







### YRS GROUP

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CHANDIGARH





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#### VISION

To be a well recognized organization delivering top notch products in the field of Insulation, Refractory, Pre-Insulated Sandwich Panels, Pre – Engineered Buildings, Metallic Profiled sheets, by producing excellent quality products having extra durability designed to meet the customer needs. We focus on energy conservation at every stage, provide implementation & reducing overheads by proper planning and control.

#### MISSION

- Commitment & Complete Satisfaction of our Customers
   Customer is our first priority. We give our customer high priority and encourage long lasting relationships. We honour our Commitments.
- Deliver of High Quality & Innovative Product
   We focus of outputs and deliver high quality products to our customers in time.
- High End Customer Support
   We strive to continuously improvement; provide best support to our customers, suppliers, financial institutions, employees and other stake holders.
- Safety
   We care for products and ensure their safety.
- Healthy Working Environment
   We treat everyone with respect and care.

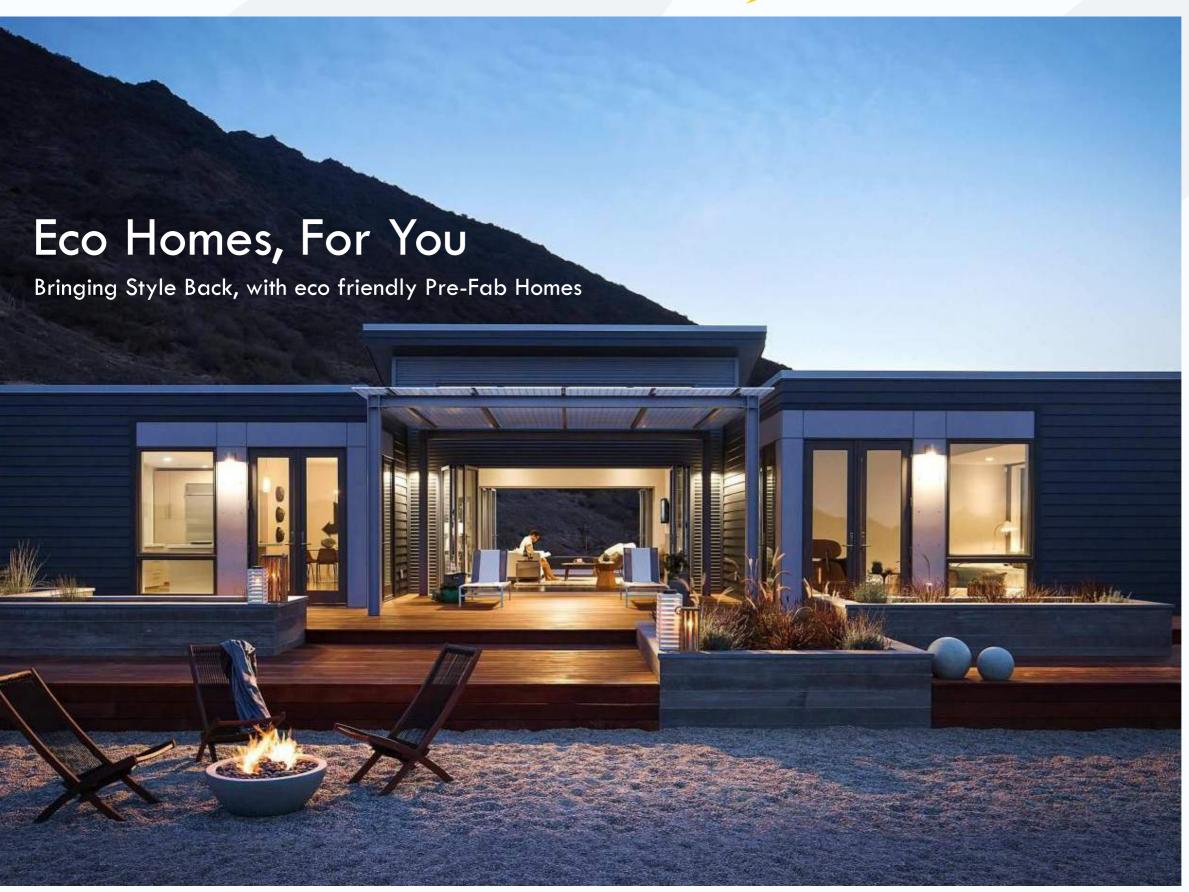
#### **CORE STRENGTH**



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## Sandwich Panels & Pre-fab Construction modular

Building construction with Pre-fab Construction and Sandwich Panels systems made of pre-painted galvanised steel with Sandwich Panels rigid PIR/ PUR insulation, helps to create sturdy, aesthetic buildings that save money, time, effort, and skill in Sandwich Panels and Pre-fab Construction.

