

HIGHER TECHNICAL INSTITUTE

ELECTRICAL ENGINEERING DEPARTMENT

DIPLOMA PROJECT

DESIGN OF THE SPECIALIZED ELECTRICAL  
SERVICES OF AN OFFICES BUILDING

E/1203

SAVVA GEORGE

JUNE 1999

HIGHER TECHNICAL INSTITUTE	PROJECT NO. 2999
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OF AN OFFICES BUILDING**

By

**Savva George**

Project report submitted

to the department of Electrical Engineering

of the Higher Technical Institute

Nicosia , Cyprus

in partial fulfillment of the requirements

for award of the diploma of

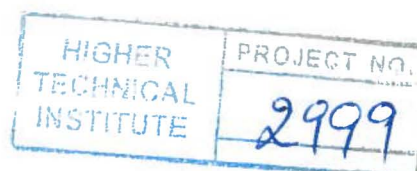
**TECHNICIAN ENGINEER**

in

**ELECTRICAL ENGINEERING**

Project Supervisor: Mr. A. Georgiou

June 1999



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## ACKNOWLEDGEMENTS

I would like to express my deep thankfulness to all the people who helped me complete this project.

Special thanks to Mr.Louka Louka the director of PROMETHEUS LTD for his great help on fire and security systems installation, and Mr.Marios Stavrides the director of YTM Electrical Contractors LTD for his help on lightning protection system installation.

Finally I wish to express my sincere and deep thanks to my internal supervisor at H.T.I, MR.A.Georgiou, for his help.

## SUMMARY

Savva George

Design of the specialized electrical services of an offices building.

A security system in a building has to do with the protection against fire, burglar and protection against lightnings.

In the case fire protection, the system must provide an early warning of fire in order to prevent the extension of the fire.

In the case of an intrusion, the burglar alarm system used, is installed in such a way that there is no possibility of entrance in the building. The system is separated into zones so that different modes of operation are possible and in case of an intrusion, the area that the intrusion took place will be known.

In the case of the lightning protection, the system is installed in such a way to provide protection against lightnings.

All these systems are designed and installed according to British Standards regulations. By following these regulations we come to the conclusion that the system is effectively protected against fire, intrusion and lightnings.

## INTRODUCTION

The project is to design the installation of a lightning protection system, a fire alarm system and a burglar alarm system in a building.

The building has three floors, consisted by various shops, apartments and offices.

The project includes the theory, the system design, single line diagrams, costing and drawings for the three security systems.