ENERGY SAVING IN BUILDINGS THROUGH SHADING DEVICES

Project report submitted by

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SUMMARY

TITLE: ENERGY SAVING IN BUILDINGS THROUGH SHADING DEVICES

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This project investigates the possibility of energy saving in buildings with the application of shading devices.

At the beginning of this project, the author, studied and presented the principles, the importance and the effect of solar radiation in buildings.

Furthermore, an existing computer programme was used to investigate the overall effect of overhangs, reveals and fins on the thermal load of a detached residence at Makedonitissa, Nicosia.

In addition, various trial cases were fed to the computer programme in order to determine whether better utilisation of solar energy, during the warm months (June, July, August, September) could take place, and whether optimisation of solar energy received could be achieved during the cold months ie., November, December, January and February.

Finally, an economic feasibility study was performed following the suggestion of alternations for thermal load improvement.

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