

Aluthermo® - Technical data sheet

QUATTRO

The "All-in-one" solution to insulate with a minimum loss of space. Efficient and easy to install.

HOW DOES IT WORK ?

QUATTRO is a semi-rigid complex composed of the following successive layers :

- 1 a film of pure aluminium, 30 microns thick, treated against oxidation
- 2 a layer of bubbles of dry air enclosed in self-extinguishing polyethylene
- 3 a film of pure aluminium treated against oxidation
- 4 a foam of fire-retarding and waterproofed polyethylene
- 5 a film of pure aluminium treated against oxidation
- 6 a layer of bubbles of dry air enclosed in self-extinguishing polyethylene
- 7 a film of pure aluminium, 30 microns thick, treated against oxidation

The air trapped in the bubble film and polyethylene foam is dry and stable. Possible condensation is therefore always avoided within the usual range of temperatures for Aluthermo® QUATTRO.

TECHNICAL CHARACTERISTICS

Dimensions of the roll	1,20 x 25 m or 1,20 x 6,25 m
Surface area per roll	30 m ² or 7,5 m ²
Weight	± 750 g/m ²
Thickness	± 10 mm
Operating temperature range	-55°C to +80°C
Fire resistance classification	Bs1d0
Equivalent thermal resistance	See study WLik : www.aluthermo.com (*)
Thermal performance	Up to 13% more effective than 200 mm of mineral wool (*)(**)
Acoustic attenuation	R _w (C; C _{tr}) = 35 (-2; -7) dB
Impact noise attenuation	ΔL _w = 22 dB
Permissible load with 10% deformation	543 kg/m ²
Permissible load with 20% deformation	1232 kg/m ²
Bursting resistance	2423 kg/m ²
Sd value	> 6000 m
Number of the aluminium films	4
Thickness of the outer aluminium film	30 microns
Emissivity	< 0,05 (EN 16012)

(*) Performance data only valid for the installation between 2 air gaps without direct contact (see installation instructions of the product).

(**) Thermal performance measured by the Eliosys laboratory, comparing the energy consumption of a structure insulated once with Aluthermo and once with 200 mm of mineral wool (λ 0.040 W/m.K.).

In the absence of consensus on the standard, this result is not considered in the calculation of the EPC or the obtaining of a subsidy. See the Eliosys test report on www.aluthermo.com



APPLICATIONS



- On the roof, from the outside
- On the roof, from the inside
- On the walls as cladding
- On the walls from the inside
- For floors

ADVANTAGES

- Multi-reflective and multi-layer
- Easy to install as it is thermally-welded across its entire surface
- Durable as pure aluminium
- Fire protection class Bs1d0
- Roof membrane, insulation material and vapour barrier all in one
- No shrinkage and rotproof
- 10-year warranty in association with Allianz Insurances

