

THERMAL INSULATING PLASTER **CLIMATE SYSTEM 450**

- ✓ Ecological
- ✓ Thermal insulating
- ✓ Soundproof
- ✓ Hydrophobic
- ✓ Frost-resistnat
- ✓ White
- ✓ Incombustible
- ✓ Wapor permeable
- ✓ Does not require reinforcement

Technical description

Scope of application: Thermal insulating plaster Climate System 550 is used as a finishing layer for the walls made of aerated concrete and perlite-concrete blocks, ceramic block, stone slabs of coquina, brick, metal and other materials both indoors and outdoors. Such finishing plaster is used as a decorative one. And more than that! Thanks to insulation properties Climate System 550 provides heat, water and sound proofing. In texture the surface is glassy and smooth. It is specially recommended to be used for external leveling of slopes and doorways. It can also be used as glue to slabs Multipor to insulate facades.

Composition: Mineral binding (cement, lime), light mineral aggregates, polymer modifying additives.

| Technical characteristics | |
|---|-----------------|
| Consistency of the fresh mixture, mm | 174±4 |
| The amount of water for 1 kg of dry mix | 0,52-0,58 l |
| Density of fresh mortar, kg/m ³ | 710±20 |
| Air content in fresh solution, % | 29,3±20 |
| Time of use of the dissolved mixture, min | 780 |
| Density of the solution in the dry state, kg/m ³ | 510 |
| Ultimate strength the solution on the tensile bending, N/mm ² | 0,85±0,14 |
| Compression strength, N/mm ² | 2,5±0,2 |
| The strength of adhesion of the solution with the base (concrete) in air- dry conditions, N/mm ² | 0,4±0,13 FP:B |
| Coefficient of water absorption of the solution, kg/(m ² ·min 0,5) | 0,05±0,05 |
| Permeability of the solution, μ | 9,8±1,5 |
| The thermal conductivity of the solution in dry state W/(m·K) | 0,12 |
| Class of thermal conductivity | A1 |
| Frost resistance of the solution | Frost resistant |

Application instruction

Preparation of foundation

Climate System 550 is applied on cleaned from old paint, dirt, dust and fragile fragments foundation, if necessary wash and clean the concrete from residues of mold release. Before applying the mortar mixture on the surface with high penetrating ability (foam, gas concrete, silicate bricks and other porous materials) soak the wall with the sufficient amount of water or prime it.

General recommendations for application

The works shall be carried out at temperature of foundation from +5°C up to +30°C. All recommendations, provided in this Technical Description, are efficient at temperature of +20°C and atmospheric moisture capacity 60%. The workability time for mortar mixture can change under other conditions.

IMPORTANT! During summer period do not perform the works at direct sunlight to the mortar mixture and foundation! Also avoid the direct effect of atmospheric precipitations on the mortar mixture.

Note: Thermal insulating plaster mix Climate System 550 contains cement and lime, which can cause to the alkaline reaction while interacting with the water, thus, while working it is necessary to take care of the eyes and skin. If the mortar mixture hits the eyes, immediately wash them out and consult the doctor.

Fulfillment of works

Thermal insulating plaster mix Climate System 550 may be applied manually and using the plastering machines of M-Tech Duo - Mix, PFT type or analogous ones.

Manual mode

Preparation of mortar mixture

Pour the clean water 0,52-0,58 l per 1kg (6,24-6,96 l per bag 12 kg) into the large reservoir with flat bottom (with capacity of 40 l). Add the thermal insulating plaster mix Climate System 550 to the water.

IMPORTANT! In order to provide uniformity of mortar mixture while batching it is necessary to apply the full content of the bag. The partial application of the bag's content is not allowed.

Thoroughly stir the mortar mixture using manual high speed (not less 600 rpm) construction mixer until uniform consistence without lumps and clots during 4-5 minutes.

It is recommended to apply the mixer with 2 nozzles.

Sustain the mortar during 5 minutes and again stir thoroughly. The indication for correct prepared mortar mixture is its uniform thickness without flakes and its ability to be kept on overturned metal putty knife.

Installation of screeds

Apply the mortar mixture Climate System 550 by modeling to the surface of the foundation within the interval of approximately 30 cm; press the screed profiles into it, aligning them in the plane. The profile pitch shall be 20 cm less the length of the rod.

Plaster application

Before applying the mortar mixture soak the wall in the sufficient amount of water. Using the putty knife and stainless smoothing board, apply the mortar mixture to the wall between the screeds with thin layer. In 3-5 minutes apply the basic layer of plaster along the screeds. Remove the excessive mortar mixture using the rod.

For more economical use of the material it is recommended to put the clean polyethylene film at the foundation of the wall, and the mortar, which has fallen from the tool, can be used during 10-15 minutes, having previously been stirred with the rest of the mortar mixture. Hereby avoid penetrating of the rubbish into the mortar mixture.

Final finishing

After 4-8 hours (depending on the ambient temperature) carefully pull out the screeds. Fill in the places, where the screeds were located, with the mortar of thermal insulating plaster mix Climate System 550 and smooth down using the metal smoothing board. At air temperature of below +15°C the drying time of the basic layer is increased up to 12-14 hours.

Attention! Before preparation of finish mortar the reservoir and metal smoothing boards shall thoroughly be cleaned.

It is recommended to rub the finish layer using plastic float.

It is also recommended to apply penetrating priming to the surface after 48 hours. In a day after this, the surface can be painted with water-dispersion silicone or silicate based façade paints.

Warranties of manufacturer

The manufacturer guarantees the conformity of the thermal insulating plaster mix Climate System 550 to the characteristics, provided in this Technical Description while the implementation of the rules for its transportation, storage, preparation and application. The manufacturer is not responsible for improper use of the mixture, as well as for its application with other purposes and under other conditions, not anticipated by this Technical Description. The warranty storage period of the thermal insulating plaster mix Climate System 550 in original factory packing under dry conditions is 12 months.