



COMPOSITION FOR STRUCTURAL PROTECTION OF STEEL AND REINFORCED CONCRETE STRUCTURES IN HYDROCARBON FIRE CONDITIONS

General requirements for URAN-3S plaster composition

1. Storage of URAN-3S plaster

URAN-3S plaster in bags should be stored in a dry place at any temperature, avoiding contact with wet surfaces.

The warranty storage period in bags is 12 months from the date of manufacture when the above requirements are observed.

2. Environmental conditions during application of URAN-3S

Air temperature: +5°C to +32°C

Surface temperature: up to +35°C

Atmospheric precipitation: absent

Atmosphere conditions: according to GOST 17.2.3.02

3. Drying of the coating

To dry the coating, it is necessary to maintain the temperature and humidity conditions and provide ventilation. During drying, the ambient temperature should not drop below +2°C, even briefly.

The drying time for a coating thickness of more than 30mm under normal conditions is 28 days.

It is recommended to protect the coating from rapid moisture evaporation at high ambient temperatures in cases when:

- The temperature exceeds +35°C
- Direct sunlight exposure occurs
- Wind speed exceeds 5 m/s

4. Equipment requirements

URAN-3S plaster is applied by mechanized methods using continuous-action plastering stations (M-Tec Duo Mix, Maltech Supermix Eco) or a screw plaster pump equipped with a periodic-action concrete mixer (Putzmeister S5 EVTМ or equivalent) for wet shotcreting. Spraying guns – sprayers for thin layers (for decorative application) with a nozzle diameter of 8-12mm are used for application.



5. General Rules

Before applying the fireproof plaster, ensure that the surface is ready for treatment.

The surface of the structure must be dry, clean, free from rust, dust, and other contaminants. There should be no grease, oil stains, or substances hindering the adhesion of materials on the surface of the structure.

The surface of the structure must be primed with an anti-corrosion primer GF-021 or an equivalent. Next, apply a concrete contact based on acrylic polymer with the addition of fine-dispersed quartz.

URAN-3S plaster is applied to the surface layer by layer. The minimum layer is 10mm. The recommended thickness of one layer should not exceed 25mm. If the composition is applied to the surface with reinforcing mesh, it is necessary to cover the mesh with the first layer.

When calculating the practical consumption, technological losses should be taken into account.

When applying, make sure that the distance between the spray gun nozzle and the surface of the structure is not more than 600mm.

Only clean tap water should be used for preparing the solution. The use of technical water is prohibited. To prepare the URAN-3S solution, 11-12 liters of water per one 12kg bag are required.

When applying the first batch, pay attention to the quality of the surface of the sprayed solution. There should be no runs or dissolutions. If such defects appear, it is necessary to reduce the amount of water and fix this value.

The viability of the **URAN-3S** solution is 45 minutes at a temperature of +18°C and humidity of 60%.