ENGINEERING PROPERTIES OF CONCRETE MADE WITH CHOLEMANITE, BARITE, CORN STALK, WHEAT STRAW AND SUNFLOWER STALK ASH

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ABSTRACT

In this study, in the mix of concrete 5% and 10% barite and, 0.5% and 1% cholemanite are used instead of sand by reducing. Also 2.5% and 5% wheat straw, sunflower stalk corn stalk ash are used instead of cement by reducing. Reference samples with no additives are produced for making comparisons. A total of 29 series of standard tests were made with the wet and hardened concrete examples. Am 241 gamma-ray source is used for the detection of the radiation permeability of mortars produced from 12x12x2 cm. linear absorption coefficient of the barite and cholemanite added samples were larger than the control sample.

Keywords: Cholemanite, Barite, Corn stalk, Wheat straw and Sunflower stalk ash.