

**ENERGYSHIELD** 

700-L

#### TECHNICAL DATA SHEET

#### **DESCRIPTION**

FIBRANxps **700-L** is board of thermal insulation foam rigid extruded polystyrene (XPS). Has a closed-cell structure and is manufactured in accordance with procedures certified according to European Standard EN 13164 – "Thermal insulation products for buildings - Factory made products of extruded polystyrene (XPS)-specification". Boards FIBRANxps **700-L** presents with a smooth surface on both sides and "L" profile shape of edge.



## **PROPERTIES**

## **Thermal**

Excellent thermal insulation characteristics (low \lambdad);

High resistance to water absorption;

Proper diffusion of water vapor;

Capillarity nil;

Inertia climatic variations;

## **Mechanical**

High mechanical strength, especially compressive;

High dimensional stability;

Homogeneous density (42 ± 3kg/m3);

## Fire resistance

Euroclass E;

## Environmental

Produced with environmentally friendly expanding gases (without CFCs or HCFC'S);

Shelf life identical to the building (estimated 50 years);

100% recyclable

# Chemical resistance

Insensitivity to attack by acids and bases, but sensitive materials with volatile components (solvents):

Compatible with conventional building materials (cement mortars, lime, plaster, etc.);

Possible incompatibility with PVC waterproofing membranes;

Do not develop any molds or other efflorescence;

No nutritional value for rodents, insects, etc..

## **Applicability**

Light, easy to transport, cut and apply;

These properties are stable over time.

## **APPLICATIONS**

- Heavly loads floor
- Parking decks and green roofs
- Cold rooms and ppavements of industrial sheds with high loads
- Perimeter basement walls (even when water is present)

## **CERTIFICATION**

Product certified according to European standard EN 13164 Company certified according to ISO 9001 and ISO14001 Certification entities:

LNEC, Laboratório Nacional de Engenharia Civil, Portugal;

AENOR, Asociación Española de Normalización y Certificación, Spain.







## INTRUCTIONS FOR USE

FIBRANxps boards must be applied on flat surfaces, regulated and clean. Good resistance to bitumen, lime, cement, gypsum, salt water, bleach, deodorants, acids, inorganic gases, alcohol and silicon. Contact with materials containing volatile ingredients come into the dissolution process. The direct contact with PVC elements (example: waterproofing membranes) is not allowed. If in doubt, it is recommended a preliminary test or contacts the manufacturer. The maximum working temperature for application is 75 °C and the minimum is -50°C. The shrink film should only be removed immediately before application of FIBRANxps. These boards are easily transportable and security, and easy to cut with saw blade, knife or blade, or with a hot wire device. During the cutting boards, and in enclosed spaces, we recommend the use of respiratory protective masks and eyes protection.



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#### TECHNICAL DATA SHEET

ECHNICAL DATA		El	N13164: <b>XPS-EN13164</b>	-T1-CS(10\Y)700-DS(70,90)
Properties		Units	EN standard	FIBRANxps <b>700-L</b>
Shape of edge profile				L
Surface				Smooth surface
Board's Dimensions		mm	EN 822	1250 x 600
Thickness tolerance		mm	EN 823	T1 +3/-2(≥50mm)
Declared Compressive strength at 10% deformation		kPa	EN 826	700
Declared thermal conductivity	50mm   60mm   80mm	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	EN 12667	0,035
λ <sub>d</sub> (after 25 years)	100mm   120mm	W/(m <sub>x</sub> K)		0,037
Declared thermal resistance R <sub>d</sub> (after 25 years)	50mm   60mm   80mm	m²K/W	EN 12667	1,40   1,70   2,25
	100mm   120mm			2,70   3,20
Declared value of dimensional stability		%	EN 1604	≤5
Reaction to fire (Euroclass)			EN 13501-1	E

Abbreviations used in the Designation Code according to EN 13164 (European Standard for thermal insulation products in extruded polystyrene; Ti - Level thickness tolerance stated; CS (10 \ Y)x - Declared compression resistance (at 10% strain), DS (TH) - Dimensional stability under specified temperature and declared wet conditions.

### **PACKAGE CONSTITUTION**

Packaged in shrink film in packages with maximum height of 45 cm and content identification.

Board thickness	N° of boards in one package	Quantity in one package
(mm)	(units)	(m²)
50	8	6,00
60	7	5,25
80	5	3,75
100	4	3,00
120	3	2,25

## STORAGE

FIBRANxps boards can be stored outdoors, on a clean and smooth surface, or in enclosed and ventilated space. They are insensitive to water from rain and snow, but not to ultraviolet radiation. The shrink film is UV resistant for up to 6 months. They should be stored away from flammable materials, fire or other ignition sources. Come into contact with solvents such as gasoline, coal tar and formic acid, or with gases such as methane, ethane, propane and butane. The appearance or structure may be damaged when in contact with mineral and vegetable oils, paraffin, phenol, and fats.

The technical data and instructions included in this sheet are the result of knowledge and experience acquired by the Group FIBRAN from their R & D departments and product application. The use, processing and/or application of the product are not the responsibility of liberfibran since the conditions of use, process and application are beyond the control of our company. For this reason it is the user's responsibility to ensure that the material is suitable for the intended use and conditions of the project. This data sheet invalidates any previous version for the same product and is subject to change without notice.

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FOR FURTHER INFORMATION, PLEASE CONTACT:

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