

International Journal of ChemTech Research

CODEN(USA): IJCRGG, ISSN: 0974-4290,

ISSN(Online):2455-9555 Vol.10 No.11, pp 95-101,2017

ChemTech

Comparison of the Performance of Self Compacting Concrete

*Rajasekaran.D, Aravind Prabu.S, Karthik.S

Department Of Civil Engineering, Sasurie Academy of Engineering Coimbatore, India

Abstract: Self-Compacting Concrete Originally developed in Japan, SCC technology was made possible by the much earlier development of Superplasticisers for concrete. Tocompare the performance of SCC with Fly Ash 20%, Silica Fume 10%, Rice Husk Ash (5%, 10%, and 15%) as a partial replacement of cement, due to the high increase in construction which has brought a heavy demand for ingredients of concrete such as cement and sand, and these materials are becoming costly and scarce. The use of self-compacting concrete (SCC) is spreading worldwide because of its very attractive properties in the fresh state as well as after hardening. By using Super plasticizer (High Range Water Reducing Admixture) to increase the workability & admixture should bring about the required water reduction & fluidity but should also maintain the dispersing effect. The Using M40 grade of concrete with curing period of 7days, 14days and 28days.To Study the workability and mechanical properties of Self-Compacting Concrete & Compare to Conventional Self-Compacting Concrete. The laboratory testing included slump flow test, L-Box test, V-Funnel test, compressive strength test.

Keywords :Self-Compacting Concrete, Silica Fume, Rice Husk Ash, Fly Ash, Super plasticizer, Material Testing.

Rajasekaran.D et al/International Journal of ChemTech Research, 2017,10(11): 095-101.
