

Design of the Electrical Installation
of Hotel Apartments

Project Report submitted by
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In part satisfaction of the conditions
for the award of

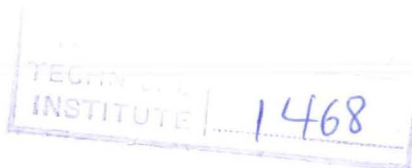
Diploma of Technician Engineer

in Electrical Engineering of the
Higher Technical Institute, Cyprus.

Project Supervisor : Mr. J. Demetriou
Lecturer in Electrical Engineering, H.T.I.

Type of Project : Individual

MAY, 1989



Introduction

S U M M A R Y

1. Purpose of the Project

The purpose of this project is the design of the electrical installation of hotel apartments.

2. Description of the Project

The complex consists of ground, basement, first and second floor.

3. Basis of Design

The whole work is based on IEE wiring regulations and E.A.C. regulations.

4. Scope of the Design

The design consists of:

1. General requirements of the Electrical Installation.

2. Illumination design.

3. Electrical installation design. (Lighting and power).

4. Costing.

5. References, appendices and technical data.

6. The drawings of the electrical installation.

5. Appendix

1. General requirements of the Electrical Installation.

2. Illumination design.

3. Electrical installation design. (Lighting and power).

4. Costing.

5. References, appendices and technical data.

6. The drawings of the electrical installation.

6. Appendix

1. General requirements of the Electrical Installation.

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4. Costing.

C O N T E N T S

PART 1 : General Requirements of the Electrical Installation

- 1.1 Isolation
- 1.2 Distribution
- 1.3 Earthing
- 1.4 Thermal Effects
- 1.5 Inspection and Testing

PART 2 : Illumination

1. General
 - 1.1 Units and Definitions
 - 1.2 The Lumens Method
 - 1.3 The Point to Point Method
 - 1.4 Illumination Calculations
 - 1.5 Illumination Design Results

PART 3 : Electrical Installation Design

1. General Details
 - 1.1 Lighting Design
 - 1.2 Typical lighting cct Calculation
 - 1.3 Lighting design results
2. Power design
 - 2.1 Sockets Outlets
 - 2.2 Typical 13A S.0 cct Calculation
 - 2.3 13A sockets outlets design results
 - 2.4 15A sockets outlets typical cct calculation
 - 2.5 15A sockets outlets design results
 - 2.6 Cooker units calculations
 - 2.7 Cooker ccts design results
 - 2.8 Water Heaters calculations
 - 2.9 Water Heaters design results
- 3.1 Supply Cables Calculations
- 3.2 Supply cables design results

PART 4 : Costing - Tendering and Others

- 1.1 General
- 1.2 Materials costing
- 1.3 Labour costing
- 1.4 Overall costing
- 1.5 Comments and Conclusions
- 1.6 Drawings of the Electrical Installations

PART 5 : References and Technical Data

- 1.1 Illumination references - appendices
- 1.2 Electrical Design references - appendices.