COMPUTER AIDED DESIGN OF A SOLAR HEATING SYSTEM FOR A BLOCK OF FLATS

by

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Project Report
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SUMMARY

The main objective of the diploma project was to design with the aid of computer a solar Heating System for a residential house.

To carry out and complete the project the following steps were followed as given in the Objectives of the project.

1. Calculate the heat requirements for the space heating of the building.

2. Study the methods and techniques currently used for the collection and storage of solar energy for space heating.

3. Design a suitable system for the collection storage and distribution of low temperature solar energy to meet the heat requirements of the building.

4. Determine the sizes of the solar components (collectors, storage, etc) and carry out pipe sizing.

5. Investigate the monthly and yearly system performance through simulations.

6. Prepare drawings (plan views and diagrammatic layouts) showing clearly the system layout and components.

7. Conduct a cost-estimate of the system.

CONTENTS: