



What is building energy upgrade and how it works

Building energy upgrading (of a detached house, apartments building, or flat) is the whole of interventions made in it with the purpose of reducing the energy requirements of the building, for both heating and cooling Απλόχρώμα

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TEMPERATURE OF AREA

°C TI -

T2

DIFFUSION OF LIGHT IN THE IN<u>TERNAL AREA</u>

ENERGY WE ARE SAVED FROM TEMPERATURE MAINTENANCE

39

Thermo

Common paint

3G thermo interior, an innovative smart product providing thermal independency

The feeling of comfort in an interior space depends both on the atmospheric temperature and on the surface temperature of the internal surfaces that make it up. The difference between the atmospheric temperature and the surface temperature of the interior walls can affect this sensation and make you feel different from the actual atmospheric temperature.

3G Thermo Interior based on the technology of third generation coatings, adapts naturally the temperature of the surfaces and creates a feeling of thermal comfort. Because its special microporous surface but also because of the extremely low price of the product's thermal conductivity, there are some processes that occur naturally and have as a result to prevent the condensation and growth of micro-organisms on the coated film. 3G film surface in magnification

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PHOTO OF ELECTRONIC MICROSCOPE

surface of common color film in magnification

Advantages of the use of 3G Thermo interior

It upgrades the indoor space where it is applied as it reduces the heat loss from the surface, having as main advantage the saving of energy resources. It therefore improves the efficiency of cooling and heating appliances and helps to reduce energy costs.

It achieves better thermal comfort in the room where it is applied without many and abrupt temperature changes

It prevents the condensation of water vapor on the surface by inhibiting the formation of fungi and mold

It improves the acoustic of the room where it is applied, it has sound-proofing properties, and it is contributing to reduced sound transmission and echo.

Allows the surface to breath

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nterior

It contributes to better diffusion of light into the interior, creating more relaxed and brighter environment

Low VOC content without harmful emissions or effects on humans nor the environment

Temperature control throughout the year

The 3G Thermo interior is an internal coating. Due to its special composition it provides increased thermal protection, helping to energy saving throughout the year (winter and summer).

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Measured by the Department of Physics of the University of Athens displays excellent thermal properties

Measurements of the University of Athens according to international standards ASTM E903-96 & ASTM G159-98			
coefficient of thermal conductivity			0,143 W/mK ISO/DIS 22007-2.2
		thermal diffusion	0,25mm²/s ISO/DIS 22007 - 2.2
special heat capacity		cial heat capacity	0,55MJ/m ³ K. ISO/DIS 22007-2.2



ceiling with moisture and not



Berling S.A. Paint Industry, Inofita Viotias, P.C 32011, P.:+302262031663, F.:+302262031293 info@berling.gr



Energy saving Thermal comfort Breathing properties Anti - mold Water vapor / moisturea bsorption Light diffusion