

BIM-Driven Architectural and Structural Analysis and Design of Residential Building

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Abstract: *The use of Building Information Modeling (BIM) can be a useful platform for structural engineers to analysis and design. The current state of project is analyzed by giving a general data on how architectural, structural consultation firms are providing regulation on their projects to improve stability of structure. The capability of BIM to proceed structural process is discussed with dynamic system, and how it impacts design and progress workflow. The benefits of using BIM in structural engineering are, in the areas of productivity, coordination, and visualization. Study is developed to test the defection throughout process for all three-discipline structure architecture and Mechanical, Electrical, Plumbing and Fire (MEPF).*

The aim of this study provides useful information for everyone interested in increasing their knowledge on BIM technology in structural engineering. For the project AutoCAD is used for drafting plan. STAAD PRO is used for design and analysis for stability of structure. Revit is used for modeling and making schedules of structural quantities also detail section used for Good For Construction GFC drawings. Clash detection is necessary for clash free model which ID's done on Navisworks..

Keywords: Building Information Modeling

