

DESIGN OF THE ELECTRICAL AND TELECOMMUNICATIONS  
SERVICES FOR HOTEL APARTMENTS

by

Eleftheriades Antonis

Project Report

submitted to

the Department of Electrical Engineering  
of the Higher Technical Institute

Nicosia Cyprus

in partial fulfillment of the requirements

for the diploma of

TECHNICIAN ENGINEER

in

ELECTRICAL ENGINEERING

May 1990

E/665

HIGHER TECHNICAL INSTITUTE	PROJECT NO 1618
----------------------------------	--------------------

## S U M M A R Y

This project deals with the design of the electrical and telecommunication services for hotel apartments. Also a costing of the installation is carried out.

The electrical services are separated into lighting and power design. In order to be able to carry out the lighting design, illumination calculations were carried out for the selection of the appropriate luminaires to be used. Then sample calculations were done showing the lighting and power design. At the end the assignment of the various circuits to the distribution boards was done, also the calculations for the balancing of the current demand to the three phases as well as the protective devices to be used and their breaking capacity.

The telecommunication services show how the telephone network was distributed to the building and whether direct exchange lines were used or a key system.

Finally all necessary drawings of the electrical and telecommunication services as well as the single line diagram of the electrical installation are included.



	PAGE
2.8 - Fault level calculations	56
2.9 - Fault level calculations table	58
2.10- Earth equipotential bonding	59
CHAPTER 3 - TELEPHONE DISTRIBUTION SYSTEM	
3.1 - Introduction	60
3.2 - Key System	61
3.3 - Procedure to be followed in planning of the internal wiring	61
3.4 - Telephone distribution system design	62
3.5 - Conduit diagram	63
3.6 - Wiring diagram	64
3.7 - List of connections	65
CHAPTER 4 - SCHEDULE OF MATERIALS AND COSTING	66
CONCLUSIONS	71
SYMBOLS USED	72
REFERENCES	74
APPENDICES	
DRAWINGS	