



SUPREME PETROCHEM LTD

INSUboard[®]

Extruded Polystyrene Thermal Insulation Boards

CFC & HCFC Free



Create
a refreshingly cool,
energy efficient
environment

Introduction

Supreme Petrochem Ltd, part of Supreme Group of companies, is the largest producer of Polystyrene & Expandable Polystyrene beads in India, key raw materials for making Thermal Insulation Boards/Sheets. State-of-art manufacturing facilities are located in Nagothane, Maharashtra and Chennai, Tamilnadu.

Description

INSUboard – Extruded Polystyrene (XPS) Thermal Insulation Board is a rigid foam board having closed cell structure and is produced in a fully automated continuous extrusion process in accordance with international specifications and standards. Its unique properties of high compressive strength, higher R value and low water absorption makes it an ideal insulating material for roofs, walls and floors.

Key Features

- High resistance to heat flow, i.e. low thermal conductivity.
- High insulation value long term.
- Resistance to water vapour diffusion and water absorption.
- Long term durability.
- Uniform density distribution.
- High compressive strength, compared to other insulation materials.
- Light weight and easy to handle.
- Resistance to bacteria and micro organism growth.
- Non-toxic.

The cost of energy and demand for air conditioning in buildings is constantly increasing. With increased energy conservation becoming more and more relevant, the ability of the product selected to effectively insulate a building of whatever type is very important.

Insulation should be viewed as a long term investment. Consequently, one of the best ways to optimize this investment is by choosing high quality and effective insulation material for buildings.

Properties

Heat Flow: **INSUboard** provides an excellent resistance to heat flow. There is no change in the K value (Thermal conductivity) of the material after prolonged usage and hence the heat flow into/out of the system remains intact.

Water Vapour: Closed cell structure of **INSUboard** provides exceptional resistance to water permeability and will absorb less than 1% water by volume.

Density: **INSUboard** has a uniformly high density and compressive strength, making it an ideal solution for over deck insulation and floor insulation in cold storages.

Fire: **INSUboard** is tested as per DIN 4102 and is available in both class B2 & B1.

Dimensional Stability: The regularity and homogeneity of **INSUboard** cellular composition ensures good dimensional stability.

Application: **INSUboard** is ideal for energy conservation in a wide range of industrial, commercial buildings and in private dwellings.

INSUboard is mainly used for thermal insulation of flat and pitched roofs, under deck insulation, external, internal and cavity wall insulation, industrial and cold storage floors and underground constructions.



Available Thickness

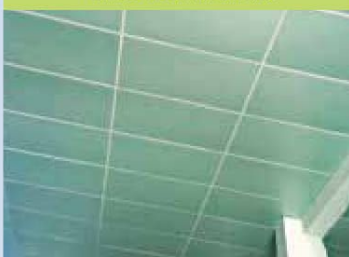
20,25,30,50,75 and 100 mm

Standard Size

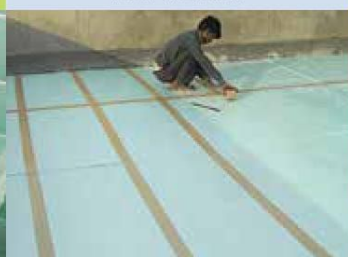
600 mm x 1250 mm
Other lengths are available upon request



Under deck Insulation



Floor Insulation



Cavity Walls



External Wall Insulation Systems



Technical Specifications

TEST PARAMETER	UNIT	TEST METHOD	SPECIFICATIONS			
Board Thickness	mm		20	25	30	40 mm and above
Compressive Strength @ 10% Deflection, minimum	kPa (psi)	ASTM C 1621	180 (26)	240 (35)	290 (42)	350 (51)
Equivalent Thermal Conductivity, maximum	W/m.K	ASTM C 518	0.0289*	0.0289*	0.0289*	0.0289*
Flexural Strength, minimum	kPa	ASTM C 203	345	345	414	414
Water Vapor permeance of 25.4 mm thickness, maximum	ng/Pa.s.m ²	ASTM E 96	63*	63*	63*	63*
Water Absorption by total immersion, maximum	% v/v	ASTM C 272	0.3	0.3	0.3	0.3
Dimensional Stability (change in Dimensions), maximum	%	ASTM D 2126	2	2	2	2
Oxygen Index, minimum	% v/v	ASTM D 2863	24	24	24	24
Density, minimum	kg/m ³	ASTM D 1622	34	34	34	34
Flammability	Class	DIN 4102 Part1	B2*	B2*	B2*	B2*
Surface Burning Characteristics	Class	ASTM E 84	A	A	A	A
Board size			600X1250mm	600X1250mm	600X1250mm	600X1250mm

INSUboard meets the ASTM C 578 Type VI standard requirements for boards with thickness of 30 mm and above; and for thickness less than 30 mm meets ASTM C 578 Type IV standard requirements.

INSUboard is made from CFC/HCFC Free Blowing Agents.

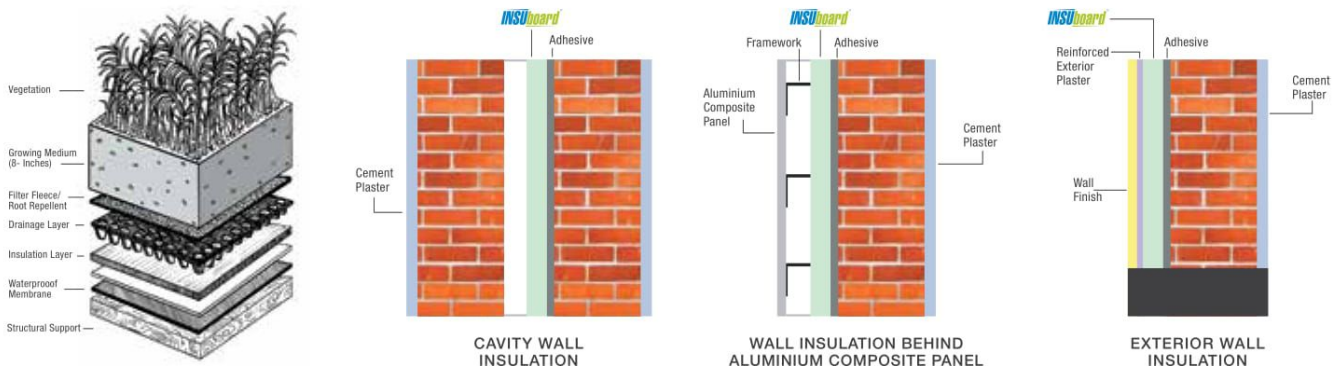
For parameters with (*) mark, the product is "TYPE TESTED" once in six months in BIS / MoEF / DGS&D / DDCA approved laboratory.

Above specifications are for our "STANDARD product".

INSUboard with lower thermal conductivity, higher compressive strength, higher density or B1 fire rating are available, on specific requests. Please contact SPL Marketing Representative for the same.

Application Guide: Customers are advised to use appropriate Building Codes and Regulations applicable in their region before using **INSUboard**. Supreme Petrochem Ltd assumes no liability, whether expressed or implied, of the intended application.

Disclaimer: Data presented in this specification sheet are typical values and are intended to serve as guide only. SPL reserves the right to review and alter the contents of this specification sheet without prior notice.



Storage

INSUboard should be stored on a flat surface, material should be stored in covered areas away from direct sunlight and ultraviolet rays.

