

HIGHER TECHNICAL INSTITUTE

ELECTRICAL ENGINEERING DEPARTMENT

DIPLOMA PROJECT

DESIGN OF THE ELECTRICAL INSTALLATION
OF A SHOW ROOM

E. 1190

BY: ANDRONIKOS KOKKINOS

JUNE 1999

HIGHER TECHNICAL INSTITUTE

L. AGAPIAN

ELECTRICAL ENGINEERING COURSE

11/12/20

DIPLOMA PROJECT

E.1190

DESIGN OF THE ELECTRICAL INSTALLATION
OF A SHOW ROOM

ANDRONIKOS KOKKINOS

JUNE 1999

HIGHER TECHNICAL INSTITUTE	PROJECT NO. <i>2986</i>
----------------------------------	----------------------------

To

All my friends and especially to my family for the help
and support they offered me.

ACKNOWLEDGEMENT

I would like to express my thanks to all the people that have helped throughout this project and especially my supervisor Mr. A. Georgiou

TABLE OF CONTENTS

Page

Introduction.....	1
Lighting circuits.....	3
Socket outlet circuits.....	25
Earthing & Inspection and testing	34
Air condition system.....	42
Distribution boards.....	47
Telephone network.....	53
Intruder alarm system.....	58
Costing.....	62
Tables	
Drawings	

INTRODUCTION

This project deals with the design of the electrical and specialised electrical services of a show room

The design will include

- Lighting design
- Power design
- Telecommunications system
- Intruder alarm system

All the design will be carried out according to

- The IEE regulations (16th edition)
- The british standarts BS4737
- The CYTA regulations

ASSUMPTIONS FOR HEIGHT OF VARIOUS LOADS

1. The distribution boards are at a height of 1,5 m
2. All the switches are at a height of 1,5 m
3. The socket outlets are at a height of 0,5m
4. The wall lamps at the toilets are at a height of 2,25 m
5. The EAC meter and the RCCB are at a height of 1,75 m
6. The sensors for the intruder alarm system are at a height of 3 m