

A-Star Insulation & Refrigeration



**Add: Survey No. 70/6/2, Gram- Siloda Buzurg, Sanwer Road
Indore 453551 (M.P.) INDIA**

Web: www.astarinsulation.com

Email: astarindore@gmail.com

Call us on:- 08048039693

AboutUs:

A-Star Insulation & Refrigeration is one of the leading manufacturers of Prefabricated Puf Panels, PEB shelters, office Containers, & Prefabricated housing in India. We are one of the biggest manufacturers in central India with an approx land area of 40000 SQF & annual production capacity of 2000000 SQF. Our company is well known as trusted solution provider in Prefabricated Puf Panel Industry.

A-Star offers wide range of PUF Insulated Panels for the various applications:

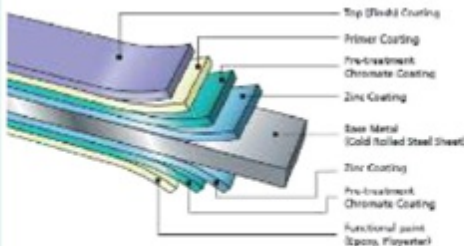
- Cold Storages
- CA chambers
- Ripening Chambers
- Pack Houses
- Freezer Rooms
- Clean Rooms
- Control rooms
- Insulated Roofing
- Wall Partitions & Cladding
- Walk On Ceilings and many more.
- Prefabricated Shelters for offices
- Porta Cabins
- Health Centres and Schools
- Accommodation Shelters
- Community Shelters
- Communication Shelters
- Insulated Shed
- High Altitude Accommodation Shelters
- Sub Zero Temperature Areas

Benefits:

- Pre-engineered and factory made for precision.
- Internationally accepted and meets or exceeds all building code specifications
- Higher energy savings due to very low thermal conductivity
- Flexibility in design and choosing various options on fascia of panels and colours
- All weather proof construction and Maintenance free
- Long lasting value with controlled quality, accuracy & speed of construction and caters for better functionality and application.

