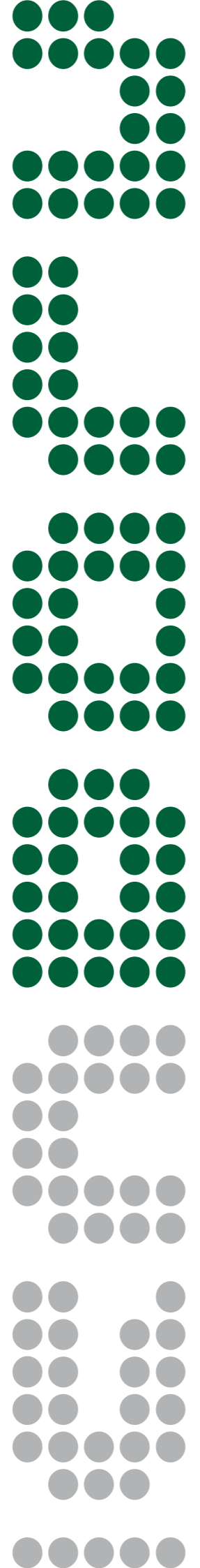


Isopack is the most modern Italian company in the field of manufacture and selling of heat-reflecting insulation products.

With a strong experience in the construction industry, Isopack aims to expand the market of heat-reflecting insulation products as today is in France and Canada.

The automation of the company's management and productive processes ensure its customers quality, technical assistance and energetic consulting.

All Isopack products have been certified by the most important institutes, both national and international.



ISOPACK s.r.l. via P. Sette zona PIP 70024 Gravina (BA) ITALY  
 t +39 080 3224000 f +39 080 3255839 p.iva 06730830723

[isolanti] [termoacustici]



www.isopack.it info@isopack.it

# HEAT TRANSFER



Heat freely moves from higher temperature places to lower. The phenomenon ends when the two places reach the same temperature.

The use of insulating materials effects the heat transfer between the two places.

Heat transfer may happen through three different modes:

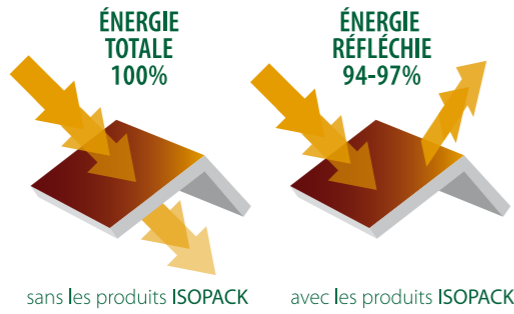
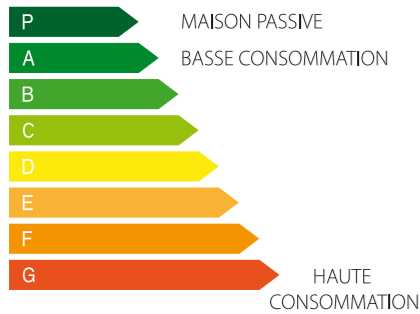
**conduction** (5-10%): heat transfer between two materials in close contact with different temperature;

**convection** (15-30%): heat transfer through fluids (i.e., water, air, etc.);

**irradiation** (60-80%): heat transfer in the empty space (i.e., sun irradiation).

The last mode is the main reason of heat loss representing the 80% of the total amount of energy used in the houses during wintertime. Systems avoiding these heat losses are: **traditional heat insulation**, contrasts the heat transfer through thermal resistance (the capacity of a material to oppose itself to heat transfer); **heat-reflecting insulation**, avoids heat transfer through reflective power (the capacity of a material to reflect the heat).

BARRES DE BOIS, ENDUIT, BRIQUE CREUSE, SOL, CHAPE, INSTALLATIONS, PLANCHER, TUILES, GAINÉ, CLOISON EN PLANCHES, BÉTON ISOLANTS THERMO-ACOUSTIQUES



# ISO.ALL ROOFS WALLS FLOORS

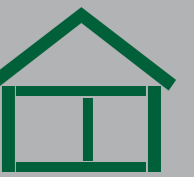


With its 9 layers combined in only 18 mm, this is a universal product that can be used both on roofs and floors and walls ensuring an excellent thermal insulation and soundproofing. Through the reflecting power of the Aluminium, the 3 layers of air bubble film and the 2 layers in expanded polyethylene, ISO.ALL contributes to the reduction of energetic costs, guaranteeing both economical and environmental benefits.

TECHNICAL FEATURES	VALUES
WEIGH	700 g/m <sup>2</sup>
THICKNESS	18 mm
REFLECTING POWER	0,97 (97%)
EMISSIONITY	0,3 (3%)
FIRE RESISTANCE	Class 1



# ISO.PLUS ROOFS WALLS FLOORS



ISO.PLUS is a product that can be used for many applications. If applied to roofs and walls, is really effective both in summer and in winter thanks to its 2 external Aluminium layers.

In summertime the upper layer reflects the external heat avoiding it to enter the building; during winter the lower layer reflects the heat in the house so that it doesn't run away.

If applied to the floor, reduces the noise through its layer in expanded polyethylene.

ISO.PLUS is made of 7 layers entirely welded among them in order to form a panel facilitating its installation and reducing swarfs.

