

JOINTS FOR FURNITURE MAKING

By:

AINORSHAH ISMAWANI BINTI ISMAIL

**Final project submitted in partial fulfