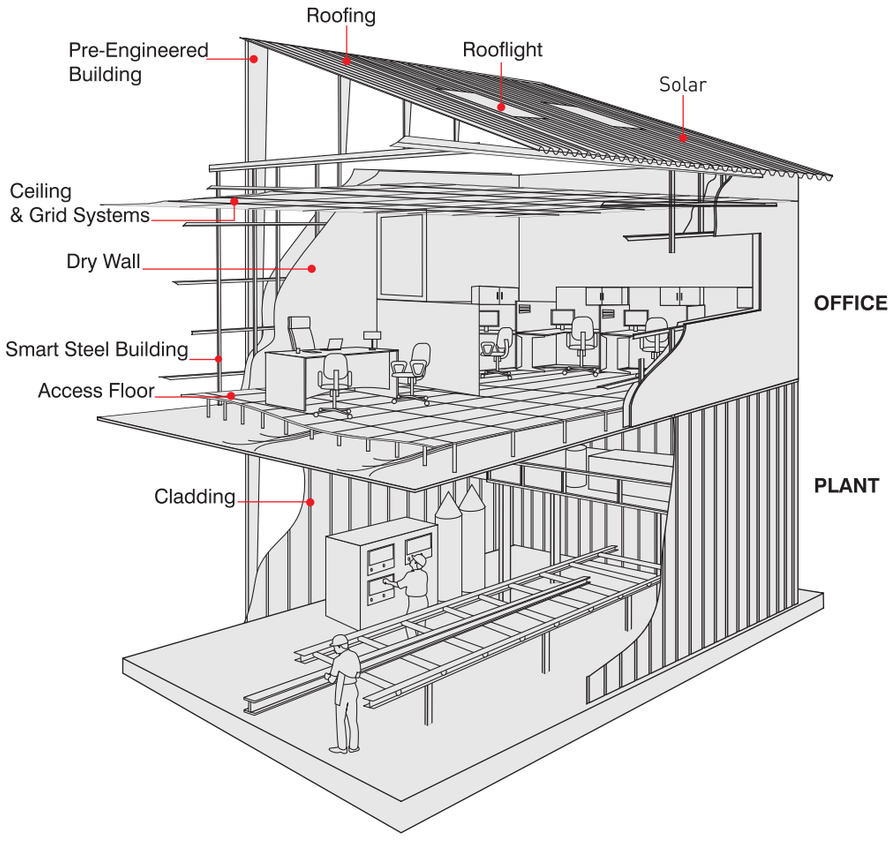
Everest is a complete building solutions provider. Today, Everest is a comprehensive building solutions provider, with a constant endeavour to innovate new age building solutions. The company offers a wide range of roofing, ceiling, wall, flooring and cladding products. The company has consistently introduced new age building products like Pre-Engineered steel buildings for the industrial, commercial sector and solar rooftop solutions.

Everest has been a pioneer of new age fibre cement boards and panels, which enable strong, light, rapid and durable construction of residential, commercial and industrial infrastructure. Made using environment-friendly materials, these products are used in a wide range of applications such as cladding, ceilings, walls, facades, wall partitions, interior & exterior wall lining, pre-fab structures, drywalls and mezzanine floors. Everest Boards are manufactured using Hatschek process enabled with HPSC (High Pressure Steam Curing) technology which makes them moisture, fire and termite resistant. These new age panels have significant competitive edge to other wood based alternatives.



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RAPICON

NEW AGE WALLS

EVEREST RAPICON
A NEW WAY TO BUILD WALLS

Construction industry is evolving constantly. It keeps adopting new technologies and solutions that are more efficient and economic than the previous. In today's fast paced world, time is the essence. Everest, one of India's leading and fastest growing complete building solutions providers, presents a revolutionary concept of readymade walls. Walls that offer efficient construction with strength, speed and safety.

