

ÉTUDE DE NOUVELLE FORMULATION D'ADJUVANT HYDROFUGE POUR APPLICATIONS DIVERSES

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Abstract : This work aims at finding an optimal composition of a water repellent admixture for waterproofing concrete and mortar. The composition optimization is performed by implementing an experimental design type D^{optimal}. The influence of four main components (A :Oil, B :NaOH, C :Éthanol, D : water) and a fifth (E :émulsifiant) considered as an additive, on three properties of waterproofing concrete aged at least 28 days with knowing : capillarity, index of porosity and mechanical strength, is studied. This research allowed finding a compromise providing both a low capillarity and a low porosity and an acceptable mechanical strength of adjuvanted concrete.

Keywords : Admixture, Waterproof, concrete, Mortar, Experimental Design.