# ROCKAL XPS FOAM PRO



The process of extruding foamed polystyrene results in a material with uniformly small, closed cells, a smooth 'skin' and an unrivalled set of properties which make it the choice of consultants in a wide range of demanding insulation applications.

The following properties makes Extruded Polystyrene an ideal choice for thermal insulation:

#### **MOISTURE RESISTANCE**



The superior moisture resistance and very low vapour permeability of extruded polystyrene insulation provides outstanding benefits for most construction and engineering applications

#### **CHEMICAL RESISTANCE**

XPS is resistant to many common chemicals such as: acids, bases, water and water-based paints, alcohol and alcohol-based paints, brine or salt water, cement and mortars, asphalt, etc

#### **SURFACE FINISH**

- Smooth

- Rough or rough with line

#### **R-VALUE**

The ability of an insulation to resist heat flow. The higher the R-value, the greater the insulating power. XPS has excellent long term R-value and proven

## MECHANICAL PROPERTIES

High and uniform compressive strength.

#### **ENVIRONMENTAL**

High and uniform compressive strength.

#### **TECHNICAL**

#### **Hot Climate:**

In hot conditions, the greatest source of heat flow is solar radiation

The aim is to reduce the flow of heat inside the building.

#### **Cold Climate:**

In cold conditions, the main aim is to reduce heat flow out of the building, to keep living space warm.

## **ROCKAL XPS FOAM PRO** ITS DIVIDED ACCORDING ITS SHAPE TO:



#### A - NORMAL (N)

**B-SHIPLAP (SL)** 



1235 mm - 1250 mm (±3) Length

Width 600 mm (±3) =

(20,25,30,40,50,60......up to 100) mm



1235 mm - 1250 mm (±3) Length

Width 600 mm (±3)

Thickness = (30, 40, 50.....up to 100) mm

### FLAMMABILITY:

All items can be produced by using Non-flammable gas as blowing agent and Flame Retardant Additives.

#### TYPICAL DATA SHEET **ROCKAL XPS FOAM INSULATION BOARDS**

.NO	Properties	Test Method	ROCKAL FOAM Pro
1	الكثافة Density, (Kg/m3)	ASTM D 1622	37-40
2	الموصليه الحراريه Thermal Conductivity (K), max (W/m.K)	ASTM C 518	0.028
3	اجهاد الضغط عند 10% ترخيم Compressive Strength at 10 % deflection, min.(kPa)	ASTM D 1621 ASTM C 165	450
4	قوة الانحناء Flexural Strength, min. (kPa)	,ASTM C203 ,Method I Procedure B	500
5	امتصاص الماء .Water Absorption by Submersion, min (% Volume)	ASTM D 2842	0.3
6	نفاذية بخار الماء .Water Vapor Permeance, max (Perm/inch)	ASTM C 355 ASTM E 96	1.1
7	ثبات الابعاد Dimensional Stability .max ,(Change in dimension) (%)	ASTM D 2126	2
8	مؤشر الأكسجين Oxygen Index, min (% Volume)	ASTM D 2863	24
9	خواص الاحتراق Fire Classification according to,standard method for Surface Burning Characteristics of Building Material under designation	EN-13501-1	Class E
10	معامل خفض الضوضاء Noise Reduction Coefficient (NRC)	ASTM C 423	≥ 0.80

#### HANDLING, STORAGE & USAGE CONDITIONS.

Don't load heavy objecs on the stacked product.

XPS Foam Board should be stored in a cool. dry and well-ventilated place.

The shelf life of unopened XPS board is six months, while in the rainy season it is only three months.

Keep Fire (source of ignition), heat source, chemical solvent far away from XPS Foam Board.

Avoid exposure to sunlight, rain, wind and avoid any other mechanical damage. XPS Foam Board is not resistant to UV, so it can' be exposed in especially not to be exposed to sunlight.

XPS Foam Board should not be left on the site to exposed to UV -rays prolonged sunlight (more than 1 hour specially on higher than 350C) as this will result in surface degradation. When stored more than a month, it needs to regularly flip boards to prevent caking.

Using reflective light-coloured canvas to cover XPS boards is recommended when the storage time is long.





















#### ROCKAL XPS IS FOLLOWING THE ASTM C 578 & EN 13164.

We reserve the possibility to change, without warning, the technical characteristics in order to make the product more responding to the application requirements.

The information in this Technical Data Sheet is given to the best of our knowledge. However, as the product is often used under conditions beyond our control, we cannot guarantee but the product itself.