

DESIGN OF A SOLAR HEATING SYSTEM FOR A RESIDENTIAL HOUSE

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PREFACE:

The objectives of this project were:

1. To calculate the heat requirements for the space heating of the building.
2. To design a suitable system for the collection and storage of low-temperature solar energy to satisfy the heat requirements of the building.
3. To determine the optimum size of the solar collector, storage unit, pumps, piping and other equipment and accessories involved in the system, including all necessary instrumentation and controls.
4. To prepare detailed drawings showing clearly the system layout and components.
5. To conduct a cost-estimate and compare it with that of a convectional heating system without solar.

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