THE SIDE EFFECT OF SHELLFISH AND ASBESTOS ON COMPRESSIVE STRENGTH AND CONCRETE WATER ABSORBABILITY

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ABSTRACT

Concrete mixture consists of cement, sand, gravel, water and other added materials with certain comparisons. The use of the main mixtures of concrete can be replaced with other materials which certainly qualify as concrete mix materials. There are many waste products in the community that have not been used optimally. Especially substitute materials using blood clam shell and asbestos. So this study aims to determine the effect of blood clam shell and asbestos on the compressive strength and absorbability of concrete water. The sample used is a cylindrical shape. Concrete quality planned with fc '20,75 MPa or K-250 with blood clams of 1% of gravel weight, asbestos of 2,5%, 5%, 7,5%, and 10% of the weight of sand. From this research, it was found that the most superior samples were found in a variation of the substitution CKD 1% + ASB 5% with compressive strength is 23,364 MPa increasing by 10,34% from normal concrete, slump test value is 8 cm, and concrete absorption is 3,784%. Concretes absorption can easily be known from the result between the weight of the concrete in the dry and the weight of the surface dry concrete (SSD).

Keywords: Blood clam, asbestos, compressive strength, slump test, concrete absorption.