

Paper ID: ICRAITMS_202012_149

ANALYSIS OF HIGH RISE BUILDING INCLUDING EARTHQUAKES

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ABSTRACT:

In Present scenario construction of high rise building with floating column is a distinctive feature in urban India. As per IS: CODE-1893:2016 floating column construction is prohibited but there is no limitation and restriction for research work. The purpose of this research is to study seismic response of a building and to analyze and build the structure in which there will be less damages to the structure and its component under the excitation of earthquake. The paper deals with validation of the software has been done in relation to the literature and further matters have been decided and studied based on the validation result. Finite element-based software like Staad-Pro has been used, Equivalent static method and response spectrum method have been used for analysis. The results have been obtained in terms of base shear, displacement, storey drift, time period etc. Based on results it was concluded that triangular plate in floating column building reduces displacement and base shear of building.

Keywords: High rise building Floating column, Dynamic analysis, Staad-Pro

