

Influence of Irregularities in Plan and Elevation on the Dynamic Behavior of the Building

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Abstract : Some architectural conditions required some shapes often lead to an irregular distribution of masses, rigidities, and resistances. The main object of the present study consists in estimating the influence of the irregularity both in plan and in elevation which presenting some structures on the dynamic characteristics and his influence on the behavior of this structures. To do this, it is necessary to make apply both dynamic methods proposed by the RPA99 (spectral modal method and method of analysis by accélérogramme) on certain similar prototypes and to analyze the parameters measuring the answer of these structures and to proceed to a comparison of the results.

Keywords : irregularity, seismic, response, structure, ductility

Conference Title : ICESE 2015 : International Conference on Earthquake and Structural Engineering

Conference Location : Barcelona, Spain

Conference Dates : October 26-27, 2015