SHEAR STRENGTH OF ROCK

BY

DIRECT SHEAR METHOD OF TESTING

by

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ABSTRACT

The shear strength of rock joints is an important concept in Civil Engineering and Geoscience. Shear strength of rock joints is developed by the sliding of two planes of a rock mass over one another.

This test measures peak and residual direct shear strength as a function of stress normal to the sheared plane. Results are employed, for example, in the limiting equilibrium analysis of slope stability problems or for the stability analysis of dam foundations.

TABLE OF CONTENTS

		page
ACKNOWLEDGEMENT		i
TABLE OF CONTENTS		ii
LIST OF TABLES		v
LIST OF FIGURES		vi
LIST OF PLATES		vii
ABSTRACT		viii
CHAPTER 1	**INTRODUCTION**	
1.1	GENERAL	1
1.2	OBJECTIVES	3
1.3	SCOPE OF WORK	3
1.4	METHODOLOGY	4
CHAPTER 2	**LITERATURE REVIEW**	
2.1	PHYSICAL PROPERTIES OF ROCK	5
2.2	MECHANICAL PROPERTIES OF ROCK	5
2.3	STRENGTH THEORIES	7
	2.3.1 The Theory of Galilei-Rankine	7
	2.3.2 Theory of Mariot-Saint Vanant	8
	2.3.3 Theory of Coulomb-Navier	8
	2.3.4 Theory of Mohr	9
2.4	MODES OF ROCK FAILURE	11
	2.4.1 Flexure	11
	2.4.2 Shear Failure	11
	2.4.3 Direct Tension	11
	2.4.4 Crushing and Compression Failure	12

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1.0 INTRODUCTION

1.1 GENERAL

Rock engineering can be traced back to the earliest days of mining and civil engineering, structural geology, engineering geology and, where possible, the practical application of analytical rock mechanics. The problems in this discipline had been encountered through pass experienced in various field of work. A lot of efforts had been done in understanding the behaviour and properties of the rocks. N.Duncan (1969), Jumikis (1979) and Franklin (1989) for example have done studies in the rock engineering. There are many other experties and scientist have probing to this field in attempted to discovering the original characteristics of rocks in engineering aspects especially.

In our region rock properties studies are focused in the field of engineering geology. Among them are Lee (1976), Tan (1980), and Komoo(1987). Despite of numerous efforts of work in this field done