

The invention relates to construction materials, in particular to the production of activated building mixtures based mainly on mineral binders with inert fillers and fiber, reinforcing dispersely the mixture by fiber segments. The process for the preparation of building mixture based on mineral binder includes mixing of mineral binder, fed at an angle of $45...60^{\circ}$, sand, water, including sea water, milled quicklime with a specific surface of $3500...5000 \text{ cm}^2/\text{g}$, as well as of ground pozzolanic admixture with a specific surface of $3500...5000 \text{ cm}^2/\text{g}$, with the concomitant air feeding under a pressure of $0.5...6.5 \text{ atm}$ in the component mixing zone, homogenization of the mixture by its reciprocating movement upon mixing, activation of mineral binder by hydrodynamic cavitation, the power pulses of which occur due to local pressure drop during the passage of mixture flow through the restrictions, each of an area of $5...50\%$ of the flow cross-section area and/or due to the collision of particles of mixture components with the water jets, the axes of which are inclined in vertical plane at an angle of $15...75^{\circ}$ and shifted relative to each other in a horizontal plane at an angle of $45...270^{\circ}$. Additionally in the composition of the building mixture is added fiber and a high-performance plasticizer in an amount of $1.0...4.0\%$ of the weight of mineral binder. Mixing of components of the building mixture is carried out in two stages, at the first of which is prepared an activated aqueous mixture of mineral binder, high-performance plasticizer with air, and at the second stage in the zone of outlet of the obtained activated mixture are added the remaining prepared components of the mixture and the fiber. Concomitantly, at the first stage on separate sectors of displacement of the flow is created a regime of intense cavitation, the degree of aggressiveness of which is determined by the specific properties of the mineral binder.

Claims: 5