

BC Extruded Polystyrene Thermal Insulation Board

BC XPS boards are used for thermal insulation of Roofs, Walls or even Basement. Some area salient features of BC Protection boards are:

<ul style="list-style-type: none"> • Due to closed-cell and homogeneous structure high resistance to water absorption thus ensuring that the product is not only dimensionally stable but capable of maintaining its K Value for long periods.
<ul style="list-style-type: none"> • Desirable resistance to vapor diffusion
<ul style="list-style-type: none"> • Sufficient strength against heavy loads.
<ul style="list-style-type: none"> • Excellent K and R values.
<ul style="list-style-type: none"> • Long-term high insulation efficiency.
<ul style="list-style-type: none"> • Resistance to ageing and rotting.
<ul style="list-style-type: none"> • High resistance to thermal cycling.
<ul style="list-style-type: none"> • Non Toxic and non-hazardous to humans .
<ul style="list-style-type: none"> • Eliminates thermal bridging with its tongue and
<ul style="list-style-type: none"> • Available in various types for roofs, slabs, and walls.
<ul style="list-style-type: none"> • Very light in weight with no additional load .

General Data:-

Nominal Board Length : 1250 mm.
Nominal Board Width : 600 mm.
Nominal Thickness : 50, 75, 100 mm.

Application:-

BC Protection boards can be very conveniently installed on a roof. In classical as well as inverted roofs. It can be used with most roof membranes if appropriate precautions are observed. Once the waterproofing membrane has been installed and flood tested, the insulation boards can be installed loose laid or spot bonded to the waterproofing membrane. In protected roof membrane assemblies, ballast is applied after board roof insulation

Walls:-

BC Insulation boards can be used as wall insulation also. It can be applied in several ways including as a sandwich application.

Floors:-

BC Insulation boards can be used for floor applications also. The higher density and compressive strength makes it ideal for such applications.

Multiple-Layer Insulation:-

The recommended specification is for multiple-layer insulation. BCI urges double-layer application, especially when the total required thickness of XPS insulation is more than 2 inches (50 mm). Cover boards are considered to be components of a multiple-layer insulation assembly.



Technical Data:-

Sl. no	Characteristics (Typical Values)	Test Method	Unit	BC Protection board
1	Density	DIN 53420 ASTM D 1622	Kg/m ³ , lb/ft. ³	32-35 2.0-2.2
2	Thermal Conductivity	DIN 52612 DIN 52616 ASTM C 518-98	W/m ^{°k} Btu.in / h.ft ² .° F	0.028 0.20
3	Compressive Strength at 10% deflection	DIN 53421 ASTM D 1621-04	Kp a psi	300 43
4	Water Vapour Diffusion resistance factor	DIN 52615	μ	100-200
5	Water Vapour Permeability	ASTM C 355-64 ASTM E 96 00	Perm/inch	0.4-0.6
6	Water Absorption by Submersion	DIN 53428 ASTM D 2842 (±1% by Vol. Precision)	% by Vol. % by Vol.	0.2 ≤1.0
7.	Linear Co-efficient of Thermal Expansion	DIN 52328	°C °F	70x10⁻⁶ 9x10⁻⁶
8.	Fire Classification	DIN 4102	Buildin g Materi al Class	B2

