
MEGATRON PLUG

Sealing Compound for Waterproofing Cavities, Holes, Joints, or Cracks in Building Structures

Material Description:

"Megatron Plug" is a material used for sealing cavities, holes, joints, or cracks in water-bearing voids in building structures.

The composition of the sealing compound includes modified Portland cement, a carefully selected quartz filler, and chemical additives. The setting time of the composition from the moment of water introduction to the end of setting is 45 seconds, allowing for sealing pressurized flows with high hydrostatic pressure.

"Megatron Plug" has high bond strength to the substrate, high water resistance, chemical, and corrosion resistance.

It is used for waterproofing static structures made of monolithic concrete and prefabricated reinforced concrete.

Advantages of "Megatron Plug":

- Purpose: "Megatron Plug" is an exceptionally fast-setting compound that allows for sealing pressurized flows when other mixtures are washed away by water. Setting time - up to 45 seconds.

- Bond Strength: "Megatron Plug" has high bond strength to the substrate, ensuring reliable adhesion to the surface and high moisture protection efficiency.

- Wide Range of Applications: "Megatron Plug" can be used on various types of concrete structures, including foundation walls and slabs.

- Waterproofing: Megatron Plug has high water resistance, making it effective in preventing water and moisture penetration into the structure.

- Ease of Use: Applied exclusively to a wet surface (does not require drying) from any accessible side of the structure. No additional protection required.

- Chemical and Corrosion Resistance: "Megatron Plug" possesses properties that allow it to withstand the influence of chemical substances and avoid corrosion, even under the influence of seawater and groundwater.

- Eco-friendliness: "Megatron Plug" contains no harmful substances and does not harm

the environment. Approved for use in drinking water tanks.

Scope of Application:

- Waterproofing of prefabricated concrete structures (foundation blocks, floor panels, balcony slabs, etc.);

- Waterproofing of monolithic concrete structures (foundation slabs, cement-based screeds, columns, staircases, etc.);

- Waterproofing of industrial facilities (foundation slabs, columns, wall panels, etc.);

- Waterproofing of agricultural facilities (silos, bunkers, gas holders, underground and aboveground galleries, etc.);

- Waterproofing of water management structures (pipelines, reservoirs, wells, boreholes, etc.);

- Waterproofing of mining and mining objects;

- Waterproofing of treatment facilities (septic tanks, settling tanks, etc.).

Application Recommendations:

Expand and deepen the hole to a depth of at least 50 mm and a width of at least 25x25 mm to ensure the necessary strength and water resistance. The cavity should resemble the shape of a swallow's tail. Clean the inner part from weak concrete residues.

Mix a part of the dry mixture with water in the following proportions: 250 grams of water per 1 kg of dry mixture or 1 part of water to 3 parts of dry mixture by volume. The setting time depends on the water temperature and varies from 20 to 60 seconds. The final consistency of the mixture is plastiline-like mass.

Press the obtained mixture as firmly as possible into the cavity of the flow. Depending on the temperature of the concrete surface and the water filtration rate, the pressure should be maintained for 40-60 seconds. The lower the temperature of the concrete or water, the slower the setting of the solution occurs.

When tamping large cracks and voids, start from the highest point of the crack (joint, seam, junction, cavity).

Application work should be carried out at a temperature not lower than +5°C. It is recommended to treat the tamponed void and adjacent area with two layers of "Megatron Penetrating" mixture.

Technical Specifications:

Characteristics	Value
Appearance	Powdery dark-gray powder, free from impurities
Moisture content, % by weight	0,5÷0,7
Setting time, c	
Start	15÷35
End	45-60
Bulk density in uncompressed state, g/cm ³	1,33
Adhesion to concrete, MPa	2÷3
Compressive strength, MPa	6,0
7 days	15,0
28 days	25,0
Waterproof grade, W	W 15÷16
Frost resistance, number of cycles, F	Not less than 100-150
UV Resistance	Not affected
Application temperature, °C	+5
Operating temperature, °C	-60 ÷ +130
Shelf life, months	12

Material Consumption:

Material consumption per dry mixture is 1.35-1.5 kg/dm³.

Storage:

Guaranteed storage period is 12 months at temperatures from -20 to +60°C in intact factory packaging.

Safety Measures:

When using "Megatron Plug," the following safety measures should be observed:

- Ensure workplace safety. Make sure the workplace is clean, empty, and free of hazardous

materials. Install fencing and safety signs where necessary.

- Use appropriate eye and respiratory protection. When sealing waterproofing, dust and other substances may be released, which can pose health risks. Use protective goggles and respirators.

- Use safe tools and equipment. Ensure that the tools and equipment you are using are safe for work. Check them before use.

- When working with waterproofing, follow safety rules for working with liquids and chemicals.

- Follow all safety requirements set by relevant organizations and manufacturers.

- Ensure that the materials you use are environmentally safe and do not have a negative impact on the environment.