HIGHER TECHNICAL INSTITUTE

ELECTRICAL ENGINEERING DEPARTMENT

DIPLOMA PROJECT

DESIGN OF THE ELECTRICAL SERVICES OF A MULTISTOREY BUILDING

BY: NIKOLAS TSIAKOLI LOUKITS

E.1424

ACADEMIC YEAR

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ABSTRACT

The purpose of this project is to provide in detailed steps the way that a proper electrical installation takes place in a multistorey building. The objective of the electrical installation is to provide safety of any possible injuries or damages that can take place due to a faulty electrical installation, as well and livestock to the user.

The whole design is based to IEE wiring regulations of 16th Edition, as well and local EAC and CYTA regulations.

In this project that is made up of several chapters so that to simplify it's study, the design of the electrical services of the multistorey building is explained in detail.

At the end of this report, appendices providing technical specifications for the devices and equipment used can be found, and eventually architectural drawings are provided showing the detailed locations of the various loads and equipment used.

INTRODUCTION

This project deals with the electrical installations and the specialized electrical services of a building with flats, including specifications, drawings and typical calculations of the design.
The design of the whole electrical installations of the multistorey building is represented in this project report.

Objectives:

1. To design the complete electrical installation of a multistorey building that includes the following:

- Illumination
- Lighting circuits
- Socket outlet circuits
- Fixed appliances
- Air-Conditioners
- Motor circuits
- Supply cables to the distribution boards and diversity
- Single line diagrams
- Bonding and earthing
- Inspection and testing
- Telephone/T.V/Internet/Intercommunication access control systems design
- Lightning protection system
- Fire alarm system

2. To provide all necessary diagrams, schedule of materials and costing including labour.