





## REVOLUTIONIZING CONSTRUCTION WITH STRENGTH, SPEED, AND SUSTAINABILITY

What if your buildings could be stronger, lighter, and more resilient than you ever imagined? At RAPIDCON, we've turned that "what if" into a reality.

We are INDIA's biggest manufacturers of high-performance 3D SCIP (Structural concrete insulated panels) / EPS (Expanded polystyrene) panels, engineered to elevate construction standards for homes and commercial spaces.





## THE POWER OF RAPIDCON 3D SCIP / EPS TECHNOLOGY

3D SCIP / EPS construction technology is 3 times stronger than traditional brick or block construction methods, making them the ultimate solution for building structures that stand the test of time. With features like:

- 1. Earthquake proof:** Absorbs seismic shocks, ensuring your building remains safe and secure from earthquakes.
- 2. Ballistic proof:** Provides an added layer of security, protecting your loved ones and assets.
- 3. Good thermal insulation:** Reduces heat transfer, keeping your building cool in the summer and warm in the winter.
- 4. Seismic resistance:** Withstand seismic forces, ensuring your building remains intact.
- 5. Hurricane proof:** Resists high winds and flying debris, safeguarding your building.





## THE BENEFITS OF RAPIDCON 3D SCIP / EPS TECHNOLOGY

Our 3D SCIP / EPS panels offer numerous benefits, including:



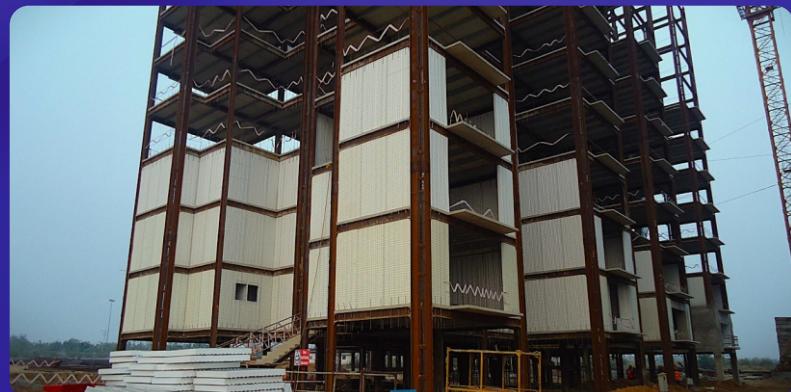
- 1. Longer construction life:** EPS construction having a lifespan of over 100 years, reducing maintenance and replacement costs.
- 2. Lightweight:** About 60% lighter than brick construction, reducing foundation costs and structural stress.
- 3. Water conservation:** EPS Technology save about 50% of water consumption during construction, reducing your environmental footprint.
- 4. Time-saving:** EPS technology reduce construction time up-to 20%, getting your project completed faster.
- 5. Cost-effective:** EPS construction technology can save up-to 30% cost as compared to traditional brick or block construction methods.



## RAPIDCON 3D SCIP / EPS CORE BUILDING SYSTEM

Perfect for modern construction projects, 3D SCIP / EPS panels can be used for all the construction needs providing a faster, more economical and lighter solution compared to the traditional building methods.

RAPIDCON EPS Technology guarantee substantial savings when compared with the traditional systems for the construction of single or multi-storey houses and of public buildings up to skyscrapers.



## WHAT IS RAPIDCON 3D SCIP / EPS CORE PANELS?

The 3D SCIP {Structural Concrete Insulated Panels} or EPS {Expanded Polystyrene Panels} are based on the association of two raw materials: high tensile steel wire and expanded polystyrene. These two components are joined together in the form of panels to exploit their main physics and technical characteristics.

## MONOLITHIC AND SEISMIC PROOF

EPS panels are finished with regular cement plaster of minimum 25mm thickness on all sides which provides the bearing capacity to the structure. The EPS component makes the panel light-weight, weather-proof sound-proof, thermally insulated and compression-resistant, while the high tensile steel wire component ensures of the panel's tensile strength which makes the construction seismic proof.

