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Study of Optimum Replacement of Cement with Silica Fume on Various Method of Mix Proportioning

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Abstract : The effect of optimum replacement of cement with silica fume on various methods of mix proportioning is discussed in this paper. The optimum extent of replacement of cement with silica fume as reported in the previous module of work was taken as 13%¹. The extent of replacement was applied to various methods of mix proportioning like Indian Method, Pumpable Concrete Method, American Method and British Method. This work is done to study the pattern of cube compressive strength and cylinder tensile strength when optimum replacement is adopted. Cubes and cylinders are casted to find the compressive strength and tensile strength for 0% and 13% replacement for all methods of mix proportioning mentioned above.

Keywords : Optimum Replacement, Silica Fume Concrete, Compressive Strength, Tensile Strength.

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