USING OF FERRO-CEMENT TO RESIST PENETRATION

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ABSTRACT
The progressive development of military destructive weapons, which means more expecting pressures, than the values that structures were originally designed to withstand, demands new techniques to enable the structural elements to resist these additional effects.

Concrete is representing until now the most important and the greatest suitable material for different buildings and systems. It needs more investigations and development to improve its properties and provide it high performance to resist impact loads, penetration and perforation which resulted from projectiles of modern destructive weapons, which affect many military structures such as slabs of airports, runways, protective shelters, and fortification structures.

An experimental program was carried out to investigate the efficiency of using Ferro cement to resist penetration. Ferro-cement is a thin composite material made of cement mortar reinforced with distributed layers of continuous, relatively small diameter, wire mesh.