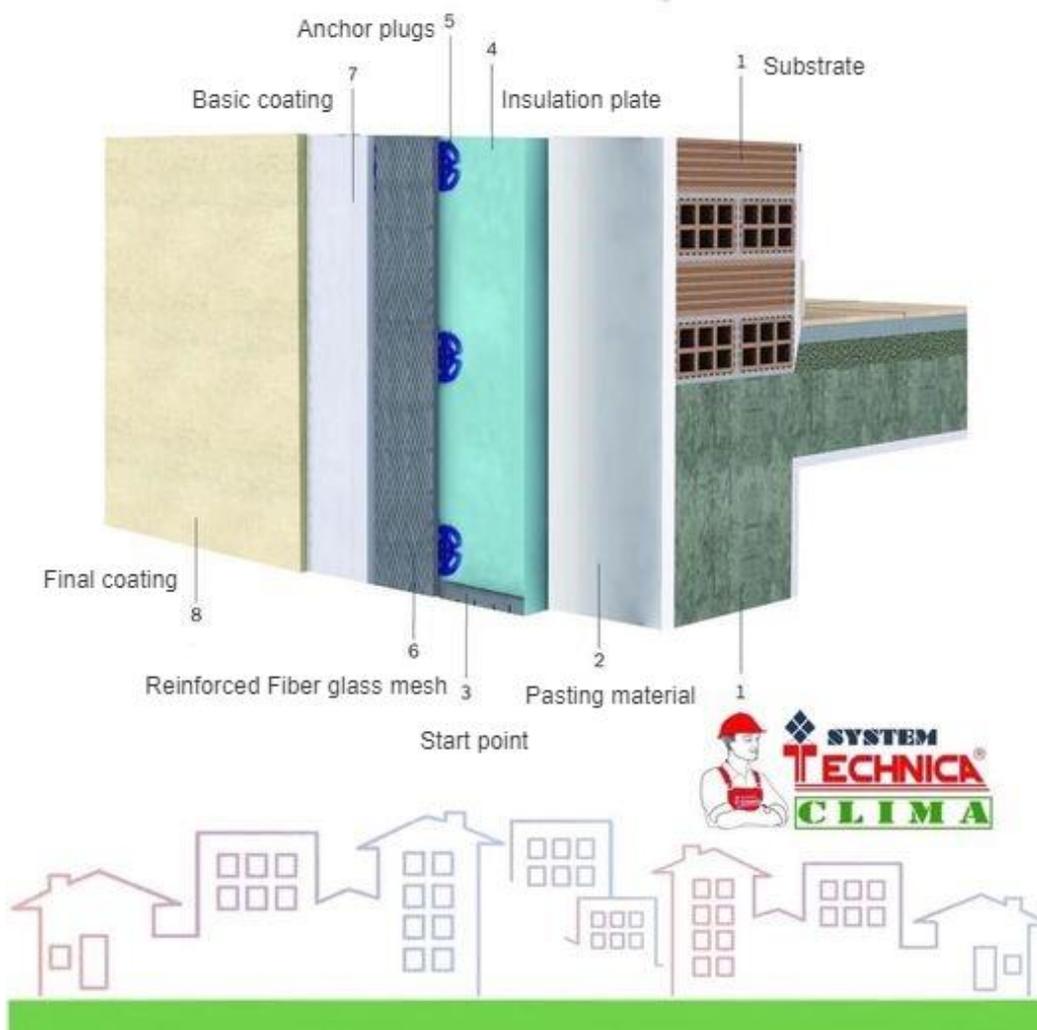


LAST GENERATION  
EXTERNAL THERMAL INSULATION  
COMPOSITE SYSTEM

*Dress your house properly !*

Based on the needs that have been formed over the last few years for saving energy, good building insulation is the key role towards that aim. It has been proven globally that systems of external thermal insulation offer the best way for the insulation of a building whether a new one or an existing one, since they manage to decrease significantly the building's needs in heat or cooling.

**SYSTEM TECHNICA** having established a long presence in the Greek market, with quality products, has created **SYSTEM TECHNICA CLIMA** a complete system for external thermal insulation of the latest generation that provides the best solutions to the needs of any building for saving energy.



