EFFECT OF LIME STONE POWDER ON MECHANICAL PROPERTY OF CEMENT COMPOSITE BOARD

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Abstract.

In order to enhance physical and mechanical properties of Cement Composite Board (CCB), some additive and admixtures are used in manufacturing process. In this paper, effect of lime stone powder has been investigated as an additive. Three groups of mixes is designed, made and tested for modulus of rupture and modulus of elasticity. In the first group, poly vinyl alcohol fibre with cellulose fibres, in the second group acrylic fibres with cellulose fibres and in the third group only cellulose fibres were used. The chemical, physical and mechanical properties of fibres were also determined. The results show, in each group, the size and percentage of lime stone powder have different effects on maximum modulus of rupture and toughness strength of CCB. The mixes in this investigation satisfy Class 2 classification of the EN 12497 standard.