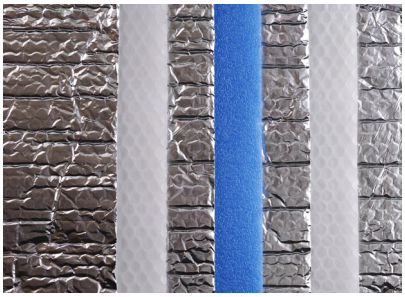
Aluthermo Quattro®:

Technical specification

Thin, multi-reflector insulation composed of two 30-micron thick outer layers of polished and anti-oxidation treated pure aluminium separated by two honeycombed layers of air bubbles enclosed inside a fire-retardant polyethylene film, together with two extra layers of pure aluminium foil and a fire-retardant and water-repellent polyethylene foam.

The obtained complex is semi-rigid and consists of the following successive layers:



1. A layer of pure aluminium foil, 30 microns thick, treated against oxidation
2. A layer of dry air bubbles enclosed in fire-retardant polyethylene, diameter 10mm, height 4mm
3. A layer of pure aluminium foil treated against oxidation
4. A fire-retardant and water-repellent polyethylene foam, 3mm thick
5. A layer of pure aluminium foil treated against oxidation
6. A layer of dry air bubbles enclosed in fire-retardant polyethylene, diameter 10mm, height 4mm
7. A layer of pure aluminium foil, 30 microns thick, treated against oxidation

The various layer must be thermally welded together over their full surface.

Fire protection class: M1
Thickness: 10 mm
Weight: +/-750 gr / m²
Permissible load: 543 kg / m^2 at 10% deformation
1,232 kg / m^2 at 20% deformation

Equivalent thermal resistance: R = 5.70 m².K/W according to the Report by the Thermodynamics Laboratory of Aix-la-Chapelle University (RWTh) entitled “Calculations of thermal transmission by radiation with the use of the ‘Aluthermo Quattro' composite insulating mat” (*Calculs de transmission thermique par rayonnement lors de la mise en oeuvre du matelas de calorifugeage composite «Aluthermo Quattro»*).