

عنوان مقاله:

Effects of soil models and nail's flexural stiffness on soil nail wall 2D numerical analysis

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خلاصه مقاله:

Considering the nail's flexural stiffness in nail's simulation is a polemic topic in the numerical analysis of the soil nail wall. In this research, effects of soil constitutive models and nail's flexural stiffness on soil nail wall 2D numerical analysis have been studied and compared with the outputs from French national research project on soil nailing, CLOUTERRE. The nail's simulation in numerical model was performed in two forms, by Geogrid and Plate elements and the soil's behavior simulation was performed by the Mohr-Coulomb (MC) and Hardening soil (HS) constitutive models in finite element package intended for two-dimensional analysis ,PLAXIS 2D. It has been observed that ignoring the nail's flexural stiffness results in more conservative results in the values of soil lateral displacement and .the nail's axial force, especially in the Hardening soil constitutive model

کلمات کلیدی:

FEM analysis, soil nail wall, nail's flexural stiffness, soil constitutive model

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