

## عنوان مقاله:

Numerical Evaluation of Wall Rigidity Effects on the Applied Dynamic Earth Pressure

## محل انتشار:

دهمین کنگره بین المللی مهندسی عمران (سال: 1394)

تعداد صفحات اصل مقاله: 8

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## خلاصه مقاله:

In the design of quay walls the applied earth pressure has an important effect on the designed section. Furthermore the rigidity of the wall section affects the amount and mode of displacements. The effect of the wall rigidity is evaluated numerically considering three types of quay walls; Stepped-like Shape Concrete Block, Knapsack Concrete Block, and Sheetpile. Results show better capability of the Knapsack wall instead of Stepped-like Shape, because of the reduction in the applied earth pressure as a result of the hunchback shape of the wall. Also the Sheetpile wall can be introduced for soils with lower strength in low seismicity degree regions, because of flexibility of these walls and less dependent on the soil strength. Also in accordance with performance based design criteria, the evaluation of the wall displacement for two levels of earthquakes is necessary and it has been considered in the numerical modeling in this research.

## کلمات کلیدی:

Earth Pressure, Gravity Wall, Sheetpile

## لینک ثابت مقاله در پایگاه سیویلیکا:

<https://civilica.com/doc/364611>

