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Abstract Details

Title: Seismic Analysis of Flat Slab Building

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Abstract: Flat slab buildings are the building in which slab without beam directly resting on the column. Flat slab building provides much more advantage over the conventional frame building in terms of appearance, economy, aesthetic and speed of construction practice. However it is subjected to flexure failure of slab, punching shear failure. Out of these failures punching shear failure is brittle failure, catastrophic and the most dangerous type of failure. This dissertation presented herein can be considered into three main aspects. In the first aspect the seismic analysis of flat slab building is considered. As performance of flat slab building is not satisfactory under earthquake loading due to their vulnerability to punching shear failure. In the second aspects as due to large bending moment and shear force at the slab column joints the stresses are developed which brings about the cracks in the concrete and the failure takes place and thus there is a demand to provide the large area at the slab column joint so as to called as column head at the top of the column and drop at the slab and hence one of the most important issue is the brittle punching failure due to the transfer of unbalanced moment and shear force between column and slabs. So punching shear failure in the flat slab building was considered in the second aspect. In the third aspects the cost of different modals is compared.

Keywords: Seismic Analysis, Flat Slab, Building.