DESIGN OF THE ELECTRICAL

INSTALLATION OF A MULTISTOREY BUILDING

Project Report Submitted by:

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in partial fulfilment of the requirements for the award of Diploma of Technician Engineer in Electrical Engineering of the Higher Technical Institute, Nicosia, Cyprus.

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SUMMARY

ELECTRICAL INSTALLATION OF A MULTISTOREY BUILDING

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The purpose of the work carried out, is to design the electrical installation of a multistorey building pertaining to a block of flats. The approach followed, satisfies the 15th edition of the IEE Wiring Regulations and the E.A.C. conditions of supply.

The installation is properly designed, so as to cover everything concerning the proper and safe operation of all electrical equipment installed in the building. Proper materials and equipment are used for protection against overcurrent and earth leakage currents. Protection against overcurrent is achieved with the use of miniature circuit breakers and against earth leakage with the use of residual current devices. The installation is separated into group of circuits. An isolator is used in each group to isolate the supply during maintenance. Where more protection is required, for instance in the case of a motor, an isolator is used especially for the circuit, and an extra protective device is installed (starter) to give overload protection.

Illumination design is carried out with the use of the "Lumens" method of calculation, which is the most widely used method, for the design of Interior lighting.

Finally the costing of the whole installation is estimated by calculating separately the material and labour cost (analytical method). By this way sufficient results are obtained.

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