requirements for strength and robustness including methods of test

Note: Please refer to diagram I & II from page no. 31

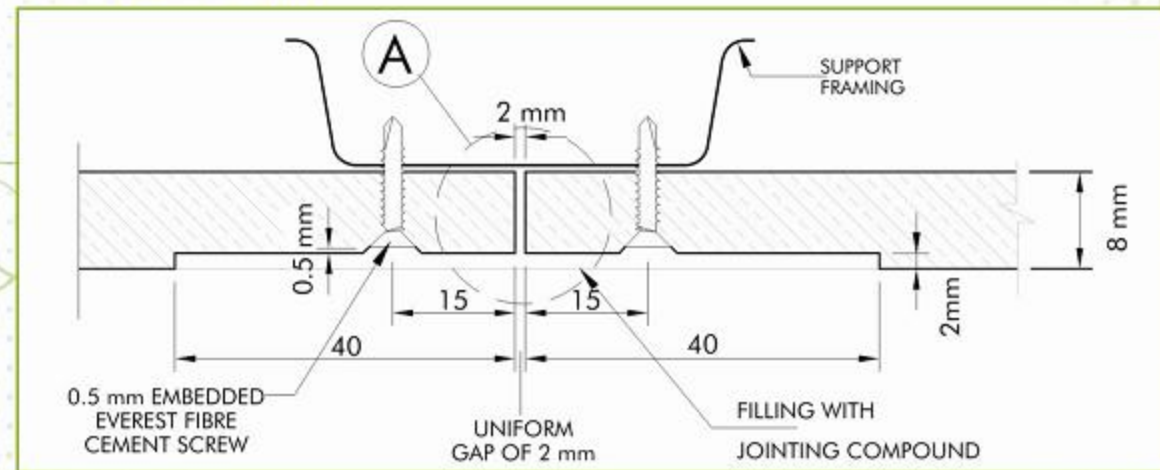
C. Acoustics

Description and Identification of items	98 mm thick partition made upon a 50 mm floor and ceiling channel with a strip of 12mm thick wall board screwed on either side of channel thus creating a width of 74mm which is covered by 12mm thick Everest Fibre Cement board on both sides of channel. The air cavity being filled with 50 mm glass wool of density 64 kg/m ³
Environment Conditions	
a. Room Temperature	32.0 ± 3.0 °C
b. Relative Humidity	56.0 ± 5.0 %
Principle Methodology of rest & Test Procedure No	IS : 9901 (Part III) - 1981, DIN 52210 Part IV - 1984, ISO : 140 (Part III) - 1995 Measurement of Sound Insulation in Building and of Building Elements. Part III Laboratory Measurements of Airborne Sound Insulation of Building Elements DP#1.07/Doc.3/TP#15

Using the standard reference curve, the sound transmission class, STC, ranging from 100 Hz - 4000 Hz was 42.

EVEREST JOINT DETAILS (INTERIOR APPLICATIONS)

JOINTLESS FINISH

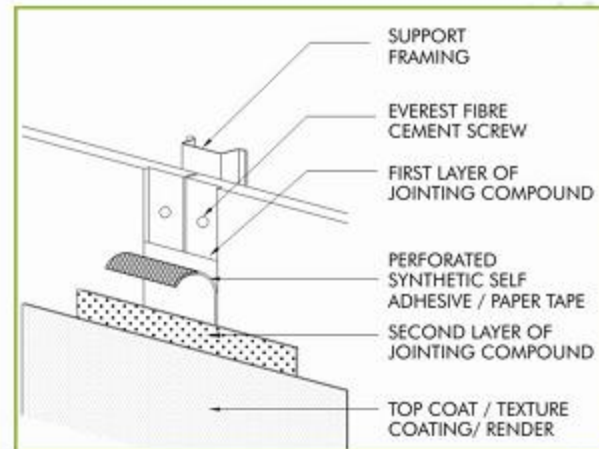


Joint-less finish with Everest Wall Boards can only be obtained using factory finish beveled edged boards. However, side beveled boards are required for joint-less finish at the corners or wherever the beveled edges of board are cut to fit to the dimensions.

To render joint-less finish, use only dry board. In hot dry conditions the joint area may be damped to avoid premature setting of Everest Jointing Compound. For the reinforcement of the joint, use synthetic perforated self adhesive tapes only of 48 mm nominal width.

At the internal corner joints centre, the reinforcing tape in to the internal angle pressing firmly on the beveled edges of Everest Wall Boards and immediately embed the tape with the coat of Everest jointing compound. Use perforated PVC corner angle rather than G.I. angle on external corner to avoid corrosion in wet areas. Fix the external G.I./PVC external corner angle at 300 mm c/c to each angle leg in a staggered manner. Fill over the G.I./PVC external angle to the edges of beveled edges of Everest Wall Boards with jointing compound.

The board joints and corner flush joints must be formed using only Everest interior jointing compound. Adhesive property of jointing compound is important of flush vinyl finishes therefore finishing compound should not be used over the Everest interior jointing compound and ensure that it is finished smooth to accept the vinyl/laminate.



EVEREST JOINT DETAILS - DUROSEAL COMPOUNDS

Pre-Installation Checks & Actions:

1. Ensure that Boards are installed properly with about 1-2mm gap in between.
2. Check that adjacent Boards do not have any major level mismatch, which will show off after finishing
3. Check that the screws are full tight and screw heads are properly countersunk
4. Check that there is no grease or oily substance or deposition of any foreign materia



Step-1 Cleaning & Preparing Surface:

Lightly sand for clean surface. Remove all loose dust.

For neat and clean work, optionally, paste masking tapes about 20mm away from joint on both flanges.



Step-2 Gap Filling:

Lightly insert EVEREST DUROSEAL compound to fill the 1-2mm gap. Wipe clean with Flexible Steel Knife (provided with each DUROSEAL pack) to level joint surface and scrap off all excess compound. Let dry for 8 hours.



Step-3. Pasting Tape:

- Wet joint line with EVEREST DUROSEAL using Flexible Steel Knife.
- Place PLEXUS-16 Tape along the joint using EVEREST DUROSEAL compound lightly.
- Paste lightly with Flexible Steel Knife to level and remove any excess compound.
- Allow dry for 4-6 hours



Step-4 Touch-up Finishing

Check thoroughly for shrinkage undulation and if any found, fill with another pass of EVEREST DUROSEAL using Flexible Knife until desired flat surface obtained. Dry for 4 hours before priming.

Optional Step - Tooling (smoothing)

EVEREST DUROSEAL is an elastic compound - difficult to sand. So for smoothing or tooling, use detergent-water and clean cloth (or #180 water-paper) and lightly rub in circular motion to smoothen surface. Thereafter wash with plain water and dry adequately before priming



Step-5 Joint Priming:

Prime only the Joint area with 2 coats of TIE-WP Elastomeric Joint Primer at minimum 30 minutes interval.



Primer & Paint:

EVEREST DUROSEAL readily accepts any type of primer and finish paint system.

However - for crack-free paint film - it is recommended that TIE-WP Primer and ELASTO-HB flat Elastomeric Paint or an equivalent paint system may be used.

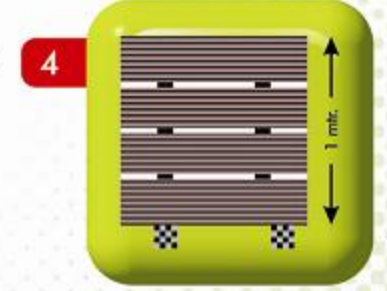
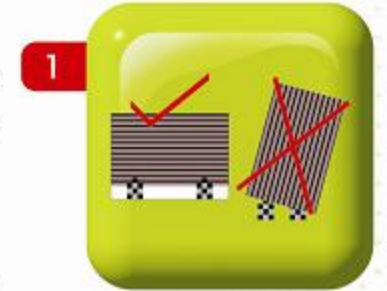
HANDLING

1. Everest boards should always be carried on long edges (width wise) by two (for less than 4 feet x 4 feet size) or four persons (for more than 4 feet x 4 feet size) to avoid damage to the board and excessive strain on people handling them.
2. While loading and unloading of Everest board of 8 feet x 4 feet or more, it should be lifted by four people to support the four corners.
3. Maximum two to three sheets should be handled for thickness of 6 mm or less. For thickness higher than 6 mm, single sheet should be handled at a time.
4. During transportation, Everest boards should be stacked flat, edges and corners should be fully protected and adequate packing material should be used at both bottom and sides.
5. Dirt settling on the textured surface of Everest designer boards while cutting, sawing and screwing should be avoided.
6. Everest boards should be handled with gloves or by applying French Chalk to avoid spoiling of the primer or making a patch mark.
7. Everest boards should be handled without opening the pack. While using the board, care should be taken in removing packing strips to avoid damage to the board.



STORAGE

1. Everest boards must be stacked horizontally, never inclined, on a smooth and leveled surface, preferably 6 inches to 8 inches above the levelled surface.
2. Everest boards should always be stored under adequately ventilated covered space without allowing direct exposure to sunlight, rain, etc. In case of non availability of covered space, board should be covered with polythene sheets and must be stacked on pallets with proper stretch wrapping to protect from weathering forces.
3. If Everest board gets wet or damp due to wrong storage then it should be dried out in natural conditions before further handling. In any case, boards should be installed in position within 2-3 weeks of procurement.
4. Everest boards should be stacked to the maximum height of 3 feet or 1 meter per stack.
5. Adjacent stacks should be stacked with minimum gap of 1 foot or 300 mm.



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