

## عنوان مقاله:

Innovation in manufacturing technology with cost optimization approach in project management

## محل انتشار:

هفتمین کنگره سالانه بین المللی عمران، معماری و توسعه شهری (سال: 1400)

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## خلاصه مقاله:

According to the growth of civil industry and subsequently the use of cement and concrete in civil and other projects, studying the green concrete production technology is felt necessary. In this research, the optimum composition of green materials has been analyzed and determined mainly based on the special weight of concrete by testing several series of concrete mixture to reach the highest resistance in light concrete produced by the ceramic grains. In each series, using the light ceramic grains, the weight of light coarse-grains ceramic and natural sand was determined for several supposed special weights for a constant rate of proportion of water to cement and cement. The range of cement carat changes was ۲۰۰-۳۵۰ Kg/m<sup>۳</sup> and special weight of concrete from ۱.۵ to ۲.۰ gr/m<sup>۳</sup> in concrete mixture. Totally, more than ۱۵۰ cylinder samples in the ages of ۳, ۷, ۸ days underwent the pressure and tension test. The results obtained from the tests indicated that in an optimum mixture, minimum amount of cement is ۱.۹ gr/m<sup>۳</sup> to reach the pressurized resistance more than ۱۳۰ kg/m<sup>۳</sup> in ۲۸ days. The highest pressurized and tension resistance for concrete with ۳۵۰ kg/m<sup>۳</sup> cement and special weight of ۱.۰ gr/m<sup>۳</sup> for ceramic grains with special weight of ۱.۹ gr/m<sup>۳</sup> for concrete .in ۲۸ days, ۱۸۴ kg/m<sup>۳</sup> and ۲۹.۵ kg/m<sup>۳</sup> were obtained respectively

## کلمات کلیدی:

Innovation, Construction Management, Cost optimization, Green materials, Wastes

## لینک ثابت مقاله در پایگاه سیویلیکا:

<https://civilica.com/doc/1374362>