Everest Rapicon walls are sandwich panels made of fibre reinforced aerated cement concrete and Everest wall boards. Their unique tongue and groove joining system facilitates rapid construction and maximises space utilisation. Everest Rapicon Walls epitomise an extremely speedy and elegant wall solution, which is compatible with a host of surface finishing choices such as paint, veneers, texture coating and wallpaper.

VERSATILE APPLICATIONS

Fire Separation Walls:

Shopping malls,
Hotels, Staircase enclosures.

Prefab Structure:

Accommodation units,
Site offices, Security and
Store rooms, Warehouses,
Godowns, Army Barracks,
Schools, Low-cost housing.

Boundary/Fencing:

Residential, Commercial,
Government, Defence.

Partitions:

Offices, Malls,
Educational Institutions,
Hotels, Restaurants,
Residential, Govt./Defence,
Industrial units.

WALL WITH MANY ADVANTAGES

Up to 2 hrs. of Fire Rating

Zero Water Usage

Better Acoustics up to 40dB

Up to 5% extra Floor Area

Up to 80% lesser Labour Input

THE EVEREST EDGE

ECONOMY

Cost Less structural and foundation cost

Time Up to 4x faster construction

Labour Ready-to-use wall panels require less labour input

Power Up to 15-20% less power consumption

Space 3-5% additional carpet area

EFFICIENT WALLS

Long-lasting Withstand all weather conditions with the strength of cement

Durable High-Impact resistance and load bearing capacity

Functionality Resistant to fire, moisture and termites

4Es

EASY INSTALLATION

Easy to handle Ready-to-install walls with unique tongue and groove joint system

Pre-sales support Designing, BOQ and Installation training

After sales support Product usage support and grievance redressal mechanism

ECO- FRIENDLY

Green products Made from 40% recycled material

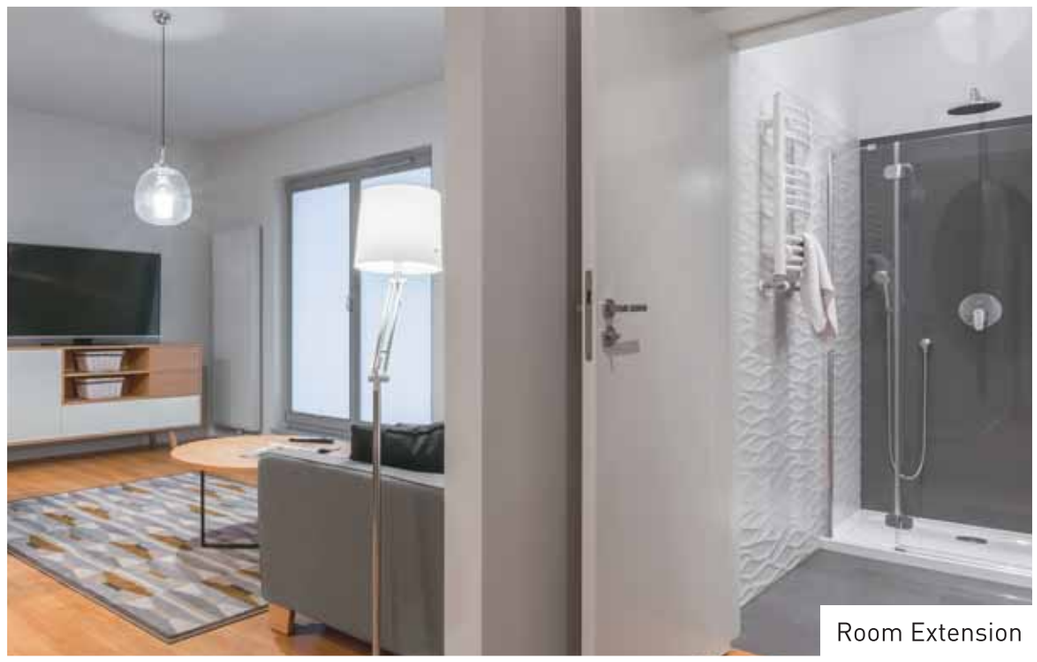
Compliance IGBC & GRIHA compliant

Toxic emissions Asbestos-free

MAXIMISE LIVING SPACES

Whether it is room extension or living area, Rapicon walls are a good choice as they leave the maximum carpet area and require lesser labour input with high speed of construction.

