

# Dynamic Analysis of Flat Slab and Grid Slab System in a Multistorey Building

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**Abstract:** *Civil engineers are facing a great challenge in structural designing. The design must fulfill various parameters which include economical structure, durability and serviceability. But taking these points in mind it becomes very difficult for an Engineer to fulfill all these requirements at a time when a design is performed manually. This dissertation presents a research on digital tools used in civil engineering and comparing their results by taking in mind the requirements of the above points. In this research process a building is taken for analysis and design on well-known Software ETABS. Based on the results taken from the Software some comparison is done with manual analysis. Nowadays every designing organization is using these Software but there is a question mark to which software we must go for designing. The parent organizations which have developed these designing tools promote their Software by showing all the positive points. In addition to this they are trying to fill all the loop holes which they found in their products but it will never happen that another developing company will put the points in light what the negative points are there in existing products. They keep on improving to deliver their best. In this project work I will present the difference for future users to which tool you must go through to acquire your needs. I am not saying that some products are not ok at all. I have designed a residential building with proper loading which is being designed on both ETABS. Manual calculations make it crystal clear the difference between the Software. The main purpose of this study is to show detailed difference between well-known simulation Software STAAD Profaned ETABS used by structural design engineers nowadays. This study is focused on the advantages of digital tools in our life to make it easy and reliable for us to Performa difficult task. It is found that ETABS is good for building design and pro on the whole deals with RCC Structures as well as Steel Structures but by survey I found STAAD Pro is mostly used to check analysis result. So, in this study I am going to check it out what is the reason, why Engineers are taking analysis result in case of RCC Design why noted sign result while using STTAD Pro.*

**Keywords:** STTAD Pro