

## عنوان مقاله:

A Comparison Between the Shear Strength Measured with UU Triaxial and Direct Shear Test on Sand-Clay Mixture

## محل انتشار:

چهارمین کنفرانس بین المللی پژوهش های کاربردی در علوم و مهندسی (سال: 1398)

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## خلاصه مقاله:

the direct shear test and triaxial test were conducted on specimens with 0, 10, 20, and 30% clay contents under 50, 100, and 150 kPa overloads to investigate the effect of fine-grained on the strength of the sandy soil. Preparing the specimens requires determining the maximum dry unit weight and the optimum water content of the soil. Therefore, before conducting the main tests, a series of proctor compaction tests were performed on the soil specimens. The tests were conducted on clean sand and a mixture of sand and clay. The results of the triaxial test showed that the ultimate strength and failure strain increase by adding to the clay content in the specimens. Moreover, the addition of clay limits the loss of strength in the soil after the ultimate strength. Compared to the results of direct shear tests, the stress-strain behavior of specimens is dominated by the clay content as it increases the stiffness of the sand-clay mixture.

## کلمات کلیدی:

Clay Soil, Sandy Soil, Shear Strength, Direct Shear Test, Triaxial Test

## لینک ثابت مقاله در پایگاه سیویلیکا:

<https://civilica.com/doc/1000584>