## BENEFITS OF 3D SCIP / EPS PANEL BUILDING SYSTEM

- Up to 3 times stronger than brick / block wall.
- Thermally insulating and energy saving.
- Quick and easy to build even with unskilled workers.
- Suitable for high wind and earthquake zones.
- Reusable and eco friendly.





## LETS EXPLORE THE FEATURES OF RAPIDCON 3D SCIP / EPS PANELS IN DETAIL

Its strength, durability and lightweight nature makes it a versatile and popular building product. Applications include insulated panel systems for WALLS as well as ROOFS for both domestic and commercial buildings.

The modularity of the RAPIDCON 3D EPS core panels favours absolute design flexibility and high degrees of integration with other building systems.

The lightweight panels make them extremely easy to handle, assemble, and use to build an unlimited range of structures, even in adverse working conditions, earthquake-prone areas and climate extremes.

EPS Foam is also well proven in civil engineering applications where its required inherent strength, means it can support structures such as roadways and railways with complete ease.

### RAPID INSTALLATION

The RAPIDCON 3D SCIP / EPS building system has been used in many building projects, in diverse conditions, and with all types of labors in different parts of INDIA. Because of its light weight, assembling speed and the ease of building, these building experiences showed a marked reduction in construction time compared to traditional building methods.

### CYCLONE RESISTANCE

Structures built with the 3D SCIP / EPS system in areas of high cyclonic risk have demonstrated their ability to resist the most devastating cyclones. Laboratory tests of impact resistance have confirmed the cyclonic resistance of the 3D SCIP / EPS buildings, suitable to cope with the pressures of hurricanes and breakthrough induced by flying objects.

### THERMAL INSULATION

The 3D SCIP / EPS buildings perform brilliantly in both insulation and load-bearing functions: the thickness and density of the panel can be customized to deliver specific thermal insulation requirements. Furthermore, the EPS core extends throughout the surface which makes up the building envelope, eliminating thermal bridging and keeping the building insulated.

### BLAST RESISTANCE

Tests indicate that structures built using RAPIDCON 3D SCIP / EPS system are able to withstand explosions measuring horizontal forces of over 29.5 tons per metre square. The series of tests has been carried out on a variety of SCIP / EPS panels finished in different types of high strength concrete where the panels performed excellently.

### VERSATILITY

The RAPIDCON 3D SCIP / EPS system promotes complete design flexibility, being equipped with a complete range of building elements: load-bearing walls, curtain walls, slabs and stairs. Therefore, the system is suitable for constructing buildings of any type. In addition, it is possible to easily obtain any geometric shape by simply cutting on-site.

### EASY INTEGRATION

RAPIDCON 3D SCIP / EPS system is a completely versatile Building System compatible to other existing building systems; in fact, RAPIDCON 3D SCIP / EPS system can also be used to complete reinforced concrete or steel structures. In addition, RAPIDCON products can be easily anchored to other construction elements, such as steel, wood, and pre-stressed concrete.

## LETS EXPLORE THE FEATURES OF RAPIDCON 3D SCIP / EPS PANELS IN DETAIL

### LOAD CARRYING CAPACITY

Numerous lab tests, performed in different parts of the world, have highlighted the high load carrying capacities of the panels which, after compression testing with centred load performed on a single finished 3D SCIP / EPS panel, 2700mm high, have shown that they withstand a maximum load of up to 1530 kN/m  $\approx$  156 ton/m. The monolithic joints of the building system provide a high level of structural strength to buildings.

### EARTHQUAKE RESISTANCE

Structures built using RAPIDCON 3D SCIP / EPS building system can withstand, completely undamaged, significant seismic activity. Buildings made using 3D SCIP / EPS panel are lightweight and hence have a low seismic mass but are simultaneously highly rigid due to the presence of two sheets of reinforced plaster that interact to create a 'monolithic shell' of the whole structure which makes the building super strong.

