DECLARATION OF PERFORMANCE

According to Regulation (EU) 2011/3110 (DoP by Regulation EU 305/2011)

Optimer System, S.A.

Version N° 1

Version date: 13/05/2025

1. Product

POLYREFLEX MULTI BLH B BIG

DOP reference number:

PR-BLH B BIG

Reflective thermal insulation for applications in slabs and floors of residential and industrial buildings.

Consisting of two external layers of polyethylene bubbles (18 mm) and one internal layer of aluminum.

From the POLYREFLEX product family, BLH B features two external layers of polyethylene bubbles heat-welded across the entire surface to an internal layer of aluminum. The product thickness is 16 mm.

Dimensions: 1.20 m x 20 m x 16 mm thickness

Estimated service life of the system is 25 years in accordance with EAD 040007-00-1201, provided that packaging, transport, storage, installation, maintenance, and repair conditions are maintained.

POLYREFLEX® BLH B is a reflective thermal insulation that increases thermal resistance at thermal bridge breaks found in slabs and floors, providing a high level of insulation with minimal thickness. The thermal resistance and optimal performance of this product are mainly due to its installation along the edge of slabs and floors using contact adhesive or mechanical fastening. It contains an intermediate layer of low-emissivity aluminized PET with its own spatial air in contact with it, meaning this product does not require contact with an external air cavity. Its intended use is in floors.

2. General Safety Information

Environmental Product Declaration (EPD): Under certification process in accordance with standard UNE-EN 15804. Once available, it will be accessible on the manufacturer's digital platform and in official EPD registries.

Hazardous substances: The product does not contain hazardous substances according to REACH Regulation (EC) 1907/2006 and Amendment 2023/1230/EU.

It has a corrosion resistance of 96 hours (NSF Test), indicating that it is able to pass the test.

The reaction to fire is Class F when exposed outdoors, but once it's installed for its use and protected by building envelopes, it reaches class B-s1, d0.

Gloves and protective glasses must be used when cutting and handling the material. Although not being toxic nor irritant, it is recommended to have proper ventilation during the installation.

In all cases, users must comply with all national regulations, particularly regarding fire, air resistance, condensation risk, and construction durability. Product suitability is subject to the following installation conditions:

- Installation must be performed via authorized companies by the manufacturer or its representative, and therefore under their technical guidance.
- Installation must comply with the manufacturer's specifications.

Constructive elements incorporating the reflective product must be designed and executed in a way to eliminate condensation risk on the reflective surface. Interstitial condensation calculations should be done according to EN 13788 standard.

3. Manufacturer

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6. Certificates Issued

According to European Commission Decision 1999/91/EC of January 25, 1999, on Conformity Certification Procedures, System 3 has been established for this type of thermal insulation product:

Product	Specific Use	Level/Class	System
POLYREFLEX®	Thermal insulation for buildings with low heat emissivity components	Any	3

7. Technical Reference Documentation

Applied European Assessment Document (EAD) No. 040007-00-1201 for “Thermal insulation for buildings with low heat emissivity components” under Regulation (EU) No. 305/2011 and European Technical Assessment issued: Technical Assessment Body (TAB) 1219, ETA 13 / 0525 dated 10/04/2025.

8. Declared Performance and Sustainability Characteristics

Essential Characteristics	Performance
Dimensions	1.20 m x 20 m x 16 mm
Weight	1200 g/m^2
Emissivity	0.12 (ETA/ETE 13-0525) (UNE-EN 16863:2024)
Reflectivity	88% (ETA/ETE 13-0525) (UNE-EN 16863:2024)
Core thermal resistance (m^{2}K/W) (1)	0.40 (ETA/ETE 13-0525) (UNE-EN 16863:2024)
Thermal resistance over slab (m^{2}K/W) (2)	1.92 (UNE-EN ISO 22097:2023) (UNE-EN ISO 6946:2021)
Improvement of impact noise level Lw	26 dB (ISO 10140, EN 717 – 2) (UNE-EN 16863:2024)
Airborne noise level Lw on site	69.4 dB (A) (ISO 140 – 7, EN 717 – 2) (UNE-EN 16863:2024)
Fire reaction	Class B-s1, d0 (after installation within a system) Euroclass F (EN 13501-1:2002) (Exposed)
Water vapor diffusion resistance	μ = 4500 (4 mm) (ETA/ETE 13-0525) (UNE-EN ISO 22097:2023)
Compressive strength at 10% relative deformation	14.5 kPa (UNE - EN 826:1996)
Cleaning with high-pressure water	80 bars. Maximum (UNE-EN 16863:2024)
Usage temperature	-20°C to +100°C (UNE-EN 16863:2024)
Barrier to natural radioactivity	Radon barrier (UNE-EN 16863:2024)
Corrosion resistance	96 hours (NSS). Passes (ETA/ETE 13-0525) (UNE-EN ISO 22097:2023)
Dimensional stability (δ%)	w: - 0.30 l: -0.40 t: -14 (ETA/ETE 13-0525) (UNE-EN ISO 22097:2023)
Thickness	16 mm (Polyethylene air bubbles + Aluminum layer + Aluminized PET)
Format	Roll

(1) According to the definition provided by the EN 16863 standard, the thermal resistance of the core refers to the product's ability to resist heat transfer by conduction between its two faces, without taking into account the effect of low-emissivity surfaces or adjacent air cavities.
(2) The thermal resistance of the system in a floor slab (m²K/W) is specified considering the contribution of low-emissivity surfaces, as well as any air cavity adjacent to the product. The calculation is carried out with vertical heat flow and includes a sealed 40 mm air cavity.

- Environmental Product Declaration (EPD): Under certification process according to UNE-EN 15804. Once available, it can be consulted on the manufacturer's digital platform and in recognized official environmental declaration registries.
- Hazardous substances: The product does not contain hazardous substances as per REACH Regulation (EC) 1907/2006 and amendment 2023/1230/EU.

9. Declaration

The product complies with the declared performances and is in conformity with Regulation (EU) 305/2011, adapted by Regulation (EU) 2011/3110. The manufacturer assumes full responsibility for the conformity of the product with the declaration of performance.



Rufino López Muñoz

Position: CEO of Optimer System, S.A.

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