

DESIGN A DOUBLE STOREY CLUB HOUSE

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ABSTRACT

The title of my project is 'Design a Double Storey Club House' which is located at 14, Jalan Junid, 84000 Muar, Johor. The objective of this project is to design a structure that is durable, economical and safe to the user. This club house has various facilities, such as swimming pool, restaurants, conference rooms, exhibition rooms and etc. a sky garden will be situated at the top of the club and it will be equipped with an automatic irrigation system. Besides, an Olympic-seized swimming pool will be situated next to the club house. A good allocation of the facilities proposed must be well planned in the architecture plan and this is the first preparation of the design.

The next step is to draw the structural layout plan of the club house and it should be planned and designed with safety and able to withstand the imposed loads based on BS6399 Part:1 and the dead loads are according to the architectural design to it respective usage. The swimming pool is designed as liquid retaining structure and the design is based on BS 8110 Part: 1 and BS8007. Furthermore, draw the piping location plan of the irrigation system which is installed in the sky garden. And all these plans are attached to the List of Illustrations of this report.

The club house design is done step by step and the design work is started from the top of the structure to the bottom of it. Basically, all the structure of the club house is designed by reinforced concrete method based on BS8100 Part: 1. The design is started with slab, staircase, beam, column and the lastly is footing for the building. And also, I have to design the swimming pool with retaining structure. The design of reinforced concrete liquid retaining structure should be designed carefully with their respective check to ensure no leakage.

All the structural design theories are attached to the body of this report and the further of the report will guide you through the process of the design of the structure. Besides, all the calculation of structure, the schedule of the structure and detailing of the structure are attached to Appendix. There is a CD attached in this report to show the Appendix B and Appendix D.