

EFFECT OF DISPERSIVE NON-METALLIC FIBRE REINFORCEMENT ON FINE-GRAINED CEMENT COMPOSITE PROPERTIES

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Abstract.

Fibres and grained particles are generally determining structural elements of high quality cement composites with dispersed non-metallic fibre reinforcement. Uniform fibre distribution and fibre position in a final composite have important effect to expected utility characteristics. Evaluation of various parametres influence on fibre-cement composite properties with using of different granulometry with various kind, type and amount of fibres. Effectivity of used components for workability and final physical-mechanical properties. Mixing optimalization for adequate dispersion and minimal wearing of fibre reinforcement. Evaluation of PVA fibre contribution to reinforcement of cement composites as an alternative to alkali resistant glass fibres.