G+1 Structures



Room Extension

Living Room

Living Area

Washroom

MAXIMISE LIVING SPACES

Rapicon walls also help you build utility spaces like pooja or studio room in quick time and at an affordable cost.

Pooja Room

Artist Studio

Rooftop Extension

Corridor

FASTER CONSTRUCTION OF COMMERCIAL SPACES

Everest Rapicon Walls are preferred choice for builders and contractors as Everest Dry wall construction technology makes high speed construction possible. They also require less labour inputs, which adds to the construction advantage of a project.

Educational Institutes

On-site Office

Locker Room

Exhibition Centre

Office Space

TECHNICAL & PHYSICAL SPECIFICATIONS

Property	Units	Standard	Required Specifications	
Length *	mm		3000, 2700, 2400	3000, 2700, 2400
Width *	mm		600	600
Thickness *	mm		50	75
Edge Profile			Square, Beveled	Square, Beveled
Standard Weight	kg/m2		43	58
Apparent Density	kg/m3	IS2380P.3:77	700~800	700~800
Modulus of Rupture (MOR)	MPa	IS:2380P.5:77	4 (- 0.2 / + Free)	3 (- 0.2 / + Free)
Uniform Distributed Load (UDL) @ 1.5 M span	kg/m2		190	255
Uniform Distributed Load (UDL) @ 2.9 M span	kg/m2		70	95
Axial Compressive Strength	Kg/m2	IS2380 P.8.77	46	75
Typical Values#				
Thermal Conductivity	K.cal/h.m°C		0.12	0.12
Sound Transmission Class	dB		38	40
Fire Rating	minutes		108	134
Fire Resistance Properties				
Surface Spread of Flame			Class 1	Class 1
Fire Propagation Index (I)			< 3	< 3
Ignitability			Class 'P' (Not easily ignitable)	Class 'P' (Not easily ignitable)
# Values taken at actual from test certificates.				
* Subject to tolerance, for details, refer to production test certificate.				
* Bevelled edge also available on demand.				

IMPACT RESISTANT

MOISTURE RESISTANT

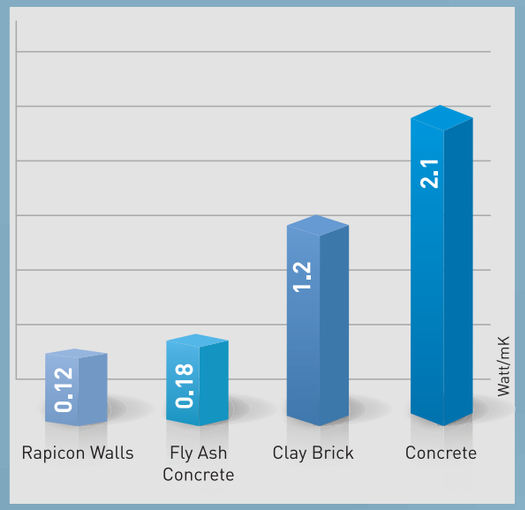
WEATHER RESISTANT

TERMITE PROOF

FIRE RESISTANT

SALIENT FEATURES

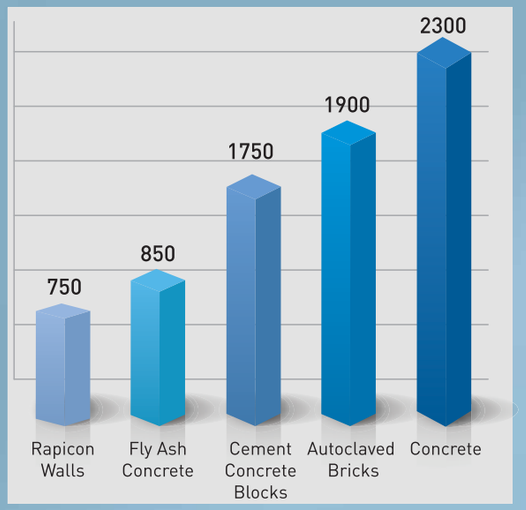
HEAT-PROOF



Thermal Conductivity Comparison

Rapicon walls have a lower thermal conductivity than traditional building materials. This makes them suitable for usage in hot weather conditions and hence Rapicon walls save energy.