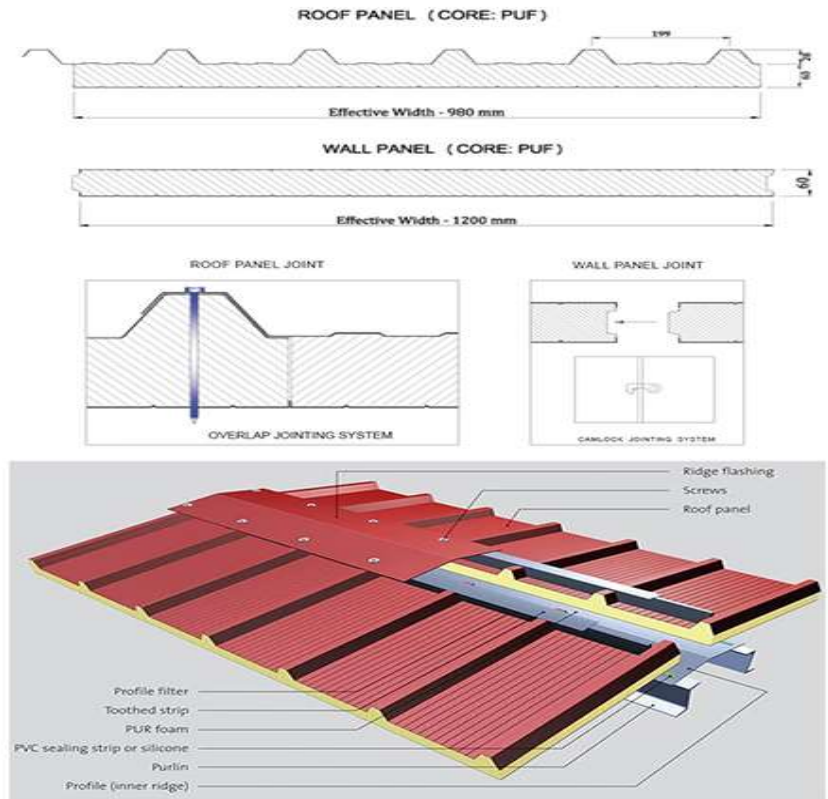
Technical Specifications of PUF Panels

Sr.No.	PARAMETERS	DESCRIPTION
1	Average PUF Density	40 \pm 2 kg/m ³
2	PUF Blowing Agent	Cyclopentane (CFC & HCFC Free)
3	Insulation Material	Polyurethane foam
4	Temperature range	+90°C to -60°C
5	Panel Type	Discontinuous type with camlock
6	M.O.C. of Camlocks	Body material of Camlock is HIPS & male latch is made of GI sheet. Camlock joins panels in easy assembly and panel-to-panel joints are leakage resistant
7	Type of Panel joints	Tongue & Groove Joint with Cam lock and all side rubber gaskets
8	Corner Panel Available	12" x 12" x 162" (maximum Length)
9	Length of Wall & ceiling Panel	2032 mm to 12000 mm 80" to 472.5" inch
10	Ceiling Suspension items with specs	MS bolt with thermal breaking cap. PVC Round Plate 6 mm thickness x 90 mm diameter Aluminium/MS washer plate for load distribution Anchor bolt (MS) hanging bolt with 40 mm washer 2.0 mm thickness Sealing to panel MS road Clamp with an insulated crown.
11	Closed cell content	90 to 95%
12	Vapour Permeability	5.5mg/PASM
13	Water Absorption	Less than 2%
14	Fire Grade Polyurethane PUF Panel	FR Grade B3 (Fire Retardant Grade)
15	Compressive Strength at 10% Deformation	* 175 kN/mm ² (For PUF only)
16	Tensile Strength	0.11 N/mm ² (For PUF only)
17	Adhesive Strength (Foam to Sheet)	0.45 kg/cm ²
18	Dimension Stability	Less than 2%
19	Panel Facing Availability	With Rib or plain on Demand (Ribs are provided for more strength)
20	Wall & Ceiling Panel facing Material	<ul style="list-style-type: none"> Pre Painted Galvanised sheet , Thickness 0.4mm Plain Galvanised sheet , Thickness 0.4mm S.S. Sheet, Grade 316, 0.50mm, finish 2B/0.6 mm matt No.4 S.S. Sheet, Grade 304, 0.50mm, finish 2B/0.6 mm matt No.4
21	Floor Panel Facing Material	<ul style="list-style-type: none"> PUF Panel with both side tarfelt sheet. PUF Panel with both side 0.4mm GIPP sheet. PUF Panel with outside GIPP sheet, inside 9 mm thick marine ply with 2 mm thick Aluminium/SS Chequered Plate
22	Specification for Colour Coating	<p>A. RAL No. : Astar Off white</p> <p>B. Indian Standard code Colour Coating : IS 14246 Galvanizing : IS 277 Base Metal : IS 513</p> <p>C. Organic Coating : Type RMP (Polyester)</p> <p>D. Zinc Coating : 120 GSM</p> <p>E. Top Primer (Thickness in micron 'μ') : 5 \pm 1 μ</p> <p>F. Top Coat (Thickness in micron 'μ') : 20 \pm 1 μ</p> <p>G. Back Primer (Thickness in micron 'μ') : 4 \pm 1 μ</p> <p>H. Back Coat (Thickness in micron 'μ') : 4 \pm 1 μ</p> <p>I. Guard Film (Thickness in micron 'μ') : 40 \pm 3 μ</p> <p>J. Salt Spray Test /Humidity Test : 750 hrs. /1000 hrs.</p>

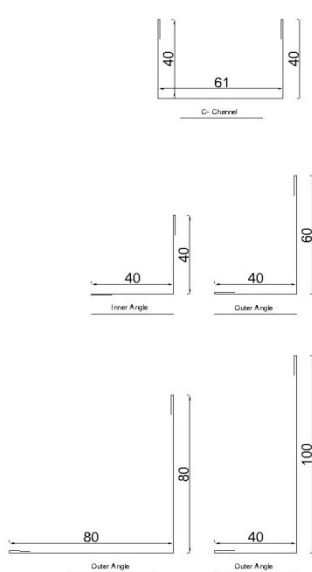
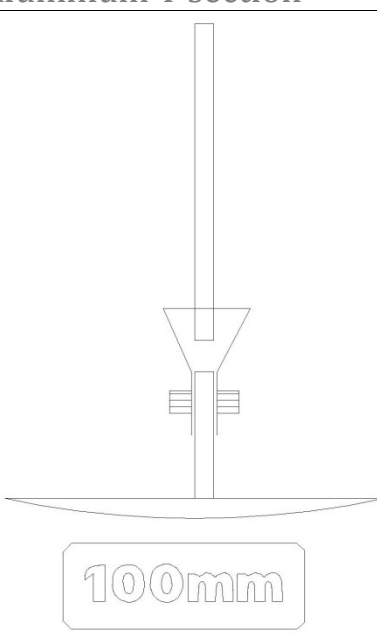
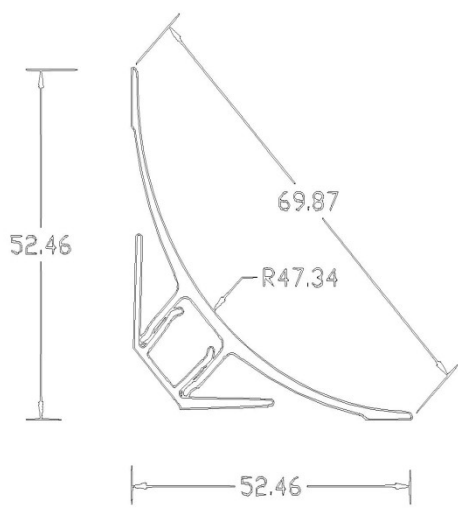


