

## عنوان مقاله:

Response of Skirted Foundations Resting on Dry Medium Dense Sand

## محل انتشار:

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## خلاصه مقاله:

Experimental model tests were carried out to study the response of skirted foundation resting on dry sand. The experiments were performed in a large soil container (1000 × 1000 mm in cross section and 800 mm in height). Skirts with three different lengths (L) varied from 0.5D to 1.5D was attached to the edge of shallow circular foundations having three different diameters (D=60, 90 and 120 mm). Different parameters have been studied; these parameters involve skirt length, foundation size and skirt conditions. Skirts with open end and closed end were used. The relative density was kept constant and equals to 60%. The case of foundation without skirt (L=0) was initially tested and set as a reference for comparison purpose. From the results of experimental tests, it was found that the skirt modifies the load-settlement behaviour, increasing the load carrying capacity and reducing the foundation settlement. The results also indicate that load carrying capacity of skirted foundation increases with increase skirt length as well as foundation size. The results show that using skirt with closed end brought a considerable increase in load carrying capacity than .that of open end

## کلمات کلیدی:

Medium Dense Sand; Skirt; Load Carrying Capacity; Circular Foundation; Physical Model Tests; Dry

## لینک ثابت مقاله در پایگاه سیویلیکا:

<https://civilica.com/doc/804094>

