"United Business Group Co., Ltd"
Production of special coatings UBIGRUND®

website: http://eng.teplokraska.com email: sale@teplokraska.com

Russia, Siberian Federal District, Novosibirsk

Sukharnaya 35, building 13A. ИНН / КПП 5407471154 / 540702001



teplokraska.com

## Instruction

on the application of ultra-thin thermal insulation UBiGRUND® - facade

The coating is intended for thermal insulation of surfaces with an operating temperature (depending on the modification) from -60 °C to + 150 °C (in peak loads up to + 200 °C).

Insulation works can be carried out on pre-prepared surfaces - skimmed, dry and adhesive soil (without gloss), with a base temperature above + 5 °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). The time of complete drying between layers with a thickness of 1 mm is 12 hours (at a temperature of 18 °C and humidity of 60%).

Application of the Modification "UBiGRUND® Facade":

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 consumption tables are available to familiarize yourself on the manufacturer's website: http://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-Anticor"

by the first primer layer with a thickness of 0.25-0.5 mm. The subsequent layers can be applied "UBiGRUND® Facade", but it is recommended to perform work on the metal to perform the basic modification of the "UBiGRUND® -Classic".

## 2. Preparation of material:

Ultra-thin thermal insulation "UBiGRUND® -facade" 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® -facade" is applied with a layer with a thickness of not more than 1 mm in one pass. Then it is necessary to give time for polymerization within 12 hours, before applying the following layers or other coatings. 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 paintopults 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 settled (folded) on the surface (especially under the rays of the sun or in a warm dry room), add a distilled (clean, filtered) water to the desired consistency and blend thoroughly 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 swables 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.

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 coating thickness and the number of layers is determined by the heat engineering calculation or laboratory flow (see Table 1 and Table 2 on the Web site Http: //teplokraska.com in the Technical Documentation section - the "Consumption Norm" document).

The tinting of the material is allowed by pigment pastes on a water basis of well-known manufacturers in pastel (not saturated) tone, compliance with the recommendations for stirring. With multi-layer applying, it is recommended to college the last layer. Adding a kole slightly reduces the heat-dissemination properties of a material that can be compensated by applying an additional layer to the calculated.

The storage and transportation of the material is allowed in a tightly closed container at a temperature of from + 5 ° C to + 40 ° C. Freezing of material or long overheating near heat sources is not allowed. If the packaging has an additional label "Frost-resistant" - it is allowed to transport and storage at temperatures up to -30 ° C for no more than one month or up to five freezing cycles-thawing.

## 4. Safety technique

Individual protection.

The product is safe. If the room is well ventilated or work is carried out outdoors - respirators are not required. To protect the skin, apply gloves and protective clothing.

Critical situations.

If the product gets into the eyes - rinse the eyes immediately in running water for 15 minutes. If you get on the skin - rinse with water with soap.

For all additional questions, contact the representative (seller).

Technical documentation and product certificates can be found on the web site.

http://teplokraska.com.