

## CALIFORNIA STATE SCIENCE FAIR 2008 PROJECT SUMMARY

Name(s)

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**Project Number** 

**J0299** 

### **Project Title**

# What Is the Effect of Admixtures on Concrete Strength?

#### Abstract

## **Objectives/Goals**

The objective of the project is to determine if the concrete additives affect the strength of concrete prepared in a controlled environment.

#### Methods/Materials

The procedure used was testing the compressive strength of concrete cubes of several mix designs. These samples were prepared in accordance with ASTM C109. These samples were cured in a moisture room in compliance with ASTM C511. The samples were then tested by a concrete compression test machine supplied by Technicon Engineering Services.

## **Results**

The results of the test show that the various concrete admixtures used did increased the strength of the concrete samples. These sample specimens were all prepared in accordance with the ASTM standards for testing in a controlled environment.

## **Conclusions/Discussion**

The conclusion is that concrete admixtures do affect the strength of concrete. Depending on the type of Admixture used will affect the strength of the concrete differently.

## **Summary Statement**

Testing of concrete strenghts by using different admixtures.

### Help Received

I used lab equipment that was furnished by Techicon Engineering Services under the suppervision of Darren Williams