LIGHT WEIGHT

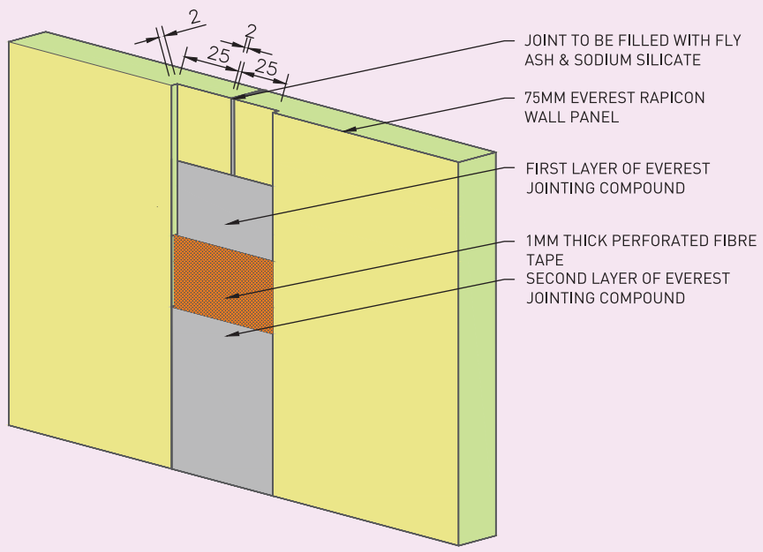


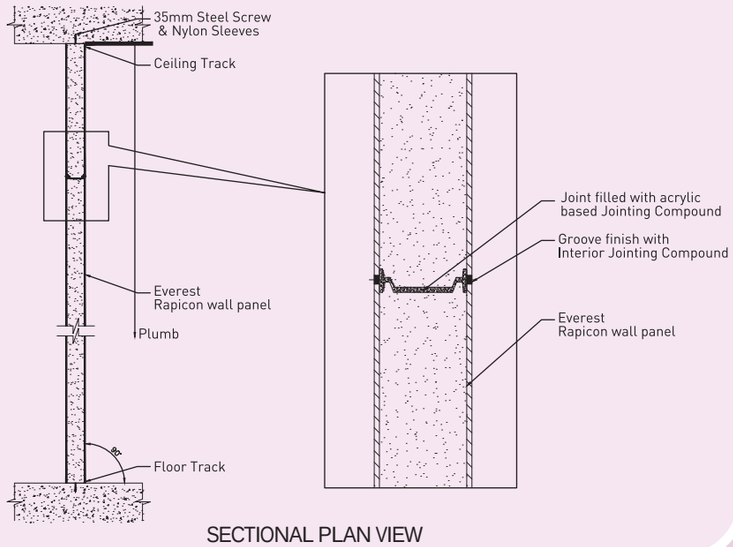
Density Comparison

The low density of Rapicon walls leads to lower weight of overall structure in comparison to traditional building materials, which reduces cost for High-rise buildings, resulting in higher ROI for builders and contractors.

FIXING, HANDLING AND STORAGE DETAILS

FIXING DETAILS

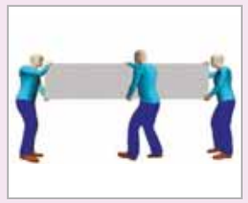




SECTIONAL PLAN VIEW

HANDLING

1. Everest Rapicon Walls should be handled vertically by 3-4 people.
2. During transportation, bottoms and corners should be protected with packing material.
3. Handle one panel at a time with gloves to avoid patch mark.

