

THERMO
confort

PHASE CHANGE MATERIALS



THERMO CONFORT coating featuring
Phase change materials by MCI Technologies

WINCO
technologies

THERMO CONFORT, make a better use of ENERGY SOURCES

Our homes benefit from more and more efficient insulation systems, sometimes too powerful. Over-insulated buildings are generating discomfort due to overheating. THERMO CONFORT now offers us the possibility to naturally regulate the temperature of our housing whether in summer or winter.

Choose the optimal comfort with THERMO



Specific heat capacity

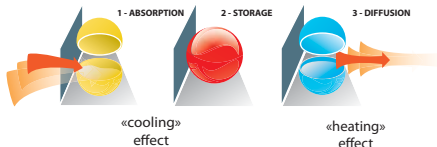


Comparative thermal mass :

30 m² THERMO CONFORT = 375 kg concrete

THE PRINCIPLE OF PHASE CHANGE MATERIALS (PCM)

impact on interior temperature management



- 1 - **ABSORPTION** : a phase change material is a material which, passing from a solid to liquid state absorbs large amount of energy called **latent heat (1)**.
- 2 - **STORAGE** : heat is absorbed and stored at a temperature specific to the material called the **melting point (2)**.
- 3 - **DIFFUSION** : heat is diffused when the material solidifies.

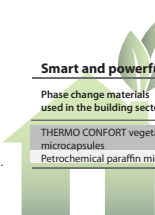
(1) amount of heat required to turn a substance from one state to another
(2) temperature at which the material changes state



THERMO CONFORT contains 75% of Phase Change Materials (PCM) composed with **vegetal wax** microencapsulated by MCI Technologies.

Smart and powerful energy

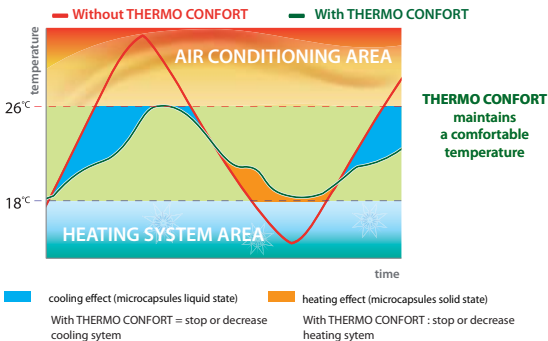
Phase change materials used in the building sector	energy storage capacity
THERMO CONFORT vegetable oils microcapsules	184 j/g
Petrochemical paraffin microcapsules	110 j/g



THERMO CONFORT, a new step toward ENERGY INDEPENDENCE

HEAT CONTROL FOR THE FOUR SEASONS

THERMO CONFORT is an interior coating that captures the heat available beyond 23 ° C. The microcapsules will retain this heat until the temperature drops below 22°C. The **energy stored** is then used to efficiently heat the interior space and to maintain a comfortable temperature.

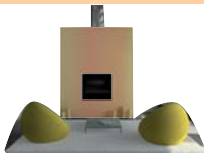


Phase Change Material contained in THERMO CONFORT naturally and continuously reduces temperature variations and peaks inside a room.

DID YOU KNOW THE «COOL WALL EFFECT» ?

Feeling comfortable inside a room depends on the temperature of the walls. Despite an ambient temperature of 20 ° C you can feel a cold sensation if the walls and windows are cold.

THERMO CONFORT naturally adapts the wall temperature : cold wall when it is hot and vice versa when the temperature drops.



Welcome to simple and efficient ENERGY SOLUTIONS !

OPTIMIZING OUR RESSOURCES TO SAVE ENERGY

Improving comfort while protecting the planet. The residential and tertiary sector alone accounts for 43% ⁽³⁾ of the final energy consumption in developed countries. To reduce this proportion THERMO CONFORT offers a simple and efficient solution: storing heat to use it when it is needed. Increasing energy savings without complicating our lives.

⁽³⁾ source : www2.ademe.fr



23°C : THE IDEAL MELTING POINT FOR A COMFORTABLE CONTINUOUS TEMPERATURE

MAINTAIN ROOMS BETWEEN

18°C & 26°C

A NATURAL SOLUTION TO TEMPERATURE FLUCTUATIONS

You installed large windows to enjoy the sun but are forced to invest in a dimming? You want the warmth of a wood stove without your interior becomes a sauna?

THERMO CONFORT is the solution, temperature changes are immediately attenuated without having to interact with the heating or the cooling system.

Thanks to **the latest PCM technology**, you will not have to close your shutters during the day, you will not be forced to manage the flow of your wood stove, THERMO CONFORT will manage the thermal regulation naturally.

**DELAYS THE START OF THE
HEATING SYSTEM**

**DELAYS THE START OF THE
COOLING SYSTEM**



THERMO CONFORT coating
featuring Phase Change
Materials by MCI Technologies

Specific applications for energy storage



Wood stove
Solar energy



Veranda
Extensions / Loft
Light frame structures



Offices
Multi family residential
Data centers
Meeting rooms



EASY APPLICATION

TROWEL APPLICATION



1 PREPARE THE SUPPORT

The substrate must be clean, hard, sound and dry. Ensure that support is not powdery or porous.



2 USE A STAINLESS COMB

To apply your THERMO CONFORT coating, choose a stainless comb with a notch twice the desired final thickness.



3 SMOOTH WITH A STAINLESS TROWEL



4 DRYING

Dry to touch in 12H.



AIRLESS APPLICATION

For optimum airless application of THERMO CONFORT, we advise you to choose an hydraulic piston airless pump with a booster chamber to prevent cavitation.

Brand	Model	Nozzle type	Pressure level
WAGNER	HC940 ESSP HC950 ESSP7	423	140
		625	
		535	
GRACO	MARK VII	535	210





PHASE CHANGE MATERIALS



Data sheet

Application characteristics	THERMO CONFORT
SUPPORT	All supports
CONSUMPTION / YIELD	Until 5 kg/m ²
DRYING TIME	Depending on the type of support and cover ⁽¹⁾
TOOL CLEANING	Water
Physicals characteristics	
ENERGY STORAGE OF THE COATED SURFACE	90 kg = 2150Wh
VAPOUR PERMEABILITY	Class I (high permeability) / SD coef. : 0.11 m

Packaging



The THERMO CONFORT range can be found in the form of a thermoregulating decoration coating. The THERMO CONFORT range can not be sanded but can be covered by a coating, paint or a wallpaper ⁽¹⁾.

⁽¹⁾ Before any covering, check the humidity rate in the substrate and carry out a preliminary test. To find all the compatible covering products, you can call our Customer Service on +33 (0)2 96 78 24 22.

Wall and ceiling



WINCO Technologies SAS

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THERMO CONFORT webpage

Your provider