#### Why Pre-Fab Homes

Convenience & speed have become the keywords of the present era, only because time is precious. This trend has struck every industry out there & the real estate sector is no exception. Builders are putting their best efforts to build your dream home as quickly as possible. But are unable to do so because of traditional construction practice.

So, what's the solution? Prefabricated homes. Yes, 'prefab construction' is a new concept in India. It has already marked its presence by the super fast completion time that too within an affordable price across the globe.

The greatest advantage of having a prefab home is that its components are made away from the construction site. The only thing the experts do is to assemble those parts at your desired location & there you go. Your prefab home is ready! It's almost like a magic where the secret lies with the technology & the specialized engineers.

Prefab homes which are also known as modular homes are extremely energy efficient in nature. Hence you can save a good amount on your electricity bills. Additionally you can customize it anytime you wish.

Maintaining that prefab villa doesn't require much investment as these are quite durable structures that are suitable for any climate. And finally, prefabs are eco friendly homes that take care of your 'go green' endeavours. Home cannot get better than this, isn't it?



YRS capabilities in modular construction extends from concept to completion. We also ensure maintenance of your InstaBuild structure throughout its lifecycle Sandwich Panels and Pre-fab Construction.

#### Ideal for

- Storage Sheds
- Living Accommodations
- Site offices/accommodations
- Hotels & Resorts

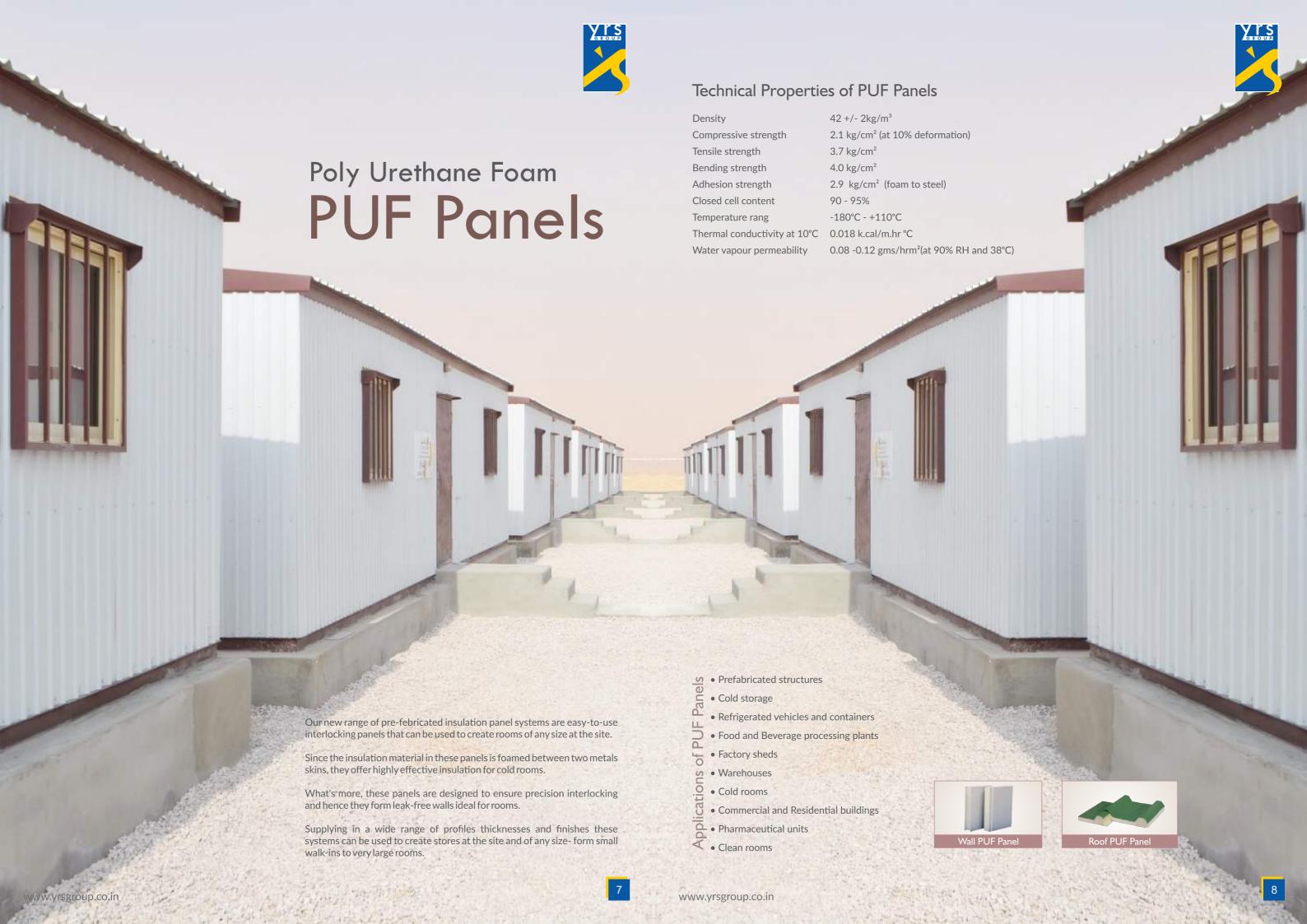
- Mobile offices/Hospitals
- Schools
- Army Shelters
- Labour Camp