Type of Puf Panels:

- Tongue & groove type Panel
- Camlock Puf Panel
- Roofing Puf Panel
- Clean Room Profile Panel



Accessories & Profiles:

Flashing Accessories	Aluminum T section	Aluminum Corner Coving
 <p>Technical drawings of flashing accessories:</p> <ul style="list-style-type: none"> C-Channel: Dimensions 40, 61, 40. Inner Angle: Dimensions 40, 40, 60. Outer Angle: Dimensions 80, 40, 100. 	 <p>Technical drawing of an Aluminum T section profile, showing a 100mm width.</p>	 <p>Technical drawing of an Aluminum Corner Coving profile, showing dimensions 52.46, 69.87, R47.34, and 52.46.</p>

Clean Room door:



Cold Room door:

Flush Type Door:



Overlap Type Door:

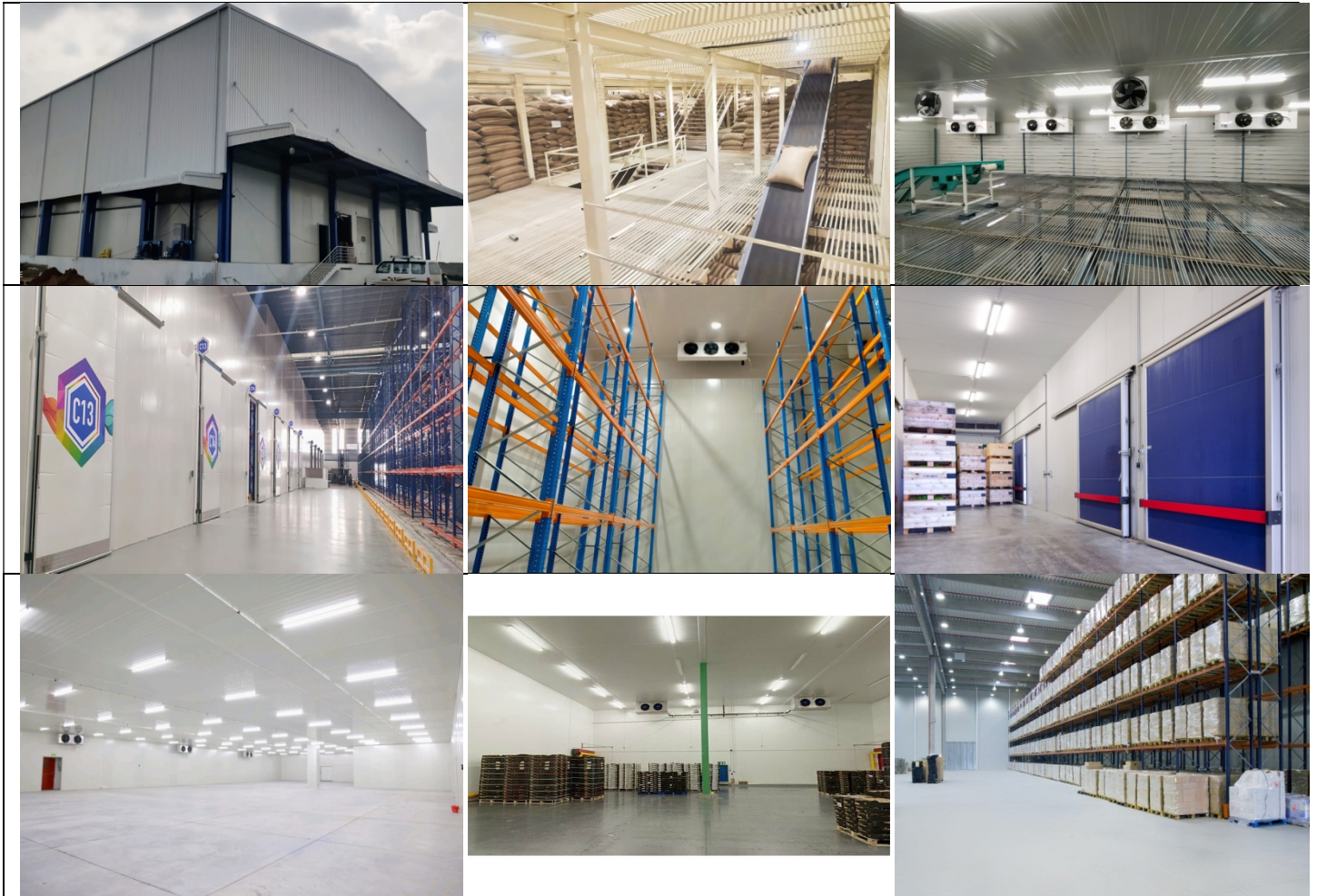


Clean Rooms/Modular Labs/Operation Theaters:



Clean room panels are modular components used in clean room environments to create controlled environments with low levels of airborne particles. They help maintain cleanliness and prevent contamination in industries like pharmaceuticals, electronics, and biotechnology.

Cold Storage/CA Chambers/Cold Chain Warehousing:



Puf Panels, also known as Polyurethane Foam (PUF) panels, are commonly used in cold chain applications due to their excellent thermal insulation properties. Here some of applications of Puf panels in the cold chain industry:

- Cold Storage Rooms
- Refrigerated Trucks and Containers
- Food Processing Facilities
- Blast Freezers & Chillers
- Icecream Parlors & Cold Rooms
- Vaccine Storage
- Mortuaries & Laboratories
- Retail display cabinets

Puf Panels are used to construct cold storage room and warehouses for storing perishable goods such as fruits, vegetables, dairy products, and pharmaceuticals. The Panels insulation properties help maintain consistent temperature and prevent temperature fluctuations that could lead to spoilage.

Pre-cooling & Ripening Chambers/Pack Houses/Process Halls:



