

**HIGHER TECHNICAL INSTITUTE**

**ELECTRICAL ENGINEERING DEPARTMENT**

**DIPLOMA PROJECT**

**DESIGN OF THE ELECTRICAL  
SERVICES OF A BLOCK OF FLATS**

**E.5953**

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## **INTRODUCTION**

### **General description of building**

This project deals with the design of the electrical installation and the specialised electrical services of a block of flats. More specifically the building is a 4- floor block of flats to be constructed in Nicosia. According to the Architects drawings it consists of a basement, ground floor, four levels containing a total of 14 flats and the roof where all the water tanks, electric water heaters, solar panels, TV antennas and lift motor room are to located. The parking space is at the basement and ground floor levels.

## **MAIN OBJECTIVES**

The electrical works covered under the design of this project include the following:

### **A. Electrical Services design**

Lighting installation (internal and external)

Socket outlets installation (general purpose)

Supply to fixed appliances (mainly kitchen equipment)

Air conditioning installation (electrical supply only)

LV distribution

Telephone network installation

TV conduit installation

Fire Alarm installation

Call system (phone door) installation

Lightning protection installation

### **B. Cost estimation of the electrical works**

## **TERMS AND CONDITIONS**

- 1) Supply voltage, three phase 415/240 Volts, 50 Hz, T.T. earthing system
- 2) The 16<sup>th</sup> edition of IEE Wiring Regulations with current amendments and the local E.A.C requirements must be complied with
- 3) The telephone installation must comply with CYTA regulations
- 4) Wiring method: Method 3
- 5) All material must obtain the Engineers/Architects' approval before starting the works

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