- High Altitude Living Shelters
- Security Cabins

#### Advantages

- Hygienic
- Easy to clean and maintain
- Light-weight and sturdily built
- Superior power and thermal-efficiency
- Allows for re-location
- Eco-friendly with CFC-free insulation

- Provides acoustic insulation
- Quick, efficient construction
- Easy, neat, and clean site work
- Allows light fixtures, A/c diffusers, pipes, etc.
- Ideal for certifications and approvals



#### **PUF SPRAY**

PUF Spray For Energy Saving of Buildings Polyurethane foam spraying is the most promising technique of creating heat/cold insulation for energy saving and waterproof coatings. Polyurethane foam's ability to cover complex-shape surfaces with excellent adhesion makes it ideal insulating material. It allows architects to design and implement thermal insulation for various types of buildings that have complicated forms such as barges, arches, columns, etc.

Polyurethane foam spraying on roof covering saves up to 80% of time and up to 50% of money in comparison with traditional methods of insulation. Due to its specific handling abilities, polyurethane foam is ideal for winterization of attics, interior sides of roofs it has superb adhesion even to ceiling surfaces as well as vertical structural units such as walls and frontispieces.

SPF has a closed cell structure that makes it water resistant. It has low Thermal Conductivity factor (0.02 to 0.03 W/ (m.K). However, it has to be protected by elastomeric coatings or other coverings (such as aggregate) to prevent ultra-violet-induced surface degradation. Such coverings can also be used for other purposes, including, inhibiting moisture vapor transmission, enhancing the aesthetics of the system, increasing the impact and abrasion resistance of the system, achieving self extinguishing properties and meeting code requirements.

