DESIGN OF AN AIR CONDITIONING SYSTEM FOR A RESTAURANT

Project report submitted by :

VASSILIOU GEORGE

In part satisfaction of the award of diploma of Technician Engineer in Mechanical Engineering of the Higher Technical Institute, Cyprus.

Project supervisor : Mr. Theodoros Symeou
Lecturer in Mechanical Engineering, H.T.I

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SUMMARY

The purpose of this project is to design the air conditioning system for a restaurant in Nicosia.

The method of thermal load calculation was based on a computer program provided by CARRIER.

Architectural drawings for the building and its design conditions were provided while ambient conditions were already stored in the computer programme.

The project can be divided into three parts.

The first part deals with the heating and cooling load calculation and gives all the necessary formulae and assumptions used.

The second part deals with the system selection, with the selection of appropriate machinery as well as with equipment, duct and pipe sizing.

Finally the third part provides technical specifications for the equipment and materials used, an estimated cost analysis for the system employed and a preventive maintenance scheme for the major equipment used.

Energy conservation was considered to be of major importance in the design of the system.

The system layout and its major components including piping, ducting and controls are presented on a complete set of detailed mechanical drawings.

The project is divided into 10 chapters.

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