EFFECT OF HOT WEATHER ON MODULUS OF RUPTURE AND SPLITTING TENSILE STRENGTH OF CONCRETE.

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Abstract: Several costly precautions for reducing temperature of concrete are specified in construction specifications for concreting in hot weather so that workability and compressive strength of concrete are not adversely affected. This paper presents the results of tests conducted for modulus of rupture and splitting tensile strength of concrete prepared at different temperatures and moist cured in hot weather conditions. It has been found that, even if the required compressive strength of concrete in hot weather conditions is obtained, the modulus of rupture and splitting tensile strength of concrete could be reduced by 22 and 11 percent respectively.