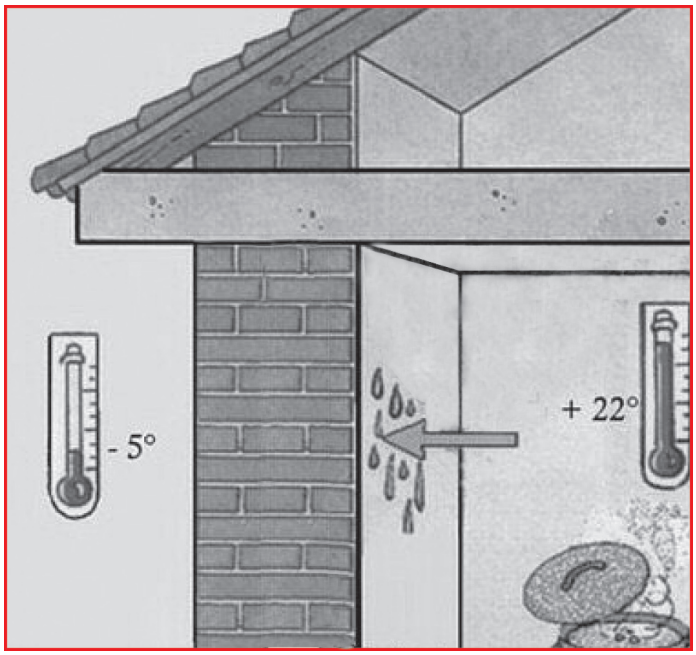
AFONTERMO™

Smoothing, Reflective, Anticondensation Thermal Coating

A few millimeters of this product substitutes 6-7 cm of thermal insulation

AFONTERMO™ is a ready to use product, which is made of micronized ceramic nano-fiber cork and various resins. Engineered to effectively solve thermal insulation issues for both metal and concrete pillars, **AFONTERMO™** replaces the traditional thermal coatings thanks to it's reflective properties, and eliminates the effect of thermal bridges unifying the temperature of the surfaces.
In light of the increased need for the biocompatibility the extraordinary thermal character of the product assumes particular importance as it prevents the generation of condensation and consequent mold, and optimizes the energy efficiency of buildings.

AFONTERMO™ PROPERTIES:
The already known insulation property of ceramic combined, as in this case, with the properties of cork gives to **AFONTERMO™** a higher quality in usage (just consider that 1-2 cm of cork contains approximately from 15 to 30 million of cells, which are rich in fatty acids, useful for their strong antioxidant nature; **AFONTERMO™** contains even more air, a valuable source of insulation for example, Polystyrene beads are 98% air as there is only 2% actual material).
The encapsulated air in the cells of this product contributes to the high insulating power. It has been scientifically determined that the more air enclosed in small spaces, improves its insulating power. Also the reflecting properties of **AFONTERMO™** contribute to it's insulating power, if applied on the inside of a construction the heat gets' reflected back in to the rooms, if applied on the outside of a building it rejects the solar temperature, allowing the optimal living comfort in all seasons.
AFONTERMO™ applied in a thin layer of just 1 mm reaches an extraordinarily high heat-insulating value, this is proved by laboratory tests performed on a steel plate (3 mm thick) treated only one side, with a single layer of **AFONTERMO™** (1 mm), and exposed to a temperature of 155°C. The opposite side, untreated, detects a temperature of 18 ° C, which means that 1 mm of thickness of



product generates a shielding of heat equal to 137 ° C. The test results show that **AFONTERMO™** is completely refractory, it does not absorb heat, but maintains it.
From tests performed on masonry brick of 28 cm thick, it was found that a thickness of 3.5 mm of product lowers the value of thermal conductance of 50%.
In light of this evidence, **AFONTERMO™** is also a solution to the current difficulties in the construction sector: thermal bridging, surface and interstitial condensation, energy saving.
In order to eliminate condensation and thermal bridges caused by pillars and beams, it is sufficient to apply on each side of them about 4-5 mm of **AFONTERMO™**.

AFONTERMO™ SECTORS FOR USE:
The product is especially used in various construction sectors: heating pipes, water tanks, oxygen lines and in refrigeration plants; it adheres perfectly to all surfaces and isolates in +176 °C temperatures. This product works well even on hot surfaces upto+260°C.