



## → ISOLMANT **POLIMURO REFLEX**

Low thickness radiant barrier featured by high thermal and acoustic performance. It is made of two layers of Isolmant 5 mm coated by a pure aluminium foil with an interposed layer of FIBTEC XS4 polyester fibre.

|  | ** isolmantPolimuroReflex  |
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| THICKNESS  | Approx. 12 mm  |
| EMISSIVITY of both surfaces  | $\epsilon$ = 0.04 - foil 8 µm pure aluminium $\epsilon$ = 0.05 - following ageing - Value certified according to ASTM C 1371-04a 2004 / UNI EN 16012:2012 standard   |
| <b>THERMAL CONDUCTIVITY</b> of 52 mm system (Polimuro reflex+ double air cavity 20 +20 mm) | $\lambda = 0.0309 \text{ W/mK}$  |
| <b>THERMAL RESISTANCE</b> of 52 mm system (Polimuro Reflex + double air cavity 20 +20 mm)  | $R_{\rm t}$ = 1.68 $m^2 K/W$ – Value certified according to UNI EN 16012:2012 – UNI EN ISO 6946:2008 standards   |
| CORE THERMAL RESISTANCE of the insulating  | $R_{t} = 0.42 \text{ m}^{2}\text{K/W}$   |
| SPECIFIC HEAT CAPACITY   | c = 1420 J/kgK   |
| VAPOUR RESISTANCE  | μ >> 300000  |
| AIRBORNE SOUND INSULATION  | $R_{\rm w}=57~\text{dB}$ Value certified Double wall in Lecalite T8 and full T10, 2 plasters and cavity 20 + 20 mm and 12 mm Polimuro Reflex. Total thickness 26 cm. Transmittance U = 0.339 W/m²K (internal surface resistance) |
| SIZE   | Rolls of 1.45 m x 20 m (hxL) = $29 \text{ m}^2$  |
| PACKAGING  | Single rolls   |

## → Conditions of use

Isolmant Polimuro Reflex is a radiant barrier , featured by high thermal and acoustic performances. It is recommended for small size cavities (4-5 cm). The pure aluminium sheet provides a perfect vapour resistant barrier and thanks to its low emissivity rate, it also ensures high reflectivity and radiant heat gain ( $\epsilon$  = 0.04). The thermal resistance improvement given by the reflective system is optimised if the product is interposed between two vertical air gaps of 20 mm thickness (horizontal thermal flux). In order to realize the double air gap, it is recommended to fix sheets of Polimuro Reflex with mechanical fasteners or metal staplers on 2 cm wood battens previously nailed on the existing wall. Install Isolmant Polimuro Reflex by laying the sheets side by side and then sealing them by means of Isolmant Alluminio tape. When realising the second wall, please keep a 2 cm air cavity to allow the proper operation of this thermo-reflecting material.

## → Item specifications

Thermos-reflecting and vapour proof product that is made of two 5 mm layers of expanded reticulated closed-cell polyethylene, coated by a low emissivity pure aluminium foil ( $\varepsilon$  = 0.04), with a fibre of polyester for technical application whose density increases along the thickness (Isolmant Polimuro Reflex type). Thermal resistance equal to 1.68 m<sup>2</sup>K/W with vertical air gap of 20+20 mm. Thickness approx. 12 mm.

**WARNING:** This technical data sheet is not a valid specification and, if it consist of multiple pages, be sure to read the full document. This instruction are the best of our current experience but are indicative information. Assuming the liability resulting from the use of this product, it is up to the user to establish whether the product is suitable for the intended use.

