

## TECHNICAL DATA SHEET

### swissporXPS 300-F swissporXPS 300 SF-F



#### DESCRIPTION

Thermal insulation boards XPS 300-F, swissporXPS 300 SF-F are manufactured using extrusion foaming method. This process allows to obtain boards with homogenous, closed cell cellular structure. In addition to very good thermal insulation properties, the boards are

characterised with low absorbability and very high resistance to compression. The swissporXPS 300-F boards are finished with straight edges, while swissporXPS 300 SF-F boards with milled ones. Smooth board surface.

#### TECHNICAL SPECIFICATION

##### Reference code:

EN 13164-T1-FTCD1-DS(70,90)-DLT(2)5-CS(10\Y)300-TR200-CC(2/1,5/50)130-WL(T)0,7-WD(V)3-MU80

Performance		Class or level
Thickness	T1	< 50 mm ± 2 50 mm bis 120 mm -2/ +3 > 120 mm -2/ +6
Resistance to freezing-thawing after water absorption at long-term diffusion.	FTCD1	≤ 1%
Dimensional stability in specific temperature and humidity	DS(70,90)	≤ 5%
Deformation under specific compressive load and temperature.	DLT(2)5	≤ 5%
Compressive stress $\sigma_{10}$ , or compression strength $\sigma_m$	CS(10\Y)300	≥ 300 kPa
Tensile resistance perpendicular to the frontal surfaces	TR200	≥ 200 kPa
Compression creep	CC(2/1,5/50)130	≥ 130 kPa
Water absorbability at long-term submersion	WL(T)0,7	≤ 0,7%
Water absorbability at long-term diffusion	WD(V)3	≤ 3%
Water vapour penetration		MU80
Reaction to fire		F

#### Heat transfer coefficient $\lambda_D$ and thermal resistance for respective thicknesses:

Thickness [mm]	50	60	70	80	90	100	110	120	130	140	150	160
Heat transfer coefficient [W/(m·K)]	0,033	0,033	0,035	0,035	0,035	0,035	0,035	0,035	0,035	0,035	0,035	0,035
Thermal resistance [m <sup>2</sup> ·K/W]	1,50	1,80	2,00	2,25	2,70	2,85	3,10	3,40	3,70	4,00	4,25	4,55

Thickness [mm]	170	180	190	200	210	220	230	240	250	260	270	280
Heat transfer coefficient [W/(m·K)]	0,035	0,035	0,035	0,035	0,035	0,035	0,035	0,035	0,035	0,035	0,035	0,035
Thermal resistance [m <sup>2</sup> ·K/W]	4,85	5,10	5,40	5,70	6,00	6,25	6,55	6,85	7,10	7,40	7,70	8,00

Thickness [mm]	290	300
Heat transfer coefficient [W/(m·K)]	0,035	0,035
Thermal resistance [m <sup>2</sup> ·K/W]	8,25	8,55

## INTENDED USE

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- ✓ thermal insulation in construction.

The specific use should result from the design.

## WORKING WITH XPS BOARDS

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Direct contact with swissprXPS 300-F, swissprXPS 300 SF-F boards does not cause burns to hands or irritation to the skin and mucous membranes and does not have other harmful effects on health. Working with the boards does not require the use of any personal protective equipment such as gloves, dust masks, clothes or protective glasses. Insulation made of swissporXPS 300-F and swissporXPS 300 SF-F boards can be safely sanded without posing a health hazard. SwissporXPS 300-F, swissporXPS 300 SF-F, does not emit any radioactive radiation of the alpha, beta or gamma type. In addition, it does not contain any measurable amounts of radium in its pores and is not a source of radon emissions into the air. For precise trimming, all you need are ordinary tools that can be found in every home. The boards can be easily cut with a hand saw with fine teeth or a knife to form various shapes. Board application guidelines - See swissporXPS installation instructions at [www.swisspor.pl](http://www.swisspor.pl), downloadable files, manuals.

## CHEMICAL AND UV RESISTANCE

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Extruded polystyrene does not chemically react with any solid building material. However, it is not resistant to organic solvents such as acetone, BTX, nitro, etc. There is a wide range of adhesives, wood preservatives and paints available on the market that are specially designed for use with polystyrene. It is unacceptable to leave the layer of swissporXPS boards uncovered for a long time. This leads to the weakening of their structure and the top layer of the boards may become covered with sediment. If this happens, it should be removed with sandpaper or a grinding grater.

SwissporXPS is non-toxic, chemically inert and does not contain chlorofluorocarbons (CFCs), hydrochlorofluorocarbons (HCFCs) or formaldehyde. Contact of extruded boards with organic solvents and materials containing them is excluded.

**CAUTION:** During insulation work, the outside air temperature, the temperature of the substrate and the material being built in cannot be lower than +5°C and higher than +25°C. Insulation work should not be carried out in strong wind, in full sunlight, immediately after or during rainfall. SwissporXPS boards must not be used in places where temperatures may exceed +70°C.

## TRANSPORT AND STORAGE

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SwissporXPS boards must be transported in their packaging, and in compliance with occupational health and safety and road traffic regulations. Swisspor extruded polystyrene boards are always delivered in the manufacturer's packaging. Each package features a label containing information about: the manufacturer's name and address, unique product code, declared thermal resistance and thermal conductivity coefficient, product code, nominal thickness, width and length, number of pieces.

The boards must be stored in a way that protects them against damage and weather conditions. Extruded polystyrene boards must be stored in their packaging, away from sources of fire and organic solvents. In the case of boards stored in collective packaging on full pallets, they may be stored outdoors on a hardened surface. If the collective packaging is opened or damaged, the product must be stored in roofed premises, protected against changing weather conditions, in particular against sunlight. Closed rooms must be ventilated.



