

# BRONYA<sup>®</sup>

## SUPERFINE HEAT INSULATION

### INSTRUCTIONS

#### for applying ultra-thin sound insulation coating BRONYA SOUND BARRIER

The **SOUND BARRIER BRONYA** has good adhesion to almost all known materials. It has a low Newtonian fluidity, therefore, when applied to vertical surfaces, there is practically no "sliding" effect, even when applying a layer with a thickness of 1 mm. The material can be used for sound insulation of enclosing structures of buildings and structures, it reduces the noise produced by railway cars, ventilation boxes, motor transport and other equipment. It is also possible to protect various enclosing and supporting structures from external noise.

Sound insulation works can be carried out at a surface and ambient air temperature from +15 °C to +70 °C (the critical value of the surface and ambient air temperature is +10 °C at the time of application and subsequent drying within 24 hours of each layer). The operating temperature of the **BRONYA SOUND BARRIER** modification ranges from -60 °C to +70 °C.

When working with a liquid sound insulation coating **BRONYA SOUND BARRIER**, special attention should be paid to the following conditions:

1. **BRONYA SOUND BARRIER** cannot be frozen
2. Before opening the container, it is necessary to ensure the integrity of the seals
3. When preparing the material, mixing should be carried out only BY MECHANICAL MEANS. The mixing speed is from 100 to 150 rpm
4. When preparing the material, it should not be excessively diluted with water (see paragraph 2 of this instruction)

#### 1. Surface preparation

Prepare the surface for the application of the material: remove loose areas, embroder and seal cracks, remove oily inclusions, clean concrete from «cementmolochka», repair the surface, including inter-brick seams and recesses deeper than 5-7 mm to reduce material consumption, fill with cement-plaster compositions. To clean the surface, use a sandblaster, a metal brush or abrasive wheels to remove gloss on the surface and remove falling off and crumbling structural elements. After mechanical treatment of the surface, a thorough dust removal should be carried out using brushes or blowers. After dedusting, the surface must be rinsed with water to remove dirt, remaining dust, etc. Wait until completely dry. Concrete, brick and similar surfaces must first be treated with a deep penetration acrylic primer Bronya Facade from a series of special coatings. The humidity of concrete when applying the **SOUND BARRIER BRONYA** should not exceed 4%, the humidity of the air when applied should not be higher than 80%. If there are oily and greasy spots on the surface, they must be removed with a solvent.

#### 2. Preparation of sound insulation coating BRONYA SOUND BARRIER

The **SOUND BARRIER BRONYA** is ready for use, it needs to be mixed only MECHANICALLY, since specialized textotropic additives that are part of the material require high mixing speeds. When using a drill with a bladed nozzle or a mixer (check with a representative of the Bronya in your region for recommendations on the choice of equipment) - the maximum permissible mixing speed is from 100 to 150 rpm. Exceeding the rotation speed will lead to the destruction of the microsphere and a radical decrease (or cancellation) of the effectiveness of the thermal insulation coating. Using vertical

movements of the blade so as to immerse the thickened part in the liquid, turn on the drill and slowly start rotating the blade, mixing the clots with the liquid. Stir until the product becomes a homogeneous thick mass. The approximate mixing time is a mixer of 3-5 minutes.

If necessary, add a little distilled water, just before applying to a pre-prepared surface. important! When applying the material manually (brush, rubber spatula), dilution of the material with distilled water is PROHIBITED in a bucket. It is necessary to first transfer the necessary part of the material into a separate container, and only then dilute it. The amount of water also depends on the temperature of the base of application and subsequent operation. When applied to a surface with a temperature from +15 °C to +70 °C the total amount of water added to the material can be no more than 5% when applied with a brush and no more than 3% when applied mechanically (by an airless spray device). For detailed recommendations, contact the nearest representative office or the manufacturer\*. With a long shelf life inside the container, stratification into fractions is allowed.

### **3. Coating application**

It is recommended to work with a soft fluted brush with long natural bristles, a rubber spatula or an airless sprayer GRACO Mark 5, Mark 7, Mark 10 nozzle 531 (recommended brands and models of airless sprayers, as well as recommendations for their configuration, check with a representative in your region, the manufacturer or on our website). To apply the coating on small surfaces or areas with a complex configuration, you can use a soft fluted brush or a rubber spatula. Surfaces with an area of 100 m<sup>2</sup> or more can be treated with an airless sprayer with a material pressure at the outlet of the nozzle of 100-120 bar (IMPORTANT!!! Not all airless sprayers are suitable for working with BRONYA coating!!! For detailed recommendations on the selection, configuration and operation of airless sprayers, check with the manufacturer or the nearest representative of the BRONYA. (Also see the additional technological map for working with airless sprayers on the website). An insulating coating can be applied to a surface with a temperature from +15 °C to +70 °C and a relative humidity of no more than 80%. The period of complete drying of one layer of coating with a thickness of 1 mm is at least 24 hours. The next layer can be applied only after the previous layer has completely dried - after 24 hours at a temperature of at least +15 °C during the entire drying with the specified conditions. When applied with an airless Graco apparatus, a brush or a rubber spatula, up to 1 mm can be applied at a time. Applying the material with a thicker layer is unacceptable, as this leads to the formation of a moisture-proof film on its surface, which in turn prevents the complete evaporation of moisture, which will lead to the cancellation of sound insulation properties and deformation of the coating.

The thickness of the layer of 1 mm can be determined by a thickness gauge of the "paint comb" type, the consumption of 1.1 liters per 1 m<sup>2</sup> (approximate consumption when applying a brush coating on a flat surface) or the thickness of the "optical density" of the material (so that the substrate does not shine through the material). The material consumption is affected by the type of surface and the method application. The total thickness of the coating and the number of layers is determined by the sound vibration task, recommendations of certified regional representative offices of the production.

## **4. Safety precautions when working with BRONYA SOUND BARRIER**

### **4.1 Individual protection.**

Under normal conditions, the product is safe. If the room is well ventilated or work is carried out outdoors - respirators are not required. In a room without ventilation - use standard respirators. To protect the eyes, use safety glasses. To protect the skin, use gloves and protective clothing.

### **4.2 Critical situations.**

If the product gets into the eyes, immediately rinse the eyes in running water for 15 minutes. If irritation persists, consult a doctor. In case of contact with the skin, rinse with soap and water. The product in the liquid state does not ignite. In case of fire of structures or structures on which the coating is applied, use water, foam, dry chemicals and carbon dioxide during extinguishing. In case of spillage of the product, use any absorbent material such as sand, soil, etc. or rinse with plenty of water.

## **5. Storage and transportation conditions BRONYA SOUND BARRIER**

Storage of the SOUND BARRIER BRONYA material is carried out in a tightly closed container at a temperature from +5 °C to +30 °C, air humidity not more than 80%, away from direct sunlight.

Transportation is carried out by any type of transport at a temperature above + 5 °C away from direct

sunlight. The packaging of the cargo for transportation must ensure the correct installation of containers and the safety of containers. It is not recommended to install more than 3 buckets in a 20-liter container or in a 10-liter container in height on top of each other without additional packaging!

Violation of the integrity of the container leads to damage to the material. In case of non-compliance with the instructions for applying and storing the material, the manufacturer is not responsible for the quality of the coating.

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