FINAL YEAR PROJECT REPORT
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# EFFECT OF CONTROLLED PERMEABILITY FORMWORK FOR DIFFERENT TYPE OF EXPOSURES

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# ABSTRACT

The development of formwork becomes very important due to increase in construction technology. Due to this, it is necessary to increase the effectiveness of the formwork to obtain good results.

It plays an important role in producing the quality of the concrete. In the present construction practice, normal formwork may cause many problems such as blow holes and uneven colour. It will reduce the surface strength of the concrete, aesthetics values and the porosity of the concrete is high.

The report of this experimental project is to make an analysis of the experiment on the 'form liner' exposed to two different type of weather conditions, inside and outside laboratory which can improve the surface strength, surface absorption, carbonation, porosity and other advantages.

# CHAPTER ONE

# INTRODUCTION

## 1.1 General

The life of a concrete structure is significantly influenced by the properties of the surface zone, its first line of defense against aggressive elements which permeate the concrete to cause corrosion of steel reinforcement and erosion of the concrete itself. These aggressors include mineral salts, oxygen, moisture and carbon dioxide.

Penetration of the concrete by these elements can be significantly reduced, even eliminated, by increasing the density of the skin of the structure - that is, by reducing its permeability. A dense concrete cover zone, with few and small capillaries, offers a high resistance to liquids and gasses which are themselves aggressive or which carry aggressive chemicals into the core of the concrete structure.

Formwork liner offers the simplest and most effective means of providing a concrete structure with a 'dense skin', capable of protecting steel reinforcement, and the concrete core, from the attack of such aggressive elements.