

THERMOlife

- Includes thermoceramic nanospheres
- Prevents mould expansion



Certified Thermal insulation paint for interior use

Certified thermal insulating
properties



✓ contains
Thermoceramic
nanospheres



It is available in white and in an unlimited number of shades through CHROMODOMI's colouring system

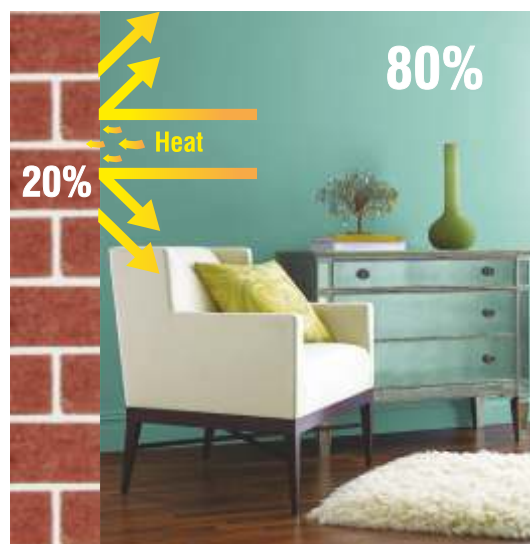
THERMolife

*...Save energy
help the environment...*



Thermolife is a pioneering product developed by Chromodomi. It thermally insulates our space, blocking heat transfer by our will, protecting us by all three ways of heat transfer:

- **Conductivity:** heat transfer through material molecules
- **Horizontal/vertical transfer:** through air
- **Radiation:** heat transfer through energy waves such as solar or those of a domestic



Using Thermolife, absorption heat from the wall reaches only 20%.



Without the use of Thermolife, thermal absorption of walls can reach up to 80% of the energy emitted.

It uses each of those properties to provide us with a warmer and healthier environment. It can be used as a supplement to ETICS or any other kind of insulation system for maximum efficiency. This material, according to our measures, can reduce the heating time required for your space up to 80%, thus aiding to power saving.

HOW DOES IT WORK ?

As we can observe during winter, when we use a carpet on the floor or a wallpaper, we feel warmer. This phenomenon results from the thermal insulating properties of the carpets' material or the wallpaper depending on its thickness. This is what Thermolife is trying to mimic through its composition. The thermal conductivity factor (λ) of a regular wallpaper is approximately 0,18 to 0,22W/Mk. Thermolife, according to measurements certified from CRES, has a factor $\lambda = 0,19$ W/Mk, similar to that of a thick wallpaper, which means that when we apply to 2 coats of the product we get the same result as of 2 thick wallpapers. The paint's thickness after 2 coats equals to 300 μm . By applying Thermolife once every year, we increase the layers density which also increases the insulating results. The temperature we feel in a room depends on two parameters: air temperature, and wall temperature. A warmer (or cooler during summer) wall improves the rooms' temperature. Moreover, Thermolife uses nanotechnology ceramic spheres to reflect heat waves and therefore reduces the time required to heat (or cool) the air of our room. According to the above, a wall coated with Thermolife can be up to 2°C warmer during winter. Each degree Celsius can approximately save us 6% of energy wasted.

ADVANTAGES

ACHIEVE THERMAL RESULTS QUICKER

Walls painted with Thermolife, because of the ceramic nanospheres it contains, reflect a big proportion of the energy emitted. So, the reflected energy helps to adjust the desirable temperature in time up to 80% less than compared to a wall coated with a regular latex paint. When we heat a room painted with a regular paint, the walls absorb heat until they reach a specific temperature, while a big part of energy is then released on the outside of the wall. When using Thermolife, we prevent heat from “escaping” through the wall and at the same time we stop concrete from absorbing amounts of it. Then 80% of this energy is reflected back to our room. We have even better results if we apply Thermolife on the ceiling as well. As an example, for a room painted with a regular paint that requires about 120 minutes to reach a desired temperature, applying Thermolife would reduce heating time to approximately 30 minutes.

POWER SAVING

In houses, schools or workplaces heating is most of the time intermittent. So, in regular cases, escaping energy is so high that shutting down heating doesn't save us enough. No matter how well insulated is our space, as long as there is activity, such as opening doors and windows, it leads to increased energy leak. With the low levels of stored thermal capacity provided from Thermolife, when applied on construction materials (concrete, mortar etc.) there is a natural reduction of energy transfer from and by these materials. That means that Thermolife slows down temperature loss when heating is turned down, which makes it quicker for us to restore the temperature when we get back and use the radiator less.

STOPS HUMIDITY AND MOULD FROM APPEARING

Mould is created on wall surfaces with temperatures lower than the ambient. Hot or cold room air, covers the surface in form of vapor, it then liquidates and as a result creates the perfect conditions for bacterial development. Thermolife balances the walls' temperature fluctuations as it effects the dew point on the surface. This function, combined with a regular ventilation of the space can keep us safe from mould.

“ Thermolife give us the ability to heat our space in 80% of the time, providing us with even better energy saving ”

Thermolife combined with External Thermal Insulation Composite Systems (ETICS)

Thermal insulation systems and Thermolife do not cancel each other out, but instead add to each other. ETICS protect the outside of the building. Thermolife isolates the inside air from the construction materials, which creates a “quick wall” heating effect. In the case of an old building who has not been insulated, Thermolife can improve conditions up to 21%.

Internal Insulation advantages

- Internal insulation is often the only option for protected/listed buildings, traditional residences and in cases of apartment buildings where not all residents agree with the installation of an external system.
- Costs less than most external systems and favors the quicker heating of space.
- It can be applied regardless of weather conditions.
- It gives as the freedom of architectural design.

“ Internal “quick walls” provided with Thermolife expedite both the heating and cooling of space,,



Thermolife does not contain substances that can be harmful for our health, like all products developed by Chromodomi.”.





Energy Saving

Energy consumption is a worldwide problem, both in terms of environmental protection and economy. Indoor heating equals to almost 50% of the energy consumed in Greece. In all households 76% of the energy is used for this reason , but unfortunately a big portion of it is wasted due to insufficient insulation of houses in the country. During the past 10 years,energy cost has gone up five times and will keep doing so because of increased taxation. Now we have the ability to lower energy consumption used for heating, easily, quickly and at a low cost. Insulation is no longer a luxury, it is a need !



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