

Seismic Analysis and Retrofitting of Open Ground Storey Structure

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Abstract: *Of the many natural and environmental disasters, seismic actions - earth earthquakes have the greatest impact on structures. It has been observed that structures lose strength over time due to many reasons, such as seismic activity, soil failure due to land movement, and so on. Then there are problems such as damage to the roof, foundation, walls, pillars, columns and beams. For them, structures become statically dangerous. And there is a question of security, and a decision comes - retrofitting. There are various building structures of public, private and historical significance. This work consists of seismic analysis of the open ground floor building using ETABS software. The structure is analyzed, and different models consist of different parameters. The maximum floor displacement is observed for the floor 4, which has a value of 1.4 mm. The maximum time period is observed for the mode 1 and it decreases to model-12.*

Keywords: Base Shear, storey displacement, storey stiffness and storey drift

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