

Pushover Analysis of Sir M Visvesvaraya Block NMAMIT NITTE

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Abstract: Pushover analysis is one of the most-used nonlinear static procedures for the seismic assessment of structures, due to its simplicity, efficiency in modeling and low computational time. The previous studies about pushover analysis are almost based on symmetric building structures and unidirectional earthquake excitation. This analysis is conducted to evaluate the seismic capacities of an existing asymmetric-plan building. The seismic response of RC building frame in terms of performance point and the effect of earthquake forces on multi storey building frame with the help of pushover analysis are carried out. In the present study the building frame is designed as per IS 456:2000 and IS 1893:2002. We should also go through ATC-40, FEMA 356. To get knowledge of pushover analysis we have to learn Etabs and should practice to analysis a RC building. The main objective of this study is to check the kind of performance a building can give when designed as per Indian Standards. The pushover analysis of the building frame is carried out by using structural analysis and design software ETABS (Version 19).

Keywords: Pushover analysis, RC building, Performance Point, Etabs, code book

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