

DESIGN OF THE ELECTRICAL

INSTALLATION OF A MULTISTOREY BUILDING

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Introduction

The design of the electrical installation of the multistorey building is based in the 16th edition of IEE regulations and the earthing system used is a TT system .

CHAPTER 1: It deals with the illumination work . The lumen method of design is used for the calculation of the number of luminaries to be installed in each room in the multistorey building .

CHAPTER 2: It deals with the lighting design of our building

CHAPTER 3: It deals with the socket load calculations . All the results can be seen in the table .

CHAPTER 4: It deals with the fixed appliances of our building .These fixed appliances are the cooker unit ,the water heater the lift motor which has a three phase motor,the water pump which has a single phase motor and the air conditioning that give us cool and hot air .

CHAPTER 5: This chapter contains all the distribution board of the building and also the balancing of the three phases.

CHAPTER 6: This chapter deals with the fault level calculations .

CHAPTER 7: This chapter deals with inspection and testing .We can see the methods of testing and inspection that must take place in order to have a safety electrical installation .

CHAPTER 8: This chapter deals with the basic rules of earthing .

CHAPTER 9: This chapter deals with the telephone installation. It contains wiring and conduit schematic.

CHAPTER 10: This chapter deals with the costing of all the materials and labor of the installation .

ABBREVIATIONS

C.I.B.S	Chartered Institute of Building Services
I.E.E	Institute of Electrical Engineers
D.B	Distribution Board
E.A.C	Electricity Authority of Cyprus
C.Y.T.A	Cyprus Telecommunication Authority
M.C.B	Miniature Circuit Breaker
C.P.C	Circuit Protective Conductor
A/C	Air Condition
W/H	Water Heater
V.D	Voltage Drop
LM	Lift Motor

General assumptions

■ Height of socket outlets above floor	0.5m
■ Height of distribution Board	1.7m
■ Height of control switches	1.5m
■ height of double pole switch for a/c	1.5m
■ Height of double pole switch for W/H	0.5m
■ Height of telephone sockets	0.5m