

COMPARISON BETWEEN SEISMIC ANALYSIS AND NON-SEISMIC ANALYSIS OF G+17 BUILDING USING SAP2000

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ABSTRACT

Engineers mostly adopt complex non-linear methods to analyze multistorey residential building to sustain earthquake forces. This paper uses much simpler Equivalent Static method to analyse G+17 storey building to resist earthquake forces using SAP2000 software. The seismic analysis is further compared with non-seismic analysis using DL+LL combination. It was observed that the seismic results obtained consisted of drastically increased maximum moments and shear forces than the non-seismic analysis.

KEYWORDS: Equivalent Static Method, Seismic Analysis, SAP2000, Earthquake, Maximum Moments, Shear Forces

Received: Feb 15, 2017; **Accepted:** Mar 03, 2017; **Published:** Mar 07, 2017; **Paper Id.:** TJPRC: IJEEGSJUN20173