

HIGHER TECHNICAL INSTITUTE

ELECTRICAL ENGINEERING COURSE

DIPLOMA PROJECT

DESIGN OF THE ELECTRICAL SERVICES
OF A MULTISTOREY BUILDING

E. 1144

ANDREAS ACHILLEOS

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Project supervisor: Mr. I. Demetriou

Type of project: Individual

Dedicated to Demetra and my family

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ABSTRACT

This project deal with the electrical installation of a multistorey building which includes:

- (a) Design of the electrical, telephone and lightning protection system , installation of a multistorey building.
- (b) Illumunation designing
- (c) Costing of the installation including labour.

The designing is carried out according to:

- The IEE and EAC Regulation for the Electrical Design
- The CIBS code for the Illumination Design
- The CYTA Regulations for the Telephone Design
- British Standard Code of practice for Protection of structures against lightning (BS 6651).

INTRODUCTION

This project is a design of the electrical, telephone and lightning protection system installation of a multistorey building consisting of two apartments and one shop including illumination design and costing of this procedure. The first chapter is based on the theory and calculations of illumination design. The illumination calculations are carried out to find used the required number of fitting to be used.

The electrical design calculations are carried out in the second chapter. The electrical installation is divided in circuits ie lighting circuits, power circuits (socket outlet and fixed appliances) and calculation for the appropriate overcurrent protective device (type and rating), live cables cross sectional are taking into account voltage drop limitations circuits and circuits protective conductor c.s.a are done for typical circuit.

The telephone installation design and calculations are carried out in the third chapter and the lightning protection system design and calculation are carried out in the fourth chapter.

Finally costing of the processing done by rising the analytical method of the overall cost of the installation is evaluated.

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