## THE ADVANTAGES

### Certifications

All individual materials of the **SYSTEM TECHNICA CLIMA** are covered by the necessary certifications based on European Regulations, bear the CE mark and have successfully undergone all the foreseeing laboratory tests.

### Saving Energy

**SYSTEM TECHNICA CLIMA** forms a thermal insulating mantle on the external side of the building, minimizes thermal bridges, reclaims the thermal capacity of the building materials and secures thermal comfort in the building's space, decreasing significantly the cost of energy for heat or cooling.

### Saving space

There is no need for constructing a double external wall in relation to new buildings and as a result of that the internal usable space is increased up to 4-5%.

### Durability in time

**SYSTEM TECHNICA CLIMA** offers materials of exceptional quality with great elasticity that they do not crack and they create instead a resistant surface on the building that demands no maintenance for many years.

### Total waterproofing

Offers perfect waterproofing from the external humidity as the final surfaces are waterproof and resistant to all weather conditions. Additionally, it prevents the formation of undesirable moldings internally which troubles many buildings without insulation, offering a clean and healthy living environment.

### Protection of the existing building

**SYSTEM TECHNICA CLIMA** enfolds the building with a protective mantle so that its structural elements are not strained by thermal fluctuations and the accumulation of vapors.

### Thermal insulation and renovation

The advantage of the system is that the functionality of the building is not interrupted (accommodation or operation) during construction, while at the same time a perfect thermal insulation is achieved and a new look with many decorative options.

### Added value

Under the regulation of energy efficiency of buildings, all buildings must have energy efficiency certificate that is necessary for any transaction (lease or sale). Thus, by applying the **SYSTEM TECHNICA CLIMA** for external thermal insulation the building is energy upgraded and gains added commercial value.

### **Eco sensitive**

By applying **SYSTEM TECHNICA CLIMA** we consume significantly less energy and contributing in that manner to the protection of the environment.

### **Financing**

The system is financially supported up to 70% if it is approved to join the “saving at home” plan, decreasing significantly in that way the cost of its construction

### **Quick repayment-steady value**

By applying **SYSTEM TECHNICA CLIMA** due to the significant saving of consuming heating or cooling energy we can re-pay in a very short period the construction costs while at the same time we make a steady investment for saving money.

## **THE INSTALLATION**

### **Substrate**

Before installing the system, the substrate that could be made of bricks, cement, mortar, cement board etc. must be thoroughly examined and be free of any rotten parts. The flatness of the substrate must be checked also, so that we can achieve the appropriate alignment of the system during its installation which is very important.

### **Insulation Pasting**

We initially place the startup guide of the system, if needed, so that it can indicate a steady horizontal base for the coating of the insulating plates that will follow. We then mix the coating material **SYSTEM TECHNICA CLIMA ST100** with 6 liters of water either manually with a mixer tool or an electric mixer, so that a uniform mixture is formed. We then place the mixture on the insulating sheet perimetrically and we also place spot of the mixture in the center of the plate so that we can cover at least 40% of the surface or we brush evenly the whole surface of the plate with a notched trowel if the flatness of the substrate allows us to do so. In order to achieve the right result with the pasting it is necessary that we do not exceed 2cm of the material (adhesive). If needed, in such case, we change the thickness of the insulating material. The plates are always placed crossways with the grouts hermetically closed and their flatness as well as the workability of the pasting material must be checked. We are very careful with the meeting points of the system with windows, lintels, covers, expansion grouts to avoid thermal bridging, as well as with the correct proofing. When the required time for the hardening of the pasting material has passed, we can scrub the insulating plates, if needed, so that we can achieve the appropriate substrate for the coating of the basic mortar mix that will follow.

