HICHER TECHNICAL INSTITUTE

ELECTRICAL ENGINEERING DEPARTMENT

DIPLOMA PROJECT

DESIGN OF THE ELECTRICAL SERVICES OF A MULTISTOREY BUILDING

BY: NIKOLAS TSIAKOLI LOUKITS

E 1424

ACADEMIC YEAR 2005 / 2007

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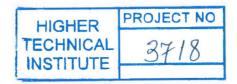
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CONTENTS

| | | PAGE |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|----------------------------------------|
| ACKNOWLEDGEMENT | | 1 |
| ABSTRACT | | 2 |
| INTRODUCTION | • | 3 |
| CHAPTER 1: | Illumination design | |
| 1.1 Introduction 1.2 Rules for energy efficient 1.3 Illumination definitions 1.4 Methods of illumination of 1.5 Procedure of the lumen m 1.6 Example calculations 1.7 Table of illumination calculation | calculations ethod | 4 5 6 7 7-8 9-13 |
| CHAPTER 2: | Lighting circuits design | |
| 2.1 Introduction2.2 Lighting circuits design programmer2.3 Staircase switch2.4 Typical lighting circuit ca2.5 Table of lighting calculation | lculations | 14 14-16 16-17 18-20 21-22 |
| CHAPTER 3: | Socket outlet design | |
| 3.1 Introduction3.2 Typical ring socket outlet3.3 Typical radial socket outle3.4 Table of socket design cale | et calculations | 23 24-28 28-30 31-32 |

| CHAPTER 4: F | ixed electrical appliances | |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|----------------------------------------------------|
| 4.1 Waterheater 4.2 Washing machine 4.3 Cooker unit 4.4 Refrigerator 4.5 Dish washer 4.6 Table of fixed appliances design calculated | | 33-35 36-38 39-42 42-45 45-47 48-50 |
| CHAPTER 5: | Air condition design | |
| 5.1 Introduction 5.2 Theoretical calculations 5.3 Area required BTUs 5.4 Table of A/C units design calculations | | 51 51-54 54-58 58-59 |
| CHAPTER 6: | Motor circuits design | e |
| 6.1 Lift installation6.2 Water pump installation6.3 Barrier gate installation6.4 Table of motor circuits design calculate | | 60-62 63-65 66-68 68 |
| CHAPTER 7: Ma | in supply cables and Diversity | |
| 7.1 Introduction 7.2 Table with diversity application results 7.3 Theoretical calculations 7.4 Table of main cables and protective de | | 69 69 70-71 72 |
| CHAPTER 8: | Single line diagrams | |
| 8.1 Introduction8.2 Single line diagrams | • | 73 73-79 |

CHAPTER 9: Bonding and Earthing 9.1 Introduction 80 9.2 Main equipotential bonding of metal services 80 9.3 Bonding conductor 80 **CHAPTER 10:** Inspection and Testing 10.1 Introduction 81 10.2 Visual inspection 81 10.3 Testing 82-83 10.4 Testing steps 83-84 CHAPTER 11: Telephone/T.V/Internet/ Intercommunication access control System design 11.1 Telephone design 85-93 11.2 T.V design 94 11.3 Internet design 95 11.4 Intercommunication access control system design 95-100 **CHAPTER 12:** Lightning protection system design 12.1 Introduction 101 12.2 Definitions 101-102 12.3 Effects of lightning strike 102 Function of a lightning conductor 12.4 103 12.5 Need for protection 103 12.6 Down conductors 103 12.7 Zone of protection 104 12.8 Inspection and testing records 104 12.9 Evaluation of the need 105 12.10 Estimation of exposure risk 105 12.11 Calculation of overall risk factor 105-106 12.12 Calculation of air terminals number 107-108 12.13 Calculation of horizontal air termination conductor number 108-109 12.14 Calculation of down conductors number 109

CHAPTER 13: Fire alarm system 13.1 Introduction 110 13.2 Zones of protection 110 13.3 Zoning of manual call points 110 13.4 Zoning of fire detectors 111 13.5 Types of fire detector 111-112 13.6 Schematic diagrams of manual call points 113 13.7 Fire alarm design 114-118 CHAPTER 14: Materials and Costing 14.1 Introduction 119 14.2 Analytical method 119 14.3 Lighting circuits 120 14.4 Socket outlets 120 14.5 Fixed appliances 121 14.6 Air Conditioners 121 14.7 Motor circuits 121 14.8 Telephone / Internet 122 14.9 T.V 122 14.10 Intercommunication access control system 123 14.11 Fire alarm system 123 14.12 Lightning system 123-124 14.13 Distribution board 124 14.14 Protective devices 124-125 14.15 Cables 125 14.16 Conduits 126 CONCLUSIONS 127 REFERENCES 128 APPEDICES

DRAWINGS

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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.