### FIRE RESISTANCE

RAPIDCON 3D SCIP / EPS panels are perfectly encased by external coats of concrete on all sides of the panel to inhibit combustion. Fire resistance has also been verified in tests performed in various sites. A wall erected using a 100 mm core single panel with 170 mm thickness provides REI 120 fire resistance, meaning that the panels can resist fire for 120 minutes with respect to load bearing capacity, integrity and insulation.



### LIGHTNESS, EASE OF TRANSPORT AND HANDLING

RAPIDCON 3D SCIP / EPS system is lightweight and highly rigid thus making them easy to handle and transport, even in the most adverse conditions. A building using RAPIDCON 3D SCIP / EPS system is up to 50% lighter than the traditional structures. This greatly reduces the need for heavy foundations, columns and beams, accordingly.

### WIDE CHOICE OF FINISHES

Buildings constructed using RAPIDCON 3D SCIP / EPS system can be completed using a variety of finishes, including traditional painting or smoothed plaster. Further, the surface of the walls has the appearance of reinforced plaster that can easily accommodate all types of wall coverings, including stone tiles and rain-screen cladding etc.

### COST EFFECTIVENESS

Compared to traditional building methods, RAPIDCON 3D SCIP / EPS system achieve far better results, at considerably reduced costs. A building framework constructed using the RAPIDCON 3D SCIP / EPS system is estimated to cost approximately 15% less than that built using traditional building methods with similar features. Further, the reduced construction period and reduced manpower leads to additional savings and better performances.



## EPS PANEL SPECIFICATIONS

Buy our panels for your construction needs and save up-to 30% of construction cost as compared to traditional brick construction... Perfect for builders, contractors, and homeowners.

### 50mm Panel

The perfect panel for building thin partition wall / compound wall and parapet wall.

120mm thick wall after plaster

- Size: 1m x 3m (32sqft)
- Thickness: 50mm (mesh to mesh)
- EPS core thickness: 50mm
- Mesh pitch: 75x75mm
- Mesh wire dia: 2.5mm
- Truss wire dia: 2.5mm

### 75mm Panel

145mm thick main wall / partition wall & sloped roof or non load-bearing slab

145mm thick main wall / 150mm thick slab after concrete

- Size: 1m x 3m (32sqft)
- Thickness: 75mm (mesh to mesh)
- EPS core thickness: 75mm
- Mesh pitch: 75x75mm
- Mesh wire dia: 2.5mm
- Truss wire dia: 2.5mm

### 100mm Panel

The most recommended panel for building main wall / residential slab.

170mm thick Main wall / 200mm thick Slab after concrete and ceiling plaster

- Size: 1m x 3m (32sqft)
- Thickness: 75mm (mesh to mesh)
- EPS core thickness: 75mm
- Mesh pitch: 75x75mm
- Mesh wire dia: 2.5mm
- Truss wire dia: 2.5mm



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### 150mm Panel

Commercial wall / Roof panel

(only produced on special orders, MOQ of 100 panels per order 20 days dispatch)

- **Size:** 1m x 3m (32sqft)
- **Thickness:** 150mm (mesh to mesh)
- **EPS core thickness:** 150mm
- **Mesh pitch:** 75x75mm
- **Mesh wire dia:** 3mm
- **Truss wire dia:** 3mm

### 250mm Double Panel

Foundation / Retaining wall

250mm Double EPS panel with 100mm space in between for concrete.

- **Size:** 1m x 3m (32sqft)
- **Thickness:** 75mm +100mm + 75mm
- **EPS core thickness:** 75mm + 75mm
- **Mesh pitch:** 75x75mm
- **Panel mesh & truss wire:** 2.5mm
- **Secondary Truss:** 6mm TMT

### Customized Panel

We can make customised EPS panels as per customer's specific structural demands.

