

EFFECT OF ALTERNATING WETTING AND DRYING OF CUBES
ON THE STRENGTH OF CONCRETE

Project Report Submitted by

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SUMMARY

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Title: EFFECT OF ALTERNATING WETTING AND DRYING OF CUBES ON
THE STRENGTH OF CONCRETE.

ABSTRACT

This project has four objectives, closely related to concrete technology.

The first one is to discuss the main factors that affect the strength of concrete. All these factors have to be considered before the preparation of a concrete mix, in order to have the most desirable results.

The second objective is to explain the importance of curing of concrete. This objective is particularly important because curing is the process of preventing the loss of moisture from the concrete.

The third objective is to investigate experimentally the effect of alternating wetting and drying of cubes on the strength of concrete.

The concrete mix used in the experimental work was grade 25N/mm .

Concrete cubes were cured in water for 0,7,14 days. Also, other cubes were cured for 1 hour per day in the tank for 2,4,7 days. Four concrete cubes were prepared for each curing case and all cubes were tested at 14 days.

The fourth and the last objective is to discuss the experimental results, having in mind the everyday practice in the Cyprus construction industry.

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