# SPRAY POLYURETHANE FOAM (PUF SPRAY)

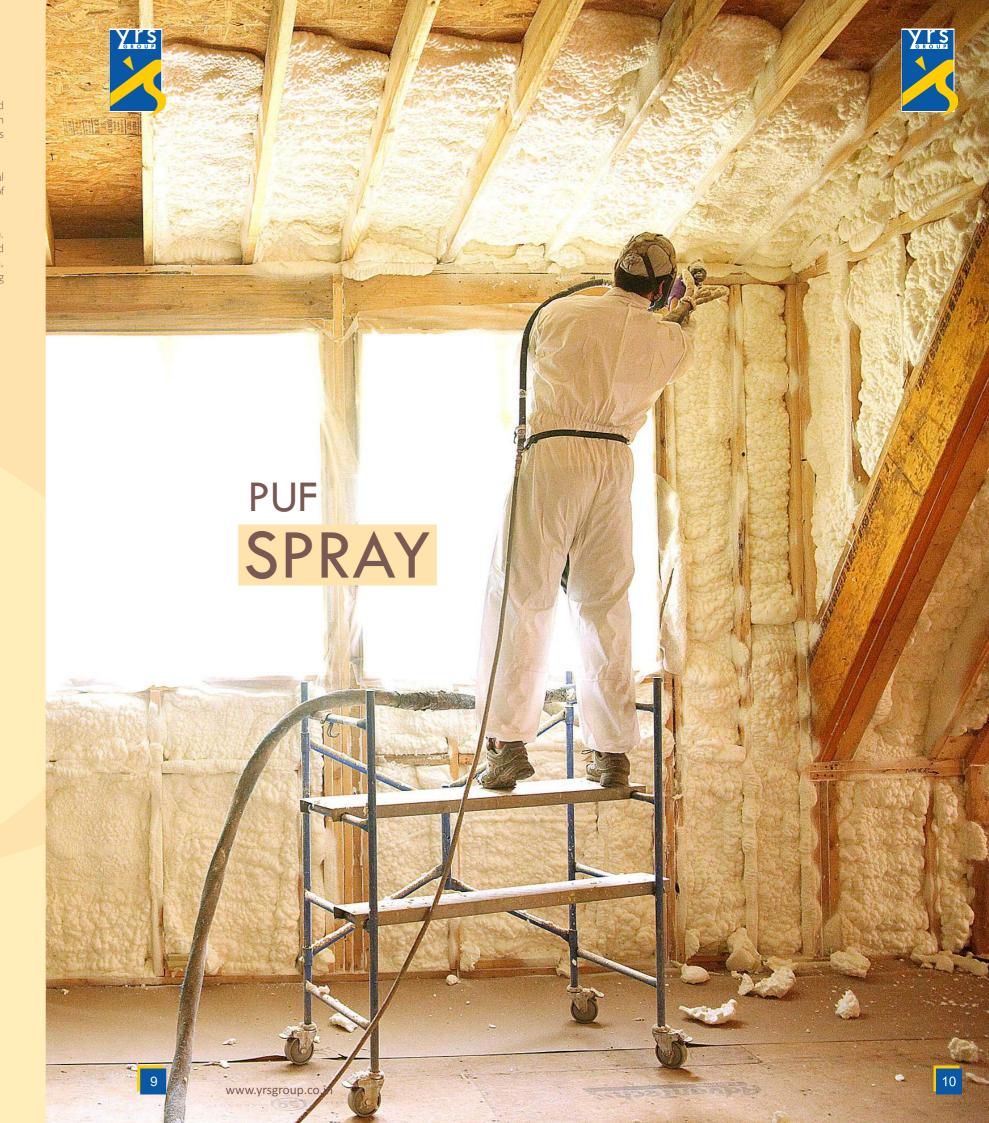
Polyurethane foam spraying is the latest technique for insulation of Building &water proofing

#### ADVANTAGE

- 1. Complete insulation of surface without any joint or a heat or thermal bridges which leads to heat loss and adversely affect the insulation properties.
- 2. It can bring down the temperature difference from outside to inside of up to 7 to 10 degree resulting in energy saving in the form of low electrical bills.
- 3. Density of the material is very low i.e 40to 50 kg per meter cube, as a result it add very little weight to the existing structure.
- 4. In can be sprayed on the profile sheet with extra coating to protect from sunrays and isolating it from harsh weather conditions will result in increased life of sheet due to protection from the rusting.
- 5. Even in harsh hot and cold weather it provides a pleasant temperature under the roof, which is beneficial to the workers working under the industrial sheds so that they can work efficiently.
- 6. Good acoustic properties for reducing the sound of rain drops on the entire sheet.
- 7. The process of spraying is done on deck and it doesn't require the factory to be closed for this work, a normal 8. production can be done under roof without affecting the work.
- 9. The life of the spray PUF is beyond 25 years.
- 10. The product does not pose any health problem to building occupants.

# TECHNICAL SPECIFICATIONS OF SPF CHEMICAL

- Density: 48 ± 2 kg/m3
- Compressive Strength at 10%: 2.1 kgs/cm2
- Deformation
- Tensile Strength: 4.0 kgs/cm2
- Bending Strength: 4.2 kgs/cm2
- Adhesion Strength: 3.0 kgs/cm2 (Foam to Steel)
- Dimensional Stability (48 Hr): 0.1% 25°C
- +38°C&90%RH:0.1%
- +100°C:0.4%
- Closed Cell Content (%): 90-95%
- Flammability: Self Extinguishing B I DIN 4102
- Temperature Range: -60°Cto + 110°C
- Temperature Conductivity: 0.02 w/mkWater absorption: 0.2% volume at 100% RH
- VapourPermeability: 0.8/0.12 GMS/HR m2 (AT 90% RH & 38°C)







Pre-Engineered

**Buildings** 

**Pre-Engineered** 

Buildings consist of:

#### **Primary** Member

#### Consist of I beams, H beams, and girders

- Formed by welding together steel plates to form H/I shaped Sections
- Framing members vary in web depth according to the local loading effects
- Large plate dimensions are used in areas of higher load effects.

