THE STUDY ON THE EFFECT OF LATEX ADMIXTURE ON THE BEHAVIOUR OF FRESH AND HARDENED CONCRETE

A PROJECT REPORT SUBMITTED TO THE SCHOOL OF ENGINEERING IN PARTIAL FULFILLMENT OF REQUIREMENTS FOR THE AWARD OF AN ADVANCED DIPLOMA IN CIVIL ENGINEERING

BY

AHMAD MARZUKI SHAMSUDIN

DEPARTMENT OF CIVIL ENGINEERING MARA INSTITUTE OF TECHNOLOGY SHAH ALAM SELANGOR DARUL EHSAN

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PREFACE

This project is to study the effect of latex admixture/constituent on the behaviour of fresh and hardened concrete. This report consists of information on the project theory, how it was conducted, experimental procedure, the result obtained and analysis.

The first chapter provides the objective, introduction and theory about latex and concrete and the combination on both of its.

The second chapter explains the behaviour, scope and limitation that has to be followed towards the completion of this project. It will also includes the methodology of doing this project.

The third chapter explain about experimental such as schedule of work, concrete mix design, materials that being used, the explanation of testing which carried out and equipment.

chapter fourth and fifth are the main ideas which consist result and analysis, also in the result obtain. Moreover it also explained the practical usage and application from the study of this project.

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CHAPTER 1

1.1 INTRODUCTION.

The practical development of cement latex compositions has taken place over the last twenty to thirty years and although earlier patents exist it may be said that real interest dates from the time of Bond's specification, which has now expired. Bond proposed that concentrated latex should be combined with aluminous cement, fillers, vulcanising ingredients, etc., and the resulting paste troweled or east into position so as to provide resilient roadways and floors.

Cement-latex compositions have several noteworthy properties (W. H. Stevens, 1948):-

- a. They yield-warm feeling, durable and resilient products.
- b. Due to their plastic stage, they can be applied in continous,
 i.e., jointless form.
- c. They have excellent adhesion to a variety of other materials.
- d. They are widely 'compoundable', that is to say, a wide variety of fillers, aggregates, pigments and the like, both organic and inorganic, can be included in the compositions, depending on the properties required, appearance, cost considerations and etc.

An important and valuable attribute of a plastic composition that can be laid in jointless form and varying thickness and having good adhesive properties, is the possibility of levelling up uneven surfaces. Thus cement-latex compositions are