Multi Story Building Design by ETABS

ABSTRACT

Most buildings are of straight forward geometry with horizontal beams and vertical columns. Although any building configuration is possible with ETABS version 2009, in most cases, a simple grid system defined by horizontal floors and vertical column lines can establish building geometry with minimum effort. Many of the floor level in buildings are similar. This commonality can be used to dramatically reduce modeling and design time. The present work deals with the analysis and design of a multi storied residential building of (G+2) by using most economical beam to column method. The dead load &live loads are applied and the design for beams, columns, footing is obtained from ETABS with its new features surpassed its predecessors with its data sharing. Our main aim is to complete a multi-storey building and to ensure that the structure is safe and economical against gravity loading conditions and to fulfill the function for which the structures have been built for. For the design of the structure, the dead load and live load are considered. The analysis and design of the structure done by using software package ETABS. In this project multi- storied construction, we have adopted limit state method of analysis. The design is in confirmation with IS 456-2000.The results of analysis are used to verify the fitness of structure for use. Computer software’s are also being used for the calculation of forces, bending moment, stress, strain &deformation or deflection for a complex structural system. The principle objective of this project is to design and analysis of multi-storied building (G+2) by ETABS v 9.7.4.

Key Words :Gravity load, Hostel, building. ETABS, Design etc,.