Polychem Systems

Polyurethane foam systems



PUREX NG systems

The PUREX NG polyurethane foam spray technology covers the most important aspects of insulation (e.g. thermal conductivity coefficient, reaction to fire, low coating weight, efficiency etc.). These features enable a wide range of foam applications in various types of construction: single- and multi-family, industrial, commercial and public buildings.

Key features of foams

- Excellent adhesion to various materials (such as sheet metal, wood, concrete, etc.) used in both the old and new construction sector.
- Low thermal conductivity coefficient and significant heating cost reduction.
- Fast and easy spray application of insulation. Subsequent layers can be applied at intervals of a few minutes.
- Very good application features: insulation in hardto-reach areas - no joints or connections creating the so-called "thermal bridges".
- Low weight of the polyurethane insulation layer due to the low structural load, it is used to renovate historic buildings.
- Durability and stability of the spray insulation layer. Declaration of constancy of physical and thermal parameters of the coating for 25 years.
- Low environmental impact both during the production of components and during foam application and its subsequent use. It is produced using an HFO blowing agent with zero ozone depletion potential (ODP=0) and a very low global warming potential (GWP) value.
- Open-cell foams belong to a group of sound-absorbing products.
- Closed-cell foams have minimal water absorption.

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properties declared in accordance with EN 14315-1

OPEN-CELL FOAM				CLOSED-CELL FOAM	
Light, semi-rigid foam used for thermal and acoustic insulation indoors. It is recommended to create a barrier with gypsum plasterboard (B-s1, d0) to improve fire properties.			Foam general characteristics	Rigid foam for indoor and outdoor applications. Used to insulate surfaces particularly exposed to mechanical impact.	
0810NF	0808NF B2	0407NF B2 ELITE	PUREX NG	0428NS	0440NS
Single-family housing (walls, ceilings, floors, attics, lofts).	Single- and multi- family housing and public buildings (walls, ceilings, floors, attics, lofts).	Single- and multi- family housing (attics, lofts, walls, ceilings, floors). Premises with a high-end finish.	Areas of application	Industrial construction, storage and livestock facilities, cold storage for food and other products. Suitable for insulating and sealing surfaces of ceilings.	Thermal insulation for flat roofs, foundations as well as floors and ceilings. External fire performance of the roof in accordance with EN 13501-5: Broof (t1).
Flagship product. Countless successful projects are a testament to the system's reliability. "Sound-absorbing" product according to VDI 3755/2000. Resistance to mould growth confirmed by a Building Research Institute test.	The first Polish opencell foam with Class E flammability. Suitable for multi-family housing. Resistance to mould growth confirmed by a Building Research Institute test.	Foam with very low water absorption and low VOC content, based on natural raw materials.	Foam characteristic features	Good balance between efficiency and mechanical strength. Excellent dimensional stability of the finished product. Fast response and drying time.	The density in the product provides good resistance to mechanical impact. The foam has received a BUREAU VERITAS type approval certificate.
40-42	40-42	40-42	Output per one 470 kg set [m³]	10-11	7,5
7-10	7-10	7-8	Product density [kg/m³]	34-37	55-65
-	-	-	Compressive strength [kPa]	min. 150	min. 300
14-22	6-12	≤0,26	Water absorption [kg/m²]	≤0,14	≤0,15
0,037	0,034	0,037	Average initial thermal conductivity coefficient [W/m*K]	0,0215	0,0215
class F	class E	class E	Reaction to fire classification according to EN 13501-1	class E	class E

For their highest quality all products are created with care





of parameters



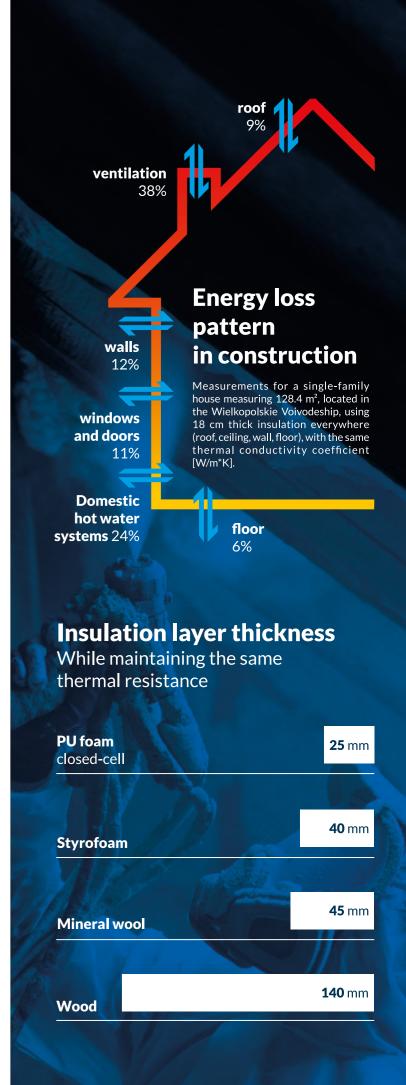


efficiency









Our strengths



Experienced team



Proprietary product formulas



Documented financial stability



Product parameters confirmed by external tests



Systematically expanded manufacturing resources



State-of-the-art R&D laboratory



Professional technological facilities



Employee and customer training



High work ethic







Benefits of working with us

- Quick response to enquiries
- Possibility of shipping to the final destination of the order - no need to store components at the Contractor's premises
- Support from Technical Advisors
- Own laboratory and research facilities, enabling the product to be tailored to individual customer needs
- Verified and reproducible product quality ensured by inspecting every product batch



