

## **GGBS as Partial Replacement of Cement: Effect on Fineness, Normal Consistency and Setting Times**

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*The manufacturing of OPC is energy-intensive, resource-consuming and results in CO<sub>2</sub> emission. Therefore studies regarding inquiry of alternative cementing materials have become widespread around the world. Ground granulated blast furnace slag (GGBS) is a potential cement-replacement material (CRM). This study intended to observe the effect of incorporating small percentages (5%, 10% and 15%) of GGBS on some properties of Portland cement. The trend of fineness of cement was found decreasing with the addition of slag. Very little effect was observed in normal consistency. GGBS appears to slightly reduce both the initial and final setting times of cement paste.*

**Keywords:** cement, slag, GGBS, fineness, normal consistency, setting time.

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