

## عنوان مقاله:

Near Surface Characteristics and Strength of Concretes Containing Different Levels of Cement Content

## محل انتشار:

دومین کنفرانس بین المللی مقاوم سازی لرزه ای (سال: 1388)

تعداد صفحات اصل مقاله: 6

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## خلاصه مقاله:

This study presents the results of an investigation on the use of different levels of cement content to enhancing the strength and near surface properties of concrete mixtures having the same W/C ratio. Three W/C ratios (0.4, 0.45 and 0.5) were used and for each W/C ratio, four mixtures were prepared with cement contents 300, 350, 400 and 450 kg/m<sup>3</sup> and tested for compressive strength, water absorption, and sorptivity. Test results indicate that the cement content has significant effects on the strength and near surface durability performance of concrete. At each W/C ratio, decrease in cement content from 450 to 350 kg/m<sup>3</sup> greatly increased compressive strength and decreased water absorption and sorptivity in varying magnitudes. Similar results were also observed when cement content increased from 300 to 350 kg/m<sup>3</sup>. However, decrease in water absorption and sorptivity was little in this case.

## کلمات کلیدی:

cement content, strength, water absorption, sorptivity

## لینک ثابت مقاله در پایگاه سیویلیکا:

<https://civilica.com/doc/844734>

