Research Paper | Engineering | E-ISSN No : 2454-9916 | Volume : 3 | Issue : 5 | May 2017

# COMPARISON OF BEHAVIOR OF CONVENTIONAL RC STRUCTURE WITH STAINLESS STEEL ENCASED CONCRETE COLUMN STRUCTURE

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## ABSTRACT

In modern period of technology to get maximum advantages of structural member under earthquake is the priority. Composite structure is one option to get the job done. Composite construction is increasing rapidly so the proper dynamic design should be needed to reduce the damage during the earthquake. In this study to fulfil the adjective of reducing the damage of the structure the composite column is used. The column is steel filled/encased concrete type composite column. And the material for steel casing is stainless steel 304 grade is used in modelling. Linear static and linear response spectrum analysis is carried out to study the response of the structure under. In this study the response of the conventional RC structure is compared with the response of the composite structure in which the stainless steel encased concrete column structure. For this analysis the FEM based ETABS software is used and the effect of this composite member is observed.

**KEYWORDS:** Composite structure, Composite column, Stainless steel, Response spectrum, Response of building.