

Field of application



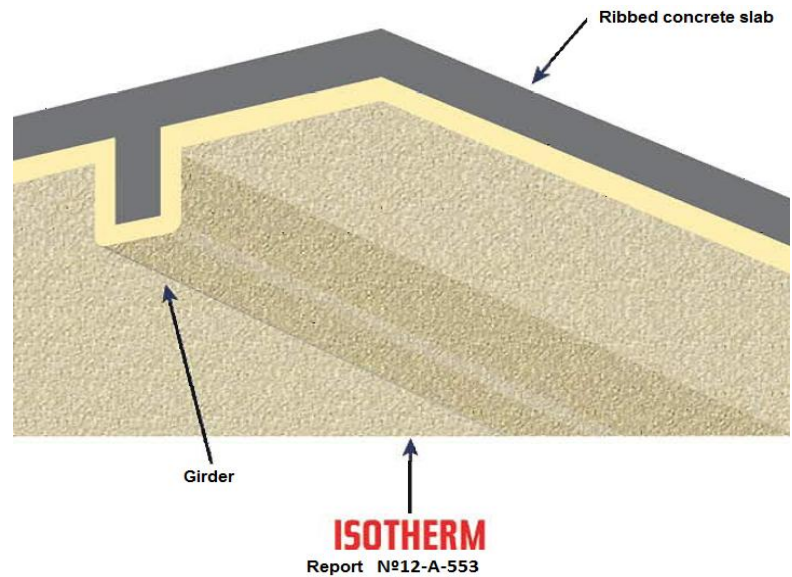
Thermal insulation



Fire protection
(concrete structures)



Acoustic insulation and absorption



Definition

ISOTHERM is a fibrous product made of mineral wool slag, hydraulic binders and additives.

Applied wet by direct spraying onto the surface requiring insulation (after the creation of a bonding bridge using a primer from the ISOFIX product range), it is designed to provide thermal insulation on a variety of surfaces not directly exposed to adverse weather conditions, passive protection against fire affecting concrete structures in addition to thermal insulation, as well as acoustic absorption.

If a wire mesh with kraft paper is fitted beforehand, ISOTHERM also serves to improve the acoustic insulation of two different spaces (impact and airborne noises).

Technical characteristics

Thickness	<i>between 40 and 240 mm</i>
Surfaces	<i>concrete, masonry, wood and wood products, steel, plaster, fibre cement, synthetic materials, paints</i>
Volumetric mass	<i>between 110 and 150 kg/m³ depending on the surface requiring protection</i>
Ph	<i>around 10</i>
Colour	<i>off-white, rustic and uniform appearance, slightly granular</i>
Finish	<i>rolled or compressed</i>
Thermal conductivity	$\lambda = 0.038 \text{ W/m.K}$, ACERMI certificate no. 12/149/770
Technical opinion	ATEC 20/15-347 v1
Reaction to fire	A1
Resistance to fire	<i>REI between 60 and 240 min on concrete structures (Efectis report 12 A 553 of 12/11/2012)</i>
Acoustic absorption	$\alpha_w = 1.00$ (report by Scientific and Technical Centre for Buildings (CSTB) AC 12-26042053 of 26/02/2013)
Acoustic insulation	<i>gain of between 2 and 11 dB depending on thickness (CSTB report AC 12-26038558 of 09/10/2012)</i>
Health	<i>not classified as a carcinogen, bio-soluble product complying with European Directive 97/69/EC.</i>
Environment and safety	<i>FDES (environmental and health declaration sheet) and FDS (safety data sheet) available</i>

Advantages / Properties

- Non-toxic, rot-proof, vermin- and rodent-resistant, does not favour mould growth or the development of fungi
- No emission of toxic or dangerous gases in case of fire
- Chemically inert, displays a slightly alkaline reaction in contact with water
- Does not cause or favour corrosion
- Applicable on all surfaces and capable of absorbing any expansions or irregularities without fissuring
- Monolithic application without losses, without seals or thermal bridges

CERTIFIED CHARACTERISTICS ACERMI			
<i>$\lambda = 0.038 \text{ W/m.K}$, ACERMI for a volumetric mass of between 110 and 150 kg/m³</i>			
Thickness (mm)	Heat transfer coefficient (m².K/W)	Thickness (mm)	Heat transfer coefficient (m².K/W)
40	1,05	150	3,90
50	1,30	160	4,20
60	1,55	170	4,45
70	1,80	180	4,70
80	2,10	190	5,00
90	2,35	200	5,25
100	2,60	210	5,50
110	2,85	220	5,75
120	3,15	230	6,05
130	3,40	240	6,30
140	3,65	<i>Adhesion strength > 1,4 kPa</i>	

Application

- Complies with DTU 27.1 (AFNOR Standard P15-202), test reports and ATEC 20/15-347 v1
- Pneumatic projection with water on sound and dry surfaces using a mineral wool applicator machine
- Ambient air temperature and temperature of support > 5°C and < 45°C
- Drying time: between 10 and 20 days in ventilated rooms (initial setting time between 2 and 4 days)
- Bonding primers: ISOFIX BT-T, ISOFIX TS or TS-M (200 to 300 g/m²)
- Finishing products : ISOFILM or ISOCOAT
- Can be painted

Appearance / Storage

- Ready-to-use product in the form of sized nodules containing additives
- Packed in polyethylene bags each weighing 25 kg on shrink-wrapped wooden pallets
- Pallets measuring 0.80 x 1.20, 8 rows of 3 bags, i.e. 24 bags or 600 kg/pallet
- Bags and pallets marked for traceability
- Maximum storage period: 8 months protected from moisture and adverse weather conditions