

## **ABSTRACT**

As our country is the fastest growing country across the globe. So, the need of shelter for highly populated cities where the cost of land is high and further horizontal expansion is not possible due to unavailability of space, so the only solution is vertical expansion. After an earthquake occurs it causes great damage due to unpredictable seismic motion striking & when the height of building is increased the wind load effect also acts on building. This causes major loss of life with a more casualties. Structures are designed to resist these sudden forces and should have sufficient stiffness and strength to control displacement at supports. However, it is inappropriate to design a structure to remain in the elastic region, under severe earthquakes & wind lateral forces, because of the economic constraints. Even the plan configuration of building depends upon how the structure reacts on loading.

eTABS is an engineering software product that caters to multi-story building analysis and design. Modelling tools and templates, code-based load prescriptions, analysis methods and solution techniques, all coordinate with the grid-like geometry unique to this class of structure. The current project deals with the analysis of commercial building (G+3) and its design which is for the purpose of serving a shopping mall. This area lies under zone II in the view of seismic zone, which is not liable to risk due to effects of earthquake.