

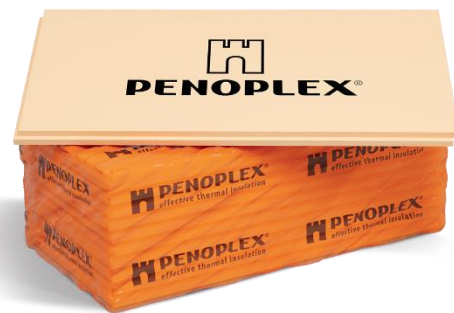
# CLIMATE DECLARATION FOR EXTRUDED POLYSTYRENE FOAM BOARDS PENOPLEX® FOR THERMAL INSULATION

Declared unit: 1 m<sup>2</sup> of XPS with thickness of 50 mm

The climate declaration shows the emissions of greenhouse gases, expressed as CO<sub>2</sub>-equivalents. It is based on verified results from a lifecycle assessment (LCA) performed as basis for an EPD®, in accordance with ISO 14025 and EN 15804

## Information about the product

PENOPLEX® board is a high-performance thermal insulation material of the latest generation, manufactured by extrusion from general-purpose polystyrene. Zero water absorption, high strength, environmental friendliness and low thermal conductivity are the main advantages of the PENOPLEX® insulation compared to other materials.



## Information about the company

LLC "PENOPLEX SPb" is one of the largest manufacturers of building materials in Europe. To date, the company has 13 factories. For more than 20 years, the company has been producing high-quality construction and decorative finishing materials. The company's portfolio contains materials that can fully provide technical solutions for various structures of buildings and structures. Throughout its history, the company has received more than 10 patents for inventions in the construction field and modernization of the production process. Today the company employs more than 1500 people who contribute to the development of the company daily. The company is a developer of more than 5 State and interstate standards for the application, design and use of extruded polystyrene foam boards PENOPLEX®.

The structure of LLC "PENOPLEX SPb" includes companies that are engaged in the production and sale of products in the following areas: PENOPLEX® — thermal insulation materials, STYROVIT® — general purpose polystyrene, PLINTEX® — decorative and finishing materials made of polystyrene, PLASTFOIL® — waterproofing materials.

## Climate declaration

The table below shows the carbon footprint of the product, calculated as carbon dioxide equivalents (kg CO<sub>2</sub> eq.) for 1 m<sup>2</sup> of XPS with thickness of 50 mm.

	XPS BOARDS PENOPLEX® with compressive strength ≤ 200 kPa									
	A1	A2	A3	A4	A5	C1	C2	C3	C4	D
GWP-fossil	3,70E+00	3,83E-01	1,21E+00	8,84E-02	9,80E-04	0,00E+00	8,70E-03	8,83E-02	2,41E-03	-1,04E+00
GWP-biogenic	-1,26E-02	3,50E-04	2,50E-04	8,00E-05	7,69E-07	0,00E+00	7,90E-06	-2,10E-04	1,01E-06	-5,52E-03
GWP-luluc	1,65E-02	1,50E-04	3,00E-03	3,47E-05	3,13E-07	0,00E+00	3,41E-06	2,02E-05	2,51E-06	-1,83E-03
GWP Total	3,70E+00	3,84E-01	1,21E+00	8,86E-02	9,80E-04	0,00E+00	8,72E-03	8,81E-02	2,41E-03	-1,04E+00

EPD PROGRAMME: THE INTERNATIONAL EPD® SYSTEM		REGISTRATION NO: S-P-07715	VALIDITY: 2028-05-15
PCR 2019:14 (1.1)	UN CPC: 369	PCR REVIEW CONDUCTED BY: THE TECHNICAL COMMITTEE OF THE INTERNATIONAL EPD SYSTEM	
INDEPENDENT VERIFICATION OF THE DECLARATION AND DATA, ACCORDING TO ISO 14025: EXTERNAL VERIFIER: INDEPENDENT VERIFIER MARCEL GOMEZ FERRER		ACCREDITED / APPROVED BY: THE INTERNATIONAL EPD SYSTEM	
CLIMATE DECLARATIONS FROM DIFFERENT PROGRAMS MAY NOT BE COMPARABLE			
THIS CLIMATE DECLARATION ONLY ADDRESSES ONE IMPACT CATEGORY AND DOES NOT ASSESS OTHER POTENTIAL SOCIAL, ECONOMIC AND ENVIRONMENTAL IMPACTS ARISING FROM THE PROVISION OF THIS PRODUCT. THESE ASPECTS MAY BE OF EQUAL OR GREATER IMPORTANCE THAN THE IMPACT CATEGORY DISPLAYED			

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	XPS BOARDS PENOPLEX® with compressive strength 200-500 KPa									
	A1	A2	A3	A4	A5	C1	C2	C3	C4	D
GWP-fossil	5,52E+00	4,78E-01	2,95E-01	1,69E-01	1,27E-03	0,00E+00	1,23E-02	1,24E-01	3,40E-03	-1,04E+00
GWP-biogenic	-1,79E-02	4,35E-04	2,10E-04	2,30E-04	9,91E-07	0,00E+00	1,11E-05	-2,90E-04	1,43E-06	-5,52E-03
GWP-luluc	3,30E-02	1,85E-04	6,50E-04	8,00E-05	4,04E-07	0,00E+00	4,80E-06	2,84E-05	3,53E-07	-1,83E-03
GWP Total	5,54E+00	4,79E-01	2,96E-01	1,69E-01	1,27E-03	0,00E+00	1,23E-02	1,24E-01	3,40E-03	-1,04E+00

	XPS BOARDS PENOPLEX® with compressive strength ≥ 500 kPa									
	A1	A2	A3	A4	A5	C1	C2	C3	C4	D
GWP-fossil	6,78E+00	6,02E-01	1,50E-01	2,46E-01	1,54E-03	0,00E+00	1,56E-02	1,58E-01	4,33E-03	-1,68E+00
GWP-biogenic	-2,90E-02	5,45E-04	2,10E-04	4,85E-04	1,21E-06	0,00E+00	1,42E-05	-3,80E-04	1,82E-06	-8,97E-03
GWP-luluc	5,91E-02	2,35E-04	2,60E-04	1,50E-04	4,92E-07	0,00E+00	6,11E-06	3,62E-05	4,49E-07	-2,97E-03
GWP Total	6,81E+00	6,03E-01	1,50E-01	2,46E-01	1,55E-03	0,00E+00	1,56E-02	1,58E-01	4,33E-03	-1,69E+00

## Other environmental impacts

For the full EPD, see  
[www.environdec.com](http://www.environdec.com) and  
[www.epdrussia.org](http://www.epdrussia.org).

## Contact information

[www.penoplex.com](http://www.penoplex.com)  
[export@penoplex.com](mailto:export@penoplex.com)

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