

PUSHOVER ANALYSIS OF UNSYMMETRICAL FRAMED STRUCTURES ON SLOPING GROUND

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ABSTRACT

This paper deals with the non-linear analysis of various symmetric and asymmetric structures constructed on plain as well as sloping grounds subjected to various kinds of loads. Different structures constructed on plane ground and inclined ground of 30° slope is considered in the present study. Various structures are considered in plan symmetry and also asymmetry with difference in bay sizes in mutual directions. The analysis has been carried out using SAP-2000 and ETABS software. Pushover curves have been developed and compared for various cases. It has been observed that the structures with vertical irregularity are more critical than structures with plan irregularity.

KEYWORDS: Pushover Analysis, Symmetrical and Unsymmetrical Structures