

ELECTRICAL SERVICES OF A MULTISTOREY BUILDING

by

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SUMMARY

DESIGN OF THE ELECTRICAL SERVICES OF A MULTISTOREY BUILDING **Submitted by: Marcou Chystalla**

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

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 use especially for the circuit, and an extra protective device is installed (starter) to give overload protection.

Illumination design is carried out by using "Lumens" method of calculation. It is the most widely used approach to the systematic design of Interior lighting. Light Loss factor is used in this method to

estimate what the illuminance produced by the installation will be at any particular stage of its life, the depreciation caused by dirt deposited on luminaires, and room surfaces.

Telephone installation is carried out for all flats and shops.

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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