IASET: Journal of Civil Engineering (IASET: JCE)
ISSN (P): Applied; ISSN (E): Applied
Vol. 1, Issue 1, Jan - Jun 2016; 35 - 44

International Academy of Science, Engineering and Technology
Connecting Researchers; Nurturing Innovations

SLOPE STABILITY ANALYZES WITH FISSURED MATERIAL

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ABSTRACT

Many developments in geotechnical engineering research about applications, theoretical, practice, to assessment slope stability, all these improvements to understanding phenomena in realty. Many cases make slope stability instable, one of these cases is fissured material. The present work deals with the slope stability analysis, by using the technique of shear strength reduction, we investigate the effect of the fissure plane, for the material with the fissures included. For this purpose, we analyse the slope by varying the angles of orientation of plane, between 0 to 75 for α_1, and α_2, to determinate the factor of safety, against a potential failure mechanism, and deducing the critical failure shape. The results show that the stability of slope is mainly dependent on angles of orientation of plane, the variation of the angles, affects in the shape of the sliding surface and on the safety factor clearly.

KEYWORDS: Fissures Included; Slope Stability; Shear Strength Reduction