A Pre-cooling room is a controlled environment designed to rapidly cool freshly harvested produce or other temperature sensitive items before they are stored or transported. This process helps extend the shelf life and maintain the quality of the products.

Ripening Chambers are controlled environments designed to accelerate the natural ripening process of fruits, particularly those that continue to ripen after being harvested. These chambers provide optimal condition of temperature, humidity, and sometimes ethylene gas concentration, which helps fruits reach their desired level of ripeness quickly and uniformly.

A Pack house is a packing facility for agriculture products, particularly fresh fruits and vegetables are sorted, graded, cleaned, processed and packaged for further distribution to the market.

Insulated Shed/ Office Containers/Prefabricated Farmhouses:



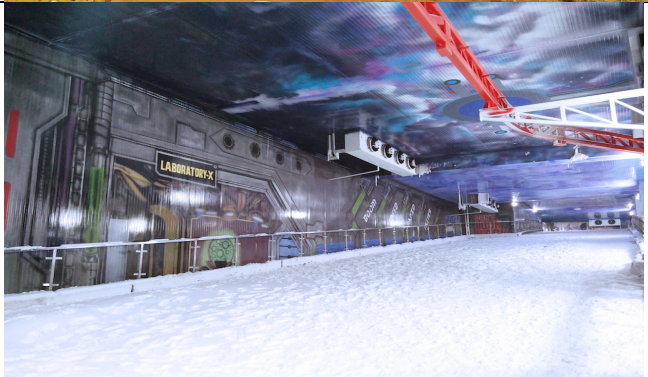
Insulated Roofing Puf panels are mainly designed and constructed for thermal insulation purpose but it also has so many other advantages like condensation control, energy efficiency, Noise reduction, Versatility, Speed of construction, Mobility and durability.

Prefabricated Shelters/Porta Cabins/Schools/Rooftop Rooms:



Prefabricated shelters are pre-built structures designed to provide protection, cover, or accommodation in various environment. These shelters are constructed off-side in factory and then transported to their intended locations for assembly. Prefabricated shelters are versatile and can serve a wide range of purposes some of them are:-

- Construction Sites
- Emergency Shelters
- Transit Shelters
- Security Booths
- Remote locations
- Community centers
- Hotels & Hospitals buildings
- School buildings
- Restrooms and washrooms
- Outdoor Events
- Outdoor Classrooms
- Control Panel Room
- Agriculture Shelters
- Information Kiosks
- Recreational Areas
- Temporary Housing
- Healthcare facilities
- Retail & Vending