TECHNICAL FEATURES	VALUES
WEIGH	570 g/m <sup>2</sup>
THICKNESS	13 mm
REFLECTING POWER	0,97 (97%)
EMISSIONITY	0,3 (3%)
FIRE RESISTANCE	Class 1



# ISO.WALL WALLS GAPS WALL LININGS



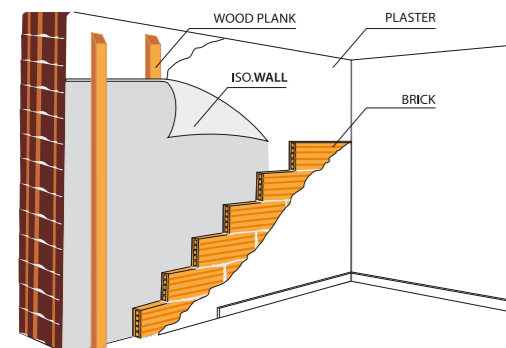
Though it's 8 mm thick, ISO.WALL is an excellent thermal insulator as well as a reliable acoustic insulator as certified by Giordano Institute.

ISO.WALL is made of 2-layers bubble film entirely welded with 2 external Aluminium sheets.

According to the law of emissivity all materials give off heat. The values to calculate this phenomenon go from 0 to 1; the more is the value near to 0, the less is the heat transferred in an environment. One of the most remarkable feature of ISO.WALL is its low emissivity (it is about 0,03).

ISO.WALL is being used as wall insulator and soundproof; in order to make the best use of its heat-reflecting capacity, it shouldn't have direct contact with the wall.

TECHNICAL FEATURES	VALUES
WEIGH	470 g/m <sup>2</sup>
THICKNESS	8 mm
REFLECTING POWER	0,97 (97%)
EMISSIONITY	0,03 (3%)
FIRE RESISTANCE	Class 1/M1
SOUND INSULATION R <sub>w</sub>	61 dB



### INSTALLATION

1. Fix 2-cm thick outdistancers (or plankings) on the wall at a distance of 1.20 m from each other;
2. Place ISO.WALL horizontally or vertically or fixing it on the out-distancers (or plankings);
3. Use the adhesive Aluminium foil to seal the ISO.WALL sheets' joints;
4. Build an internal double wall at a distance of about 2 cm from ISO.WALL sheets.

# ISO.FLOOR FLOORS



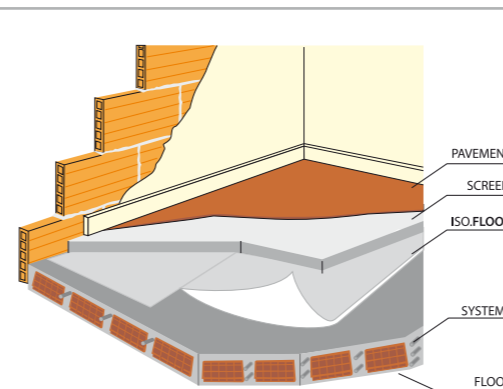
Many people still don't know that one of the main cause of heat dispersion in a house is given by a non insulated floor.

For this reason ISOPACK has created ISO.FLOOR, a floor insulator that protects your house from low soil temperatures.

It can be used also where there is a floor heating system: it has to be applied on the floor slab and directly on the heated grating (net+heating coil). ISO.FLOOR is also certified by Giordano Institute as insulator from noise (with a 20-dB reduction).

Moreover, ISO.FLOOR represents a radon barrier (a carcinogenic gas emitted from some volcanic or rocky areas subsoil).

TECHNICAL FEATURES	MEASURE
WEIGH	450 g/m <sup>2</sup>
THICKNESS	8 mm
REFLECTING POWER	0,97 (97%)
COMPRESSION STRENGHT	140 psi
FOOTSTEP NOISE ATTENUATION L <sub>w</sub>	20 dB



### INSTALLATION

1. Apply ISO.FLOOR on the whole surface of the levelling screed (screed+parquet or ceramic, etc.); appose the sheets of the products or juxtapose them at a distance of 5 cm.
- In both cases join ISO.FLOOR with suitable adhesive tape;
2. Add the screed on ISO.FLOOR;
3. Cut the side of ISO.FLOOR that remains outside the floor in order to obtain a floating floor;
4. Attach the baseboard.

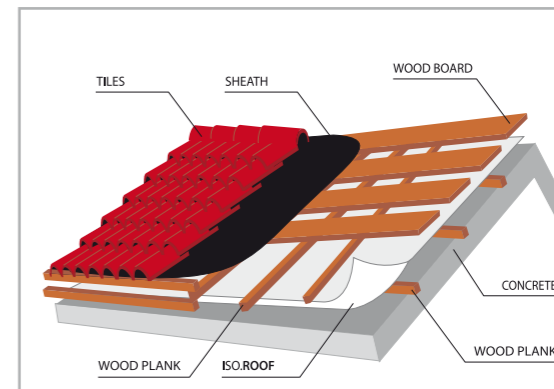
# ISO.ROOF ROOFS



The roof is the part of a house most exposed to the sun, thus it needs to be insulated.

ISO.ROOF has been created for this reason, by combining the high heat-reflecting power of Aluminium (about 97%) with the lightness and manageability of the double-layer air bubble film welded at the extremities.

TECHNICAL FEATURES	VALUES
WEIGH	470 g/m <sup>2</sup>
THICKNESS	8 mm
REFLECTING POWER	0,97 (97%)
EMISSIONITY	0,03 (3%)
FIRE RESISTANCE	Class 1/M1
SOUND INSULATION R <sub>w</sub>	62 dB



### INSTALLATION

1. Fix 2-cm thick outdistancers (or plankings) on the roof extrados at a distance of 1.20 m;
2. Place ISO.ROOF horizontally or vertically fixing it on the out-distancers (or plankings);
3. Use the adhesive Aluminium foil to seal the 2 ISO.ROOF sheets;
4. Attach a double planking on ISO.ROOF, then place a wooden flooring for the waterproofing through sheath and tiles.