AIR CONDITIONING SYSTEM OF A RESIDENTIAL HOUSE.

Project Report submitted by

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in part satisfaction of the conditions for the award of the Diploma of Tchnician Engineering of the HIGHER TECHNICAL INSTITUTE, CYPRUS.

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Air Conditioning system for Mr Frangopoullos villa, by Charalambous Andrea.

SUMMARY

- The aim of this project is to design the air-conditioning system for a residential house according to the objectives terms and conditions that prepared by the mechanical eng. department of the Institute.
- Calculations for heating and cooling loads were carried by the use of an HTI programme provided.
- The system that has been selected is "heating by radiators" and "cooling by split systems".
- Designed conditions that were given for the conditioned space are 24*C db, 49% rh for Summer and 21*C wb, 49% rh for Winter.
- Energy conservation was considered as a major factor in the design of the system.
- Sizing of equipment and piping work was carried out having in mind space availability and arrangement as well as standard sizes of fittings and pipes that are available in Cyprus market.
- Selection of the machinery and other equipments as well as its cost estimation were carried out by using catalogues and price lists from different manufacturers and importers.
- The preventive maintenance was carried out by studying in detail all the relevant information about the specifications, capabilities for every individual part of the whole system,
- The project is divided into 5 chapters and detailed drawings showing the system layout and installation were prepared and fixed in the pocket of the hard cover.

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