

Department : Civil

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Group No: 4

Guided By

**MR.Y.B.PATEL**

## **SMT. S. R. PATEL ENGINEERING COLLEGE, UNJHA**

### **Project Title**

### **PERFORMANCE ANALYSIS OF G+5 STOREY BUILDING USING IS13920 AND IS 456:2000**

#### **Abstract:**

The main objective and principle of this project is to analyse and design a multi-storeyed building G + 5 using STAAD Pro. V8i. The design involves load calculation and analysing the whole structure by STAAD Pro. V8i. The design methods used in STAAD-Pro analysis are Limit State Design conforming to Indian Standard Code of Practice. STAAD Pro. V8i features a state-of-the-art user interface, visualization tools, powerful analysis and design engines with advanced finite element and dynamic analysis capabilities. From model generation in STAAD Pro. V8i, analysis and design to visualization and result verification, Initially we started with the analysis of simple two dimensional frames and manually checked the accuracy of the software with our results. The results proved to be very accurate. We analysed and designed a G + 5 storey building initially for all possible load combinations [dead, live, wind and seismic loads]. After designing the G+5 storey by both Indian Standard 13920:1993 and Indian Standard 456:2000 we will check the efficiency of both the design for economy point of view.

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