#### Secondary Member

- Consist of Purlins and side runners
- Made out of cold form sections in Z and C shape as per design
- Size and depth of sections vary as per design

#### **Roof & Side** Cliading

- Consist of: • Profiled sheets
- PUF insulated panels
- Any other material
- Choice of material depends upon the use of the building, prevailing weather conditions, etc.

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The Pre-Engineered Building system is, without doubt, one of the fastest growing building systems in the world. The advantages that it offers appeal to all parties involved in the project. After all, who can resist a building system that offers speed, quality and value. PEB are suitable for both industrial and commercial operations.

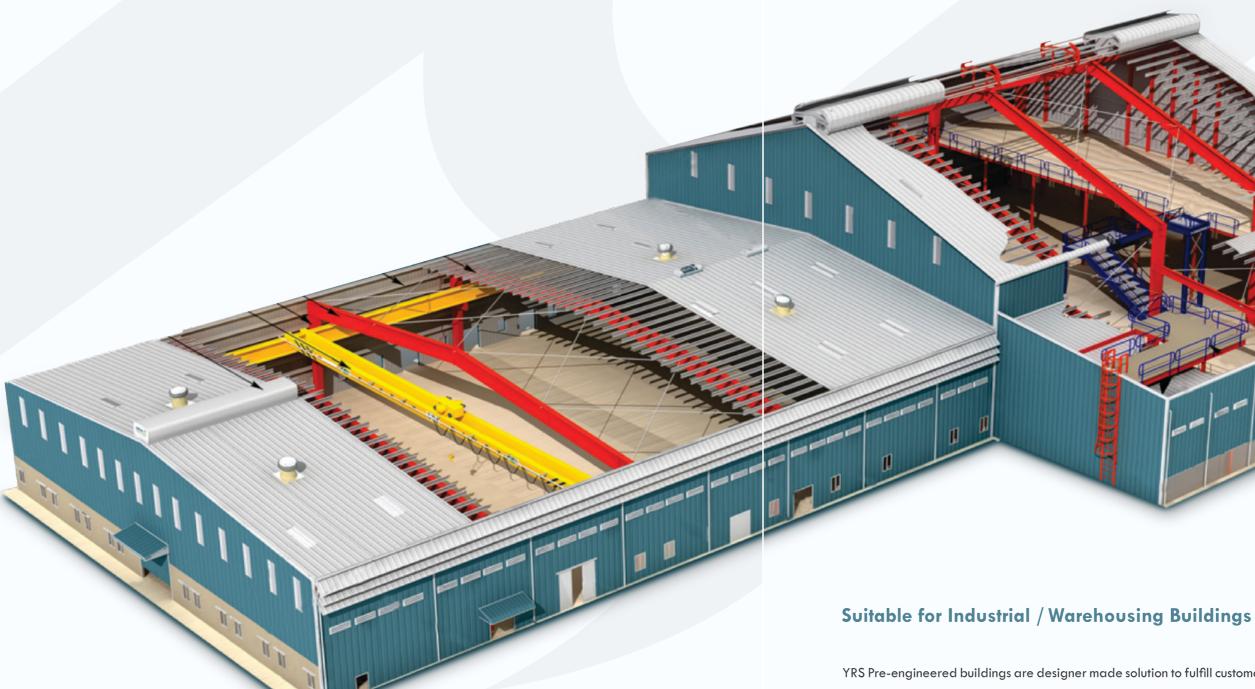
No fabrication is carried out on site and the required building can be assembled in a short period of time.

Clear span between bearing points, bay spacing, roof slope, live loads, collateral loads, wind uplift, deflection criteria, internal crane system, maximum practical size and weight of fabricated members are considered while designing a robust Pre-Engineered Building





## **Typical Metal Building Systems** & Its Constituent Elements



YRS Pre-engineered buildings are designer made solution to fulfill customer needs and requirements.

#### Some salient features

- Can be designed according to the individual needs and requirements and later can be expanded to fit the needs, can be dismantled and relocated easily.
- Unique design of steel reduces the weight and handles extremely large load.
- Shorten the time from design to finished building erection compared to traditional building system.
- Wide span without or few intermediate column provides more open space.





## **Applications of**

## **Pre-Engineered Buildings**

Warehouses and Storage Sheds

Industrial Sheds & Workshops

Sports Complexes

**Aviation Hangars** 

Factory Buildings

Cold Storage

Showrooms

# Pre-Engineered Buildings

**Environmental Friendly** 

Energy Efficient

Cost Effective

Quickly Assembled

Earthquake Resistant

Termite Proof

Durable

Easily Modifiable

Fire Resistant

Waterproof

Aesthetically Appealing

Insulated