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## **Effect on Mechanical Properties of M25 SCC with Variation of Class - F Fly Ash & GGBS**

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**Abstract:** The present investigation aims to study the workability and mechanical properties of Self compacting concrete (SCC) double blended with Class-F Fly ash and Ground granulated blast furnace slag (GGBS). The reference control mix considered in the present study is M25 grade concrete and the mix design adopted is as per Nan-Su et.al (2001) mix design. Apart from cement, the different proportions of admixtures considered in the present study are GF1, GF2, GF3, GF4, GF5 and GF6 mix proportions. As per the mix design proposed by Nan-su, W/P ratio of 0.425 is considered at the age of 3,7,28,91 days. Properties of fresh concrete for workability are done as per guidelines of European Federation of National Association Representing for Concrete (EFNARC) in terms of J-Ring test, L-Box test, Slump flow test, T50 test and V-Funnel test are done to evaluate workability properties of fresh concrete. Mechanical properties of concrete in terms of compressive strength and Split tensile strength are determined for 3,7,28 and 91 days of curing period.

**Keywords:** EFNARC, Class-F fly ash, Ground granulated blast furnace slag (GGBS), J-Ring test, L-Box test, Slump Flow test, T50 test, V-Funnel test.

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