## INSULATION MATERIALS FOR A HOUSE

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#### SUMMARY

# INSULATION MATERIALS FOR A HOUSE

This project deals with the correct methods and types of insulation used on houses and special attention was given to type of insulation applicable to Cyprus. Furthermore it deals with the requirements need to be taken when selecting or specifying insulation materials.

The first chapter deals with the main purpose of insulation and also states the proper insulators used in practice. Furthemore this chapter makes a comparison between insulation and heating media.

The second chapter is "Thermal Insulation". It includes the advantages of thermal insulation and gives forms of insulating materials. Also it deals with the maximum "U" value requirements of the Building Regulations and how to calculate "U" value.

The third chapter is "Sound Insulation". It deals with the effects of sound in both buildings and on man, beyond that it includes several solutions to sound problems. Also in this chapter the problem of external noise was discussed.

The fourth chapter is "Dampness and Damp-proofing". It includes the effects and causes of dampness and methods of preventing dampness. Furtermore it includes some damp-proofing materials and methods of providing damp-proof courses under different situations.

Finally the project ends with the fifth chapter which deals with the comparative cost effective detailing. In this chapter the resistance of materials to heat flow, the

limitations for the Cyprus market and technology were considered and possible wall roof and floor designs were outlined.

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