

HIGHER TECHNICAL INSTITUTE

ELECTRICAL ENGINEERING DEPARTMENT

DIPLOMA PROJECT

**DESIGN OF THE ELECTRICAL INSTALLATION OF
HOTEL APARTMENTS**

by

KATSELLIS NASOS (E.1675)

JUNE 1997

PART A

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HOTEL APARTMENTS**

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PART A

HIGHER TECHNICAL INSTITUTE	PROJECT NO 2667
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DESIGN OF THE ELECTRICAL INSTALLATION OF HOTEL APARTMENTS

Project Report Submitted by
KATSELLIS NASOS

in part of satisfaction of the award of Diploma of Technician Engineer in
Electrical Engineering of the Higher Technical Institute, Cyprus.

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Type of project: **Individual**

June 1997.

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TO

MY DEAR FAMILY

For all their help which they offered me
with love and understanding throughout
my years at the H.T.I. and especially
throughout this project.

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KATSELLIS NASOS

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ABSTRACT

This Project deals with the design of the electrical and Telecommunication services of Hotel Apartments.

The Project work includes specifications and tender drawing as well as typical calculations of the design carried out .

The whole design is made according to the relevant for each system Regulations .

SYMBOLS AND ABBREVIATIONS

BS	British Standard
I.E.	Institution of Electrical Engineers
E.F.L.I	Earth Fault Loop Impedance
MF	Maintenance Factor
U.F	Utilization Factor
P.F	Power Factor
S/O	Socket Outlet
SP&N	Single Phase & Neutral
TP&N	Three Phase & Neutral
V.D	Voltage Drop
MCB	Miniature Circuit Breaker
CB	Circuit Breaker
DB	Distribution Board
DC	Distribution Case
CCT	Circuit
%	Percentage
M	Meters

INTRODUCTION

This Project deals with the design of the Electrical and Telecommunications Services of a Hotel Apartment which will include the following :

1. Electrical Services

- a) Lighting
- b) Power

2. Telecommunication Services

- a) Telecommunication Design

The Design was carried out according to:

1. The 16&15 th Edition of the IEE Regulations and the local EAC conditions of supply
2. The CyTA requirements for Telephone Installation.

The Hotel Apartments consist of :

a) Block A

- Ground Floor
- First Floor
- Second Floor

b) Block B

- Ground Floor
- First Floor
- Second Floor

c) Block C

- Ground Floor
- First Floor
- Second Floor

The Hotel Apartments are divided into three identical Blocks.

In cable size calculations the worst case of circuit arrangement is considered and if it's result comply with the 16 th Edition of the IEE Wiring Regulations so should the rest of the cases.

In costing the Analytical method is used because is the most accurate method.