
teplokraska.com

Instruction

Upon applying ultrathin thermal insulation of the UBiGRUND® series

The coating is intended for thermal insulation of surfaces with an exploitation temperature (depending on the modification) from -60°C to $+200^{\circ}\text{C}$ (in peak loads up to $+260^{\circ}\text{C}$).

Insulation works can be carried out on pre-prepared surfaces - skimmed, dry and coated with adhesive soil (without a gloss), with a temperature of from $+5^{\circ}\text{C}$ to $+150^{\circ}\text{C}$. The material is applied in layers, the thickness of each layer is not more than 0.5 - 1 mm at a time (depending on the modification). Drying time between the layers with a thickness of 0.5 mm is 24 hours (at a temperature of 18°C and humidity of 60%).

Application of modifications:

For the prepared surface (metal, concrete, brick, etc.), use the basic modification of the ultra-thin heat insulation "UBiGRUND® - Classic". For poorly prepared metal substrates, we recommend using the first layer with liquid thermal insulation "UBiGRUND® -Antikor". For thermal insulation of facades of residential buildings, use vapor-permeable modification "UBiGRUND® Facade". Other modifications, detailed instructions, technological maps and flow tables are available to familiarize yourself on the manufacturer's website: Teplokraska.com

1. Preparation of surfaces:

- a) Concrete, brick, plastered wall - remove loose areas and oily inclusions, repair the cracks cement-plastering compositions. Covered with acrylic soil of deep impregnation for concrete surfaces 1-2 times. Wait for complete drying.
- b) black or non-ferrous metal - it is necessary to degrease, remove rust or gloss mechanically and coat with adhesive soil (1-2 layers). On poorly prepared surfaces, after manual stripping of loose rust, it is recommended to apply liquid thermal insulation "UBiGRUND® - Antikor" by the first primer layer with a thickness of 0.25 - 0.5 mm. Subsequent layers are recommended to apply the core modification "UBiGRUND® Classic".

2. Preparation of material:

Ultrathine heat insulation "UBiGRUND® " is ready for use. With long-term storage, it is possible to bundle material in a container, which is eliminated with a thorough mixing of a mixer on small revolutions. For ease of application, you can add a bit of distilled water to the material (up to 3%, about 25-30 ml per 1 l of material) and mix thoroughly (bottom-up) while the product does not look like cream. **ATTENTION:** The speed of mixing is not more than 150-200 rpm. Excessive mixing at high speed damages the microsphere, and can reduce the heat-reflective coating efficiency.

3. Coating:

Ultra-thin thermal insulation "UBiGRUND® " is applied with a layer with a thickness of no more than 0.5 mm (the "UBiGRUND® -facade" modification is 1 mm). It is recommended to work with a soft flat tassel with a long natural pile. The surfaces of the large area can be coated with an airless machine (with removal of filters and minimum pressure setting). Do not use the paintpults that cause the material (membrane, gear, etc.) - as they can damage the microsphere.

How to apply? The material is applied with brush with short movements in one direction (as a spatula). If the material is rapidly collapsing (folded) on the surface (especially under the rays of the sun or in a warm dry room), add a bit distilled (clean, filtered) water (10-30 ml per 1 liter) to the desired consistency and thoroughly mix upwards.

How to apply on hot surfaces? It is recommended to prepare primer from the material in a separate container, pre-diluting with water (up to 50%). With constant stirring, sequentially apply with thin layers with short swabbers of the painting brush. When the primer material stops boiled on a hot surface, you can proceed to apply the main layer using a less diluted material, but not more than 0.5 mm total thickness. Then it is necessary to withstand the applied layer for full polymerization and proceed to apply the following layer to the calculated thickness.

How to apply on condensing surfaces? Drop the surface with a rag, turn off the cold energy supply in advance. Do not include the flow of cold energy to complete drying of the coating. With constant stirring in the container to sequentially apply the material with thin layers with short swabs in one direction by a painting brush on a dry surface. Then it is necessary to withstand the applied layer for complete drying (polymerization) and proceed to apply the next layer to the calculated thickness or before eliminating condensate.

The thickness of the finished coating can be determined by the thickness gauge. The material consumption when creating a layer with a thickness of 0.5 mm is 1 l by 1.5 - 2 m². The material consumption affects the type of surface and the method of application.

The total thickness of the coating and the number of layers is determined by the heat engineering, or laboratory flow (see tables).