THE EFFECT OF COMPRESSIVE STRENGTH OF CONCRETE ON THE TIDES OF 28 MPa WITH THE ADDITION OF FABA NON B3

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Abstract

In the process of making buildings in coastal areas, contact with sea water is sometimes unavoidable. Seawater itself has a high salt content which can undermine the strength and durability of concrete. In this study, it will be discussed about the compressive strength of concrete which is influenced by sea tides for concrete quality of 28 MPa and also how much the increase or decrease in the strength of concrete at the age of 7.28 days. To determine the compressive strength of concrete which is affected by tides for concrete quality of 28 MPa, and to determine the magnitude of the increase/decrease in the strength of concrete at the age of 7.18 days.

Samples for normal and marine using Faba NonB3 with each type ranging from 3 samples with the total number of samples is 72.

The magnitude of the increase/decrease in concrete strength at the normal age of 7 days is faba 0 % 13,923 kg/cm², faba 10 % 14,5067996 kg/cm², faba 20 % 12,1854315 kg/cm², faba 30 % 16,36110352 kg/cm², faba 40% 17,83600375 kg/cm², faba 50 % 12,41274187kg/cm², at the age of 28 days the normal is 0 % 17,59629456 kg/cm², faba 10 % 19,38644201 kg/cm², faba 20 % 23,12008584 kg/cm², faba 30 % 19,22090658 kg /cm², 40% faba 25.37016115 kg/cm², 50% faba 13.36929192 kg/cm². at the age of 7 days (sea) is for faba 0 % 15,680 kg/cm², faba 10 % 19,595 kg/cm², faba 20 % 14,493 kg/cm², faba 30 % 14,669 kg/cm², faba 40% 14,018 kg/cm², faba 50 % 14,229 kg/cm², at the age of 28 days (sea) ie 0 % 18,666 kg/cm², faba 10 % 22,847 kg/cm², faba 20 % 19,525 kg/cm², faba 30 % 19,567 kg/cm², faba 40% 25.701 kg/cm²,faba 50 % 13,393 kg/cm².

Keywords: compressive strength, concrete, faba Non B3