



PHOSPHOGYPSUM-BASED BINDING MIXTURE



Binding plaster is widely used in building and construction materials for the manufacture of various accessories (panels, moldings, etc.) and bearing structures (plates, blocks, etc.).

A method of processing phosphogypsum in binding plaster lies in cleaning it from impurities in the aqueous solution, activation of sediment and entering a polymer additive to improve its specifications.

The main advantages of this binding plaster over conventional plasters are:

- the ability to adjust the time of bondability;
- increased strength of products;
- cheap raw materials due to the use of dump waste and lack of the grinding stage;
- reducing water consumption by 60-70 % compared to traditional methods of cleaning phosphogypsum from its impurities.

Viscous mixture of phosphogypsum binder meets brand G-5 according to the State Standard of Ukraine ДСТУ Б В.2.7-82-99 "Building materials. Binding plasters. Specifications".

Specifications

Composition	Plaster of fine polymeric additives
Colour	White
Presence of odor	No
Humidity	2–3 %
Water/gypsum ratio (consumption)	0.75-0.85 l/kg
Time of bondability	Onset – 3–8 min; end – 15–20 min
Fineness of grinding	Residue on the sieve 0.08, under 2% (ind. III, fine grind)
Flexural strength (aged 2 hours)	2.3–3.5 MPa