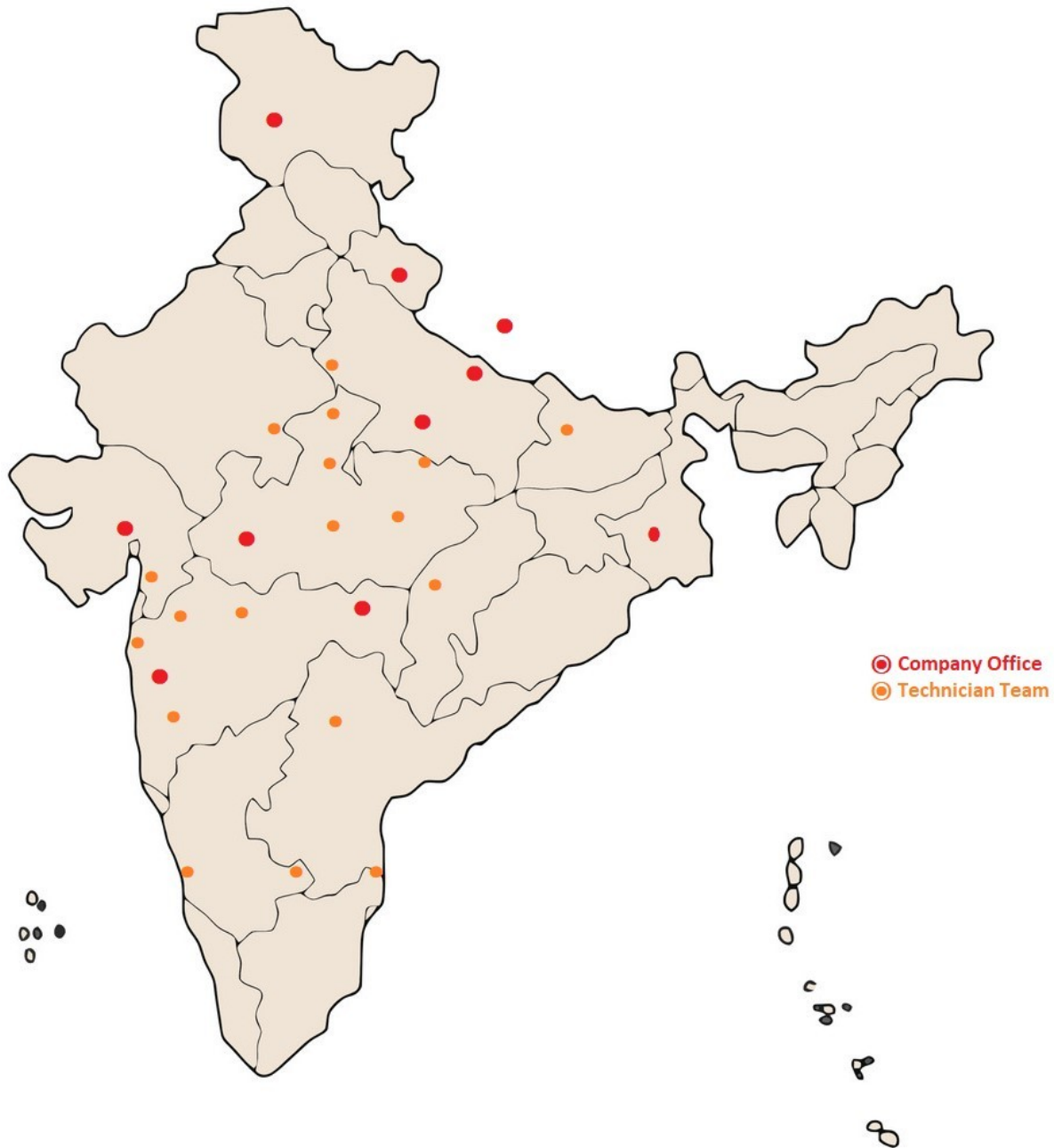


Prefabricated Puf Panels are widely used in industry due to their excellent thermal properties, durability and ease of installation.

Prestigious Clients:

ASTAR SALES & SERVICE NETWORK:



Our Company Offices:

Indore/Ahmadabad/Pune/Nagpur/Gorakhpur/Dehradun/Kolkata/Jammu/Bhairhawa-Nepal

Our Authorized Service Team:

Indore/Bhopal/Jabalpur/Satna/Gwalior/Jhansi/Lucknow/Agra/Jaipur/Haridwar/Surat/Ahmedabad
Mumbai/Pune/Nagpur/Nasik/Aurangabad/Patna/Kolkata/Sikandrabad/Manglore/Banglore/Chennai

For enquiry call us on:- 08048039693