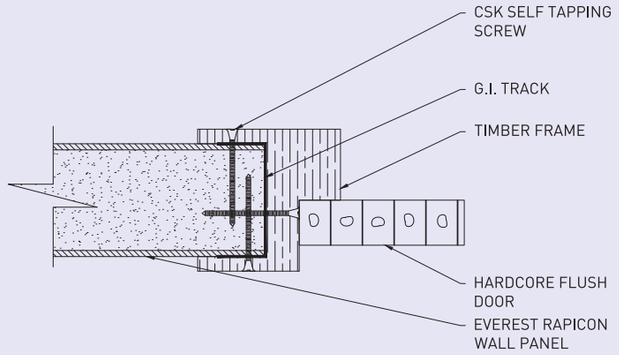


STORAGE

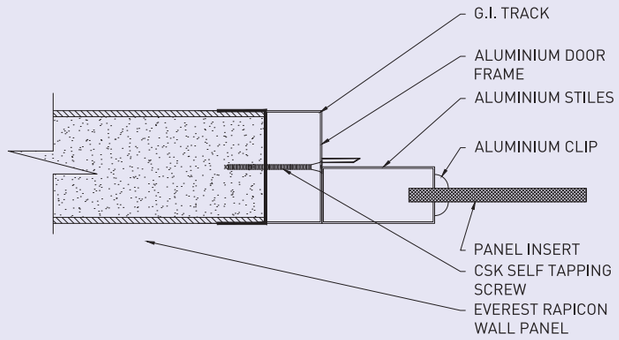
1. Stack vertically, 150-200 mm above the ground level.
2. Keep the tongue side of the panels on the top.
3. Position three metal spacers in between the panels, one at the centre of the Panel and two on either side.
4. Cover the panel with plastic/tarpaulin sheets when kept in the open.

DOOR AND WINDOW FIXING DETAILS

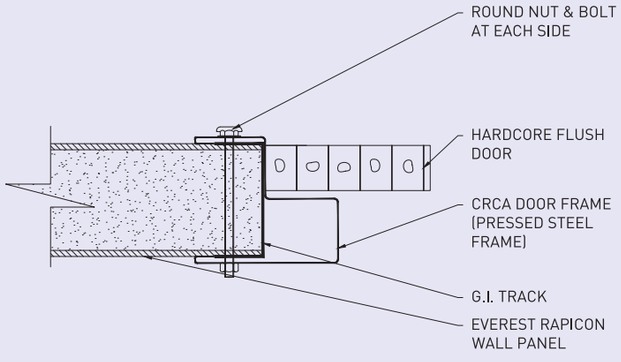
Timber Door Jamb Profile



Aluminium Door Jamb Profile

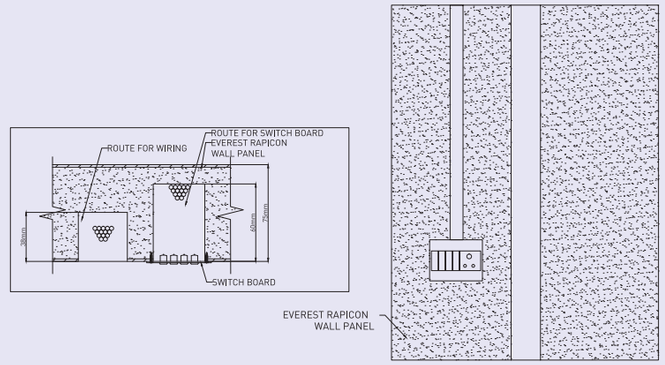


Steel Frame Door Jamb Profile



CONDUTING DETAILS

Conduting Detail



WALL PROPERTIES OF CONVENTIONAL BRICK, AAC BLOCK AND RAPICON WALLS

Advantages of Rapicon Walls

Feature	Rapicon Wall	AAC Block	Brick Wall
Savings in construction time	Excellent	Medium	Average
Savings in space	Maximum	Less	Average
Dimensional Accuracy	Excellent	Good	Average
Compressive Strength	Good	Average	Excellent
Weight	Less	Average	More
Fire Resistance	Good	Excellent	Average
Moisture Resistance	Excellent	Good	Average
Thermal Conductivity	Excellent	Medium	Average
Sound Insulation	Good	Good	Depends on wall thickness
Ease of installation	Excellent	Medium	Average

