

## عنوان مقاله:

Shear Strength Properties of an Engineered Material with Large Damping Ratio

## محل انتشار:

چهارمین همایش بین المللی مهندسی ژئوتکنیک و مکانیک خاک ایران (سال: 1389)

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## نویسندگان:

M. El-Emam - Assistant Professor, American University of Sharjah, Sharjah, UAE

Z. Khan - Assistant Professor, American University of Sharjah, Sharjah, UAE

A. Bigdeli - Student, American University of Sharjah, Sharjah, UAE

M. Rajabi - Student, American University of Sharjah, Sharjah, UAE

## خلاصه مقاله:

This study presents a series of direct shear tests conducted on engineered fill with different percentages of viscoelastic material. Damping was increased by adding a viscoelastic material to the voids of sand, which increase the capability of dissipating energy and control the excessive vibrations. In this study, specimens of uniformly graded sand with different percentages of viscoelastic material were prepared and tested in direct shear apparatus. Results indicate that the maximum shear strength of sand, friction angle, and the strain corresponding to the maximum shear strength increases with increasing percentage of viscoelastic material. However, the shear strains corresponding to equivalent maximum shear strength of pure sand does not show a large variation from the strains of pure sand. Moreover, the engineered soil exhibited smaller volume change compared to pure sand.

## کلمات کلیدی:

Direct shear, sandy soil, Soil damping, Viscoelastic material, Shear modulus

## لینک ثابت مقاله در پایگاه سیویلیکا:

<https://civilica.com/doc/94534>