## **Mechanical Anchoring**

When the pasting material has dried by using the appropriate in length special connectors, we mechanically anchor all the coating of the insulating material with 6 pieces per square meter. We place the connectors always where there is pasting material at the back side of the insulating material to avoid undesirable bending of the insulating plates. Coating basic mortar and encapsulating reinforcement fiberglass We mix **SYSTEM TECHNICA CLIMA ST100** with 6 liters of water so that a uniform mixture is formed. Initially we place the relevant special accessories, such as corner beads, water drippers, expansion grouts, if any, proofing profiles of aluminums, as well as diagonal pieces of fiberglass to the corners of the aluminums to avoid cracking. We then place evenly the material with a notched trowel throughout the whole surface of the insulating plates and we encapsulate the reinforcement grid 2 on the damp substrate. Next, we flatten the surface with a straight spatula so that the reinforcement grid is fully covered. It is important that the reinforcement grid is inter-covered by 10 cm. We recommend that the thickness of the basic mortar is 4-5 mm so that a strong reinforced substrate is created for the final mortar that will follow either in the form of a dry mortar or a paste.

## **Final coatings**

### **In the form of dry mortar**

When the basic coating is dried well and is ready to be applied with the final coating **SYSTEM TECHNICA CLIMA ST200**, we mix **ST200** with 6 liters of water so that a uniform mixture is formed. We check that the substrate is clean and apply **ST200** on the whole surface evenly either by hand or with the relevant mechanical equipment. We flatten the surface and depending on the weather conditions, when the mixture has dried, we polish it by using a damp pan float in order to achieve the ideal result. It is recommended that the thickness of the final coating is 2-3 mm. After the surface is dried well and primed with the appropriate prime it is then ready for the final coloring.

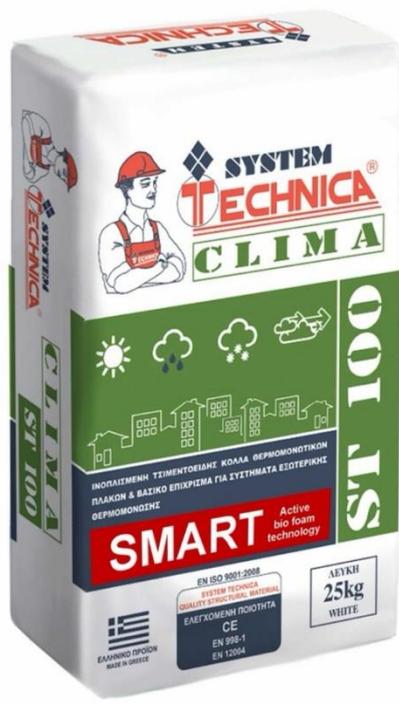
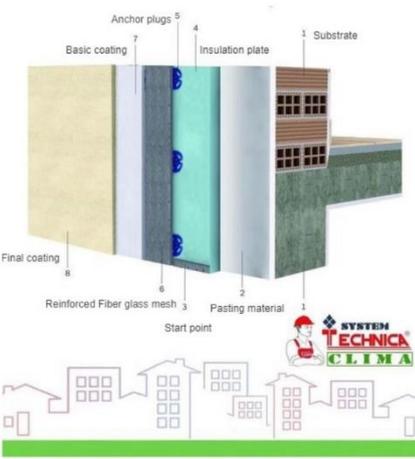
### **In the form of paste**

When the basic coating is dried well and primed with the appropriate prime it is then ready to be coated with the final coating in the form of paste. The final coatings in the form of paste are ready for use, they only need a simple stirring and also, they allow us to choose from a variety of different colors through the available reference color. We check that the surface is clean and apply the material throughout the whole surface. It is essential that the surfaces are completed from end to end to avoid undesirable bi-colorings. After the material is dried, depending on the weather conditions, it can be scrubbed or forged for the final desirable result.

## High proofing zone

It is essential that a high proofing zone is created wherever the system is in touch with the ground or points of high humidity. In such case and for 30-40 cm over the final level of the system we proof the substrate with the coating cement- based mortar **WATER PROOFER** by **SYSTEM TECHNICA** and place insulating plates of high density e.g., EPS200 or XPS, which have really low absorbance and increased mechanical shock capacity. We always make sure that we have good water runoff at the points that are in touch with the proofing zone around the building.

### EXTERNAL THERMAL INSULATION MORTARS



**NEW PRODUCT**