HIGHER TECHNICAL INSTITUTE

ELECTRICAL ENGINEERING DEPARTMENT

DIPLOMA PROJECT

ELECTRICAL SERVICES OF A MULTI STOREY BUILDING

E. 1396

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DESIGN OF THE ELECTRICAL SERVICES OF A MULTI-STOREY BUILDING

By

TORNARITES YIANNIS

Project Report Submitted to

The Department Of Electrical Engineering Of The Higher Technical Institute

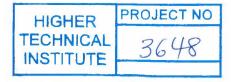
In partial fulfilment of the requirements for the diploma of

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ABSTRACT

The particular project deals with the design of the electrical services of a multi-storey building.

Such services are: Lighting, Power, and Telecommunication Installation.

For the ease and relief of the reader the work has been broken into sections.

SECTION 1: Illumination design in accordance with the CIBS Code of Interior Lighting.

SECTION 2: Power and lighting circuits in accordance with IEE Wiring Regulations Sixteenth edition and EAC local conditions of supply.

SECTION 3: Telecommunication Installation in accordance with CYTA Regulations.

SECTION 4: Building Drawings, Information, Pictures, and Catalogues are included in the appendices.

ELECTRICAL SYMBOLS

(0) WATER HEATER BELL SWITCH INTERCOM / PHONE DISTRIBUTION BOARD 5 BELL ALARM \times SUPPLY 3-PHASE SUPPLY \times AIR CONDITION A/C STORAGE HEATER S.H SINGLE 13A SOCKET OUTLET

INTERCOM / SPEAKER

TELEPHONE POINT

TELEVISON AERIAL SOCKET

SPUR UNIT

SINGLE POLE ONE WAY SWITCH
 SINGLE POLE TWO WAY SWITCH

DOUBLE 13A SOCKET OUTLET

- TIMER SWITCH
- O SPOT LIGHT
- O INCANDESCENT LAMP
- HO WALL MOUNT LAMP
- SMALL LAMP

STORAGE HEATER SWITCH

ELECTRIC COOKING SURFACE

EXHAUST FAN

**

REFRIGERATOR

OVEN

WASHER

DISHWASHER

COOKER

INTRODUCTION

This project deals with the design of the electrical services of a multi-storey building situated in Nicosia.

The building consists of the ground floor, 1st, 2nd, 3rd floor and roof.

The following regulations where followed for the procedure of calculations and design:

- a) 16th edition of the IEE wiring (BS 7671) and local EAC regulations.
- b) CIBS code of interior lighting
- c) CYTA regulations for telephony.

ASSUMPTIONS

- 1. Supply Voltage: 415V RMS 50 Hz TT Earthing system
- 2. Wiring method: PVC Conduit
- 3. External earth fault loop impedance: 0.5
- 4. Cables: PVC single core
- 5. Height of sockets from floor: 0.5m
- 6. Height of switches from floor: 1.5m