- **Panel Size:** 1x1m to 1m x 3m
- **EPS core thickness:** 50mm to 300mm
- **EPS Density:** 12D to 32D / KG per sqm
- **Mesh pitch:** 25mm to 100mm
- **Mesh wire dia:** 2mm to 6mm
- **Truss wire dia:** 2mm to 6mm



## ON-SITE SUPERVISION SERVICE

Building with our revolutionary EPS technology is smart, strong, and swift. To ensure your vision is executed flawlessly, we offer expert on-site supervision – your dedicated partner in bringing your RAPIDCON project to life with precision and efficiency.

## WHY TRUST OUR ON-SITE SUPERVISION?

- 1. Expertise, Every Step of the Way:** Our seasoned supervisors are intimately familiar with the nuances of SCIP/EPS panel construction, ensuring optimal installation and performance.
- 2. Precision Perfected:** We meticulously oversee every stage, guaranteeing adherence to design specifications and RAPIDCON's high-quality standards.
- 3. Efficiency Amplified:** Our proactive approach anticipates challenges, streamlines workflows, and maximizes the 20% faster construction potential of our technology.
- 4. Quality and speed You Can See (and Feel):** We ensure the 3x stronger, earthquake-proof, hurricane-proof, and ballistic-resistant qualities of your RAPIDCON structure are built in, not just promised.
- 5. Your Peace of Mind, Our Priority:** Relax knowing your project is in the hands of experts dedicated to delivering exceptional results and the long-term benefits of RAPIDCON construction.

With our on-site supervision, you're not just building; you're building with confidence, knowing every panel, every connection, and every detail is handled with expertise and care. Let us be your trusted partner in realizing the full potential of RAPIDCON's EPS technology.



## GREEN TECHNOLOGY SUSTAINABILITY AND ENERGY EFFICIENCY

The RAPIDCON 3D SCIP / EPS system helps to achieve high levels of energy efficiency which conform to various energy efficiency regulations. The panel's insulating properties provide significant improvements to indoor thermal comfort. Analysis shows that buildings built using EPS Technology demonstrate a reduction of up to 60% in carbon emissions compared to traditional buildings.

EPS panels are non-toxic, fully recyclable, and eco-smart offering up to 80% cost savings during reconstruction by reusing the same panels, plaster, and concrete, while significantly reducing carbon emissions. Our EPS technology enables a circular economy approach, where old EPS buildings can be demolished in a way that the materials can be reused to construct new buildings, significantly reducing carbon emissions and promoting eco-friendly construction practices.

RAPIDCON's EPS technology has earned esteemed recognition from the Government of India and Indian Defence for delivering ballistic-proof, eco-friendly, and time-efficient construction solutions. While Our membership with the IGBC (Indian Green Building Council) reflects our commitment to eco-friendly sustainable and future-ready building practices.





## FEW EXAMPLES OF EPS CONSTRUCTION WORK ON-SITE





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## WHY CHOOSE RAPIDCON?

3 simple reasons to choose RAPIDCON



### Innovative technology:

3D SCIP / EPS technology is the future of construction, offering unparalleled strength, speed, and sustainability.



### Quality assurance:

We ensure the highest quality standards in our products, guaranteeing durability and performance.



### Expertise:

Our team of experienced professionals provides expert guidance and support, ensuring your project is a success.

At RAPIDCON, we revolutionize construction with advanced SCIP / 3D EPS Panel technology—delivering stronger, and energy-efficient building solutions. Our innovative solutions offer superior insulation, durability, and sustainability, reducing carbon footprint and costs. **Experience the future of construction today.**



## FILL THE FORM, GET A QUOTE & START YOUR PROJECT!

Looking to start a new construction project or need EPS panels? Fill out the form with your project details and our expert team at RAPIDCON will review your request and get back to you quickly with the best options.



Scan QR code



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