

**ULTIMATE STRENGTH OF  
TIMBER COLUMN**

**by**

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## TABLE OF CONTENTS

	Page
Acknowledgement	i
Table of Contents	ii
List of Tables	iv
List of Figures	vi
List of Plates	viii
Notation / Abbreviation	ix
Abstract	x
<b>CHAPTER ONE</b>	
1.1 Introduction	1
1.2 Problem Statement	1
1.3 Objectives Of Study	2
1.4 Scope Of Study	2
<b>CHAPTER TWO</b>	
2.1 Introduction	3
2.2 Medium Hardwood	4
2.2.1 Kempas	4
2.2.1.1 General Characteristic	4
2.2.1.2 Structure	4
2.2.1.3 Mechanical Properties	5
2.2.2 Keruing	
2.2.2.1 General Characteristic	6
2.2.2.2 Structure	6
2.2.2.3 Mechanical Properties	7
2.3 Column Behaviour	
2.3.1 General	7
2.3.2 Slenderness ratio & shape of cross-section	8
2.3.3 Column Stress	10
2.4 Design equation	
2.4.1 Long Column	10
2.4.2 End Restraint Condition	10
2.4.3 Effect of Eccentricity	11

## ABSTRACT

The ultimate strength of timber columns is controlled or governed by the size and slenderness of the columns. Since the actual structural columns contain many defects therefore the strength of the columns is also influenced by these natural defects. This study is to investigate the strength properties of the columns base on the prototype study of the column. The columns are loaded vertically along their longitudinal axis and the mode of failure under the compression load will be recorded and analysed .From the test it should be able to determine the Modulus of elasticity and the strength of the columns where it is the important properties in design timber as structural member.

## CHAPTER ONE

### INTRODUCTION

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#### 1.1 INTRODUCTION

There are thousands of timber species growth in Malaysia. In general these timber species can be divided two major groups namely hard wood and softwood. Most of timber species growth in tropical country is hard wood including Malaysia. Forest Research Institute of Malaysia classified Malaysian hardwood into three sub-group base on the density, nature and hardness. The three sub-groups of Malaysia hardwood are heavy hard-wood, medium hardwood and light hard-wood. (Chua Yue Pun, 1981)

#### 1.2 PROBLEM STATEMENT

In order to consider timber as a structural member, it should determine the maximum capacity of load that the timber can take based on its strength and properties. The actual strength characteristic of timber column base on the prototype testing of timber. The structural timber should be adequately sound after the construction work.