

عنوان مقاله:

2D Numerical Simulation of Stabilized Soil Wall by Nailing and Anchorage Methods

محل انتشار:

دومین کنفرانس بین المللی مهندسی عمران، معماری و مدیریت بحران (سال: 1396)

تعداد صفحات اصل مقاله: 9

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خلاصه مقاله:

One of the most important issues in geotechnical engineering is using suitable method for stabilizing the deep excavations. Among widely used methods, nailing and anchorage methods are being used more in order to stabilize soil walls in deep excavations recently. Applying prestressing force is one of the differences between nailing method and anchorage one, which causes less deformations and displacements, while in nailing method, the movement of soil mass makes force to the wall. In this paper, the data of stabilized wall by Briaud and Lim (1999) were used for verifying numerical simulations. Parametric analyses were performed on nine stabilized walls with different properties and deformations and settlements of the walls were determined. The main purpose of this paper is analyzing the performance of soil nail wall in comparison to anchorage method which are simulated in Plaxis 2D (finite element software) and compared to obtained deformations of the wall according to these two mentioned methods.

کلمات کلیدی:

Numerical Modelling; Pile & Anchorage; Concrete Block & Anchor; Nailing; Plaxis 2D

لینک ثابت مقاله در پایگاه سیویلیکا:

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