

HIGHER TECHNICAL INSTITUTE

NICOSIA - CYPRUS

CIVIL ENGINEERING DEPARTMENT

Academic Year 1995/96

Diploma Project Number: C/758

Title: Analysis of the Prototype Solar House in Cyprus

Objectives:

1. To study the solar aspects embodied in the solar prototype House.
2. To examine, deviation from the designs to the actual building.
3. To investigate effectiveness of the house both for summer and winter from:
 - (a) information given by inhabitants
 - (b) Measurements
 - (c) other studies

Terms and Conditions:

1. The prototype solar house is site in Ayios Andreas in Nicosia.
2. Relevant information about the house is found in "The prototype Solar Comparative design Analysis" written by the supervisor.
3. Further bibliography and information to be provided by the supervisor.

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Type of project: Individual

Group

/DP



INTRODUCTION

This project deals with the analysis of the prototype Solar House in Cyprus.

The prototype Solar House is designed specifically for a certain family and their needs. It is sited in Ayios Andreas in Nicosia.

The main object of this project is, to study and analyse the solar principles and aspects embodied in the house, to examine if there are any deviations from the design to the actual building and finally to investigate the effectiveness of the house during the winter and summer months.

In order to make this study relevant informations were found from previous projects and further bibliography from the Higher Technical Institute's library.

In this project are given firstly some general information about the solar energy and the role it has in a Solar House, and then there is a description of the Design of the house and the methods used and considered while the Designing process. Finally there is a detailed investigation for the effectiveness of the house and some measurements that there were taken from the house during the winter and summer.

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