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Study on Analysis of G+10 Building with Shear Wall Using ETABS

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Abstract: Shear wall is a structural member designed to counteract the lateral forces acting on a structure. These walls are more important in seismically active zones when shear forces on the structure increases due to earthquakes. Shear walls have more strength, stiffness and resist in-plane loads that are applied along its height. Buildings with shear walls which are properly designed and detailed have shown very good performance in past earthquakes. Various research studies have been conducted on the design of shear wall and its performance to seismic forces. This study used analytical software called E-TABS to provide a full perspective of the equivalent static technique and a high-rise building's reaction spectrum analysis with same model, in different zones. Using software to do the study has been beneficial. The structure has a medium soil type and is approximately G+10 stories tall.

Keywords: Shear Wall, Seismic Zones, Displacement, Base Shear, Storey Drift.

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