

HIGHER TECHNICAL INSTITUTE

ELECTRICAL ENGINEERING DEPARTMENT

DIPLOMA PROJECT

DESIGN OF THE ELECTRICAL SERVICES
OF A LUXURY HOUSE

BY: MARIOS CHRISTOFI

E 1427

ACADEMIC YEAR

2007 / 2008

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ABSTRACT

The purpose of this project is to provide in detailed steps the way that a proper electrical installation takes place in a luxury house. The objective of the electrical installation is to provide safety of any possible injuries or damages that can take place due to a faulty electrical installation, as well and livestock to the user.

The whole design is based to IEE wiring regulations of 16th Edition, as well and local EAC and CYTA regulations.

In this project that is made up of several chapters so that to simplify it's study, the design of the electrical services of a luxury house is explained in detail.

At the end of this report, appendices providing technical specifications for the devices and equipment used can be found, and eventually architectural drawings are provided showing the detailed locations of the various loads and equipment used.

- Illumination
- Lighting
- Fixed Equipment
- Sockets
- V.R.V.I
- Motor
- Swimming
- Diversity
- Single Line
- Bonding
- Inspection
- Lightning
- Fire Alarm
- PV Panel
- T.V. Stabiz

2. To provide
- latest

INTRODUCTION

This project deals with the electrical installations and the specialized electrical services of a luxury house, including specifications, drawings, and typical calculations of the design.

The design of the whole electrical installations of the luxury house is represented in this project report.

Objectives:

1. To design the complete electrical installation of a luxury house that includes the following:
 - Illumination design
 - Lighting Circuit design
 - Fixed Electrical appliances
 - Socket outlet design
 - V.R.V Calculation
 - Motor and Boiler Circuit design
 - Swimming Pool
 - Diversity and main Supply Cables
 - Single Line diagrams
 - Bonding and Earthing
 - Inspection and testing
 - Lightning protection system
 - Fire Alarm system
 - PV Panel installation
 - T.V/ Stature cabling for LAN/ Telephone
2. To provide all necessary diagrams, schedule of materials and costing including labour.