



PENOBORD

XPS Insulation systems

DECLARATION OF PERFORMANCE

No. 30/2022

1. Unique identification code of the product-type:

PENOBORD XPS 300 EXTRUDED POLYSTYRENE

2. Intended use or uses:

- Thermal insulation of buildings
- Thermal insulation of doors
- Manufacture of sandwich panels
- Thermal insulation of installations and industrial equipment

3. Manufacturer:

"Elit Plast" Ltd
73035, Kherson, Ukraine, 23 Vostochnaya str., build 41a
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e-mail:info@penoboard.com

4. Authorized representative:

5. System of assessment and verification of constancy of performance:

System 3

6. Harmonized standard: EN13164:2012+A1:2015

Notified unit or units: TZUS nr 1020

7. Declared performance:

Table 1.

Essential characteristics	Performance – Declared level (class/limit value/NPD ₁)	Harmonized technical specification
Thermal resistance	1) Thermal resistance RD – see Table 2 2) Declared thermal conductivity coefficient $\lambda_D - 0,036 \text{ W/(m}^{\circ}\text{K)}$ 3) Thickness, $d_N - T(1) (\pm 1\text{mm})$, d_N (see Table 2)	EN 13164:2012+A1:2015
Reaction to fire	Reaction to fire RtF - Class E	
Durability of reaction to fire in heat function to weather conditions aging/degradation	Does not change in time - Class E	
Durability of thermal resistance in heat function to weather conditions aging/degradation	1) Thermal resistance RD – see Table 2 2) Declared thermal conductivity coefficient $\lambda_D - 0,036 \text{ W/(m}^{\circ}\text{K)}$ 3) Durability to freezing/thawing: A) Resistance to freezing – thawing after water absorption with prolonged immersion FTCT – NPD B) Resistance to freezing – thawing after water absorption with prolonged dissension FTCD – NPD	
Compressive strength	Compression stress at 10% deformation CS (10/Y) for thickness: 1) 20 mm $\geq 200 \text{ kPa}$ 2) 30 mm $\geq 250 \text{ kPa}$ 3) 40mm - 70mm $\geq 300 \text{ kPa}$ 4) 80mm – 150 mm $\geq 300\text{-}350 \text{ kPa}^*$	
Resistance to stretching/bending	Resistance to stretching perpendicular to frontal surface – NPD	
Durability of compressive strength in aging and degradation	1) Crawling at compression CC (2/1,5/50) – NPD 2) Resistance to freezing/thawing – NPD 3) Prolonged thickness reduction – NPD	
Water permeability	1) Prolonged water absorption after full immersion - WL(T) $\leq 0,5 \%$ volume 2) Prolonged water absorption through diffusion - WD(V) $\leq 1 \%$ weight	
Water vapour permeability	Water vapour permeability - NPD	
Continuous burning in the form of embers	Continuous burning in the form of embers - NPD	
Release of dangerous substances for the internal environment	Release of dangerous substances - NPD	

1) NDP - No Performance Determined

* termobonding

Table 2.

Thickness d_N (mm)	Thermal resistance (R_D) m ² K/W	Thickness d_N (mm)	Thermal resistance (R_D) m ² K/W	Thickness d_N (mm)	Thermal resistance (R_D) m ² K/W	Thickness d_N (mm)	Thermal resistance (R_D) m ² K/W
20 mm	0,55	50 mm	1,38	80 mm	2,20	140 mm	4,12
30 mm	0,83	60 mm	1,65	100 mm	2,75	150 mm	4,41
40 mm	1,10	70 mm	1,93	120 mm	3,30		

The performance characteristics of the product specified above are consistent with the set of declared performance. The present declaration of performance is issued in accordance with Regulation (UE) no. 305/2011 under the sole responsibility of the manufacturer as defined above.

On behalf of the manufacturer signed by (name and position)

Kherson, May 30, 2022

Engineer-laboratory assistant



Garanenko Y.V.