

# Study on Effect of Alccofin and Fly Ash Addition in the Concrete

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**Abstract:** *In concrete, cement is a binding material, but cement is expensive due to excessive cost of transportation from manufacturing plant. Also large scale depletion of these sources creates environmental problems. In that case flyash which are obtain from thermal power plant as a waste product is best alternative material to cement, and alccofine can gives better bond strength which are having properties more than cement. However the gradual reduction in the numbers of skilled workers in construction industries has led to a similar reduction in the quality of construction works. Infrastructural Development is at its peak all over the world and is a symbol of growth for any country. But, as every coin has two faces - Concrete is no exception. The negativity attached to construction industry is that concrete, the most popular construction material, involves use of cement which is responsible for 7% of total world's carbon dioxide emissions. Carbon dioxide is the main threat in causing global warming of the environment. Though attempts have been made to reduce CO2 emissions in environment by all possible means, but cement has not found a suitable replacement for it till date. so because of it we are replacing cement by flyash and alccofine in same percentage. Also disposal of unutilized fly ash causes severe ecological problems and is quite expensive. This study was undertaken to utilize large quantities of Class F fly ash produced in India, where utilization is in limited percent. So, this investigation explored the possibility of reducing the cement consumption in concrete with Class F fly ash in concrete. We oriented that direction the study of experimental investigations on High performance concrete with partial replacement of cement by alccofine and flyash with various compositions and study its Compressive strength and slum, flow test etc..*

**Keywords:** Cement, Alccofine, Flyash and High Performance Concrete

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