

ABSTRACT

In the recent years, researchers have focused on the improvement of concrete quality regarding its strength and durability of properties. Life spans for concrete building products can be double or triple those of other common building materials. Homes built with concrete walls, foundations, and floors are highly energy efficient because they take advantage of concrete's inherent thermal mass or ability to absorb and retain heat.

Use of fly ash improves the properties of concrete. Much research has been done on concrete with fly ash. In order to make the concrete eco-friendlier and to improve the mechanical and durable properties of concrete, an attempt is made in the present investigation to study the mechanical properties of concrete using fly ash as partial replacement to OPC. The aim of the current work is to achieve the good strength concrete by using the fly ash replacement in cement. So the experimental program has been taken, to study the use of fly ash with various percentages of cement replacement in the production of normal strength concrete.