FREQUENTLY ASKED QUESTIONS

1. What is Everest RAPICON Panel?
Everest RAPICON Panel is a sandwich module having two facing sheets of 4mm/5mm (non-asbestos). As per IS 14862 Type B Category III, Everest Wall board is placed on either side of a light weight concrete core. The light weight concrete core consists of a mix of Portland cement, binders, siliceous and micaceous material aggregate suitably aerated.

2. What are the advantages of Everest RAPICON Panel?
The advantages of Everest RAPICON Panel are 4x Faster Construction, Strong and Durable Construction, Excellent surface finish, Excellent thermal and Sound Insulation properties, Space saving, Eco-friendly and much more.

3. What are the available sizes of Everest RAPICON Panel?
Everest RAPICON Panel comes in three sizes, i.e., **2.4 mtr, 2.7 mtr & 3.0 mtr in length, and 0.6 mtr width and two Thickness available: 50 mm & 75 mm.** It can be cut in any size and shape by simple carpentry saw or circular saw.

4. How are Everest RAPICON Panels fixed ?
Everest RAPICON Panels have tongue and groove interlocking system for fixing. It can be joined with the help of tongue and groove arrangement.

5. Which material is required for fixing Everest RAPICON Panels?
Everest RAPICON Panels require Floor and Ceiling U-profile GI channels, One skilled carpenter, Two or Three labours (depending on the site conditions), Structural steel, Hardware and some carpentry tools (drill, circular saw, hammer, screwdrivers, plumb, etc.).

6. Which type of application is possible by Everest RAPICON Panel?
Everest RAPICON Panel can be used in applications like prefab housing, full height and small height partitions, wall cladding, mezzanine flooring and many more temporary constructions.

7. How do we fix doors and windows on Everest RAPICON Panels?
We can fix every door and window on Everest RAPICON Panels with the help of anchor fastener. We can use the CSK bolts of size M 6 x 65 mm and nuts to panel surface. In case of steel door frame, Aluminium and timber door frame are simply fixed by 2 inch wooden screws or CSK self tapping Screws.

8. What is the Impact Strength of Everest RAPICON Panel?
Impact strength can be classified into hard body impact and soft body impact. The hard body impact is generally 10 Nm and soft body impact is generally 100 Nm.

9. What Uniformly Distributed Load (UDL) can be taken by Everest RAPICON Panel?
Everest RAPICON Panel can take UDL (at four points) on 3 mtr Everest RAPICON Panel. The UDL of Everest Rapicon panel 75 mm thickness for 2.9 mtr span is 95 Kg/m^2 and for 1.5 mtr span is 255 kg/m^2. The UDL of Everest Rapicon panel 50 mm thickness for 1.5 mtr span is 190 kg/m^2 and for 2.9 mtr span is 70 kg/m^2 as per the typical test done by our R&D.

10. What axial load can be taken by Everest RAPICON Panel?
Axial load applies for load bearing structures only. The axial load /metre width for 50 mm thickness panel is 37.5 ± 2.5 kg/m2 or ± 7 % and 75 mm thickness panel is 56.5 ± 3.8 kg/m2 or ± 7 %.

11. Can Everest RAPICON Panels be used as a flat roof?
Yes. But not recommended by Everest Industries Limited.

12. What is the maximum height up to which Everest RAPICON Panel wall can be constructed?
The module can be constructed up to 4.5 mtr of height for non-load bearing walls. Walls more than 4.5 mtr of height would require a suitable steel frame work.

13. What is the maximum length up to which Everest RAPICON Panel wall can be constructed?
A maximum length of 6 mtr can be constructed without any cross walls or supports, intermediate supports with steel would be required for larger length.

14. What is the effect on Everest RAPICON Panels in seismic zones?
Everest RAPICON Panel structures are joined with tongue and groove arrangements. These joints are not rigid and therefore it allows lateral movements to take place. This enables the structure to withstand the movement in the earth's crust.

15. Can any module damaged during installation be repaired?
Modules can easily be repaired by patching or flushing them (with the help of joining compound and fibre tape).

16. How to do electrical conduiting and plumbing in Everest RAPICON Panels?
For electrical conduiting and plumbing, we recommend 75mm Everest RAPICON Panels. For all fixing details, please refer our code of practice.

17. What is the effect of weather on Everest RAPICON Panels?
Everest Rapicon Panels are designed for interior wall applications and also partitions wherever there is no direct exposure to outside weathering conditions. However the exposed surface will have to be coated with exterior paints.

18. Will Everest RAPICON Panel structure be stable in high wind zones?
RAPICON structures are designed by our Product Support Cell headed by qualified engineers who thoroughly study the site conditions and design according to the zones and terrains.

19. Can we construct G + 1 Building with Everest RAPICON Panels?
We can construct G + 1 with Everest RAPICON Panels, but that totally depends on site conditions, structural detail etc.

20. How facing sheets adhere to core? Don't they delaminate if loaded axially?
The facing sheets adhere to core because of the process known as cast-in situ. The core has cement which blends with the facing sheets forming a strong cement bond that is fully cured before leaving the factory. The chances of delamination, if loaded axially, are very remote unless the load is more than the specified.

21. How to fix tiles on Everest RAPICON Panels?
Ceramic or other tiles can be fixed by using tile adhesive, locally available in the market. Tile size recommendation is 4" x 8" or 3" x 6".

22. Can Everest RAPICON Panels be cut or drilled with nails or screws?
Everest RAPICON Panels have excellent workability. They can be cut with a regular carpentry saw or power circular saw. It is recommended to pre-drill the panels before nailing or fastening nuts and bolts.

23. What is the weight of Everest RAPICON Panel? Does it need any crane to handle or can it be manually handled?
Everest RAPICON Panels are very light in weight. The weight of one module of size 3000mm x 600mm x 50mm is approx. 70 kgs which can be handled manually.

24. How much capacity of Richter scale can it bear during earthquake?
Everest RAPICON Panel is very light in weight and it has tongue and groove system for fixing. That's why, it bears a very high scale.

25. Is there any reinforcement material in between two facing sheets?
No, there is only hard core in between two facing sheets.

26. Can you provide Everest RAPICON Panel with reinforcement?
Yes, we can provide Everest RAPICON Panel with reinforcement on special terms and conditions.

27. What is the percentage of breaking while loading, unloading and transportation?
Everest RAPICON Panel is light in weight so it can be handled easily and the percentage of breaking in loading, unloading and transportation is very less.

28. Can Everest RAPICON Panel be directly put on floor without channels ? Can we in-build it in floor directly?
Everest Panels can be used in Mazanine flooring etc where the applications are limited to its UDL capacity with a safety factor of at least 2.5. However it can not be used for flooring application where human safety factor is invlolved.

29. Is it costlier than brick work?
It is totally dependent upon the size of structures. If the size of structure is very less then Everest RAPICON Panel structure is very expensive, but if the size is large then the overall costing is 10-15% higher than brick works with extra benefits.

30. Is it possible to erect Everest RAPICON Panel without civil work?
Yes, it is possible to erect Everest RAPICON Panel structures without civil work. We can install this structure on framework of MS sections.

31. What is the difference between temperature (inside & outside) while using Everest RAPICON Panel ?
Everest RAPICON Panel has a very good property of thermal insulation. The thermal conductivity of Everest RAPICON Panel is 0.12 K.Cal/hm^{o}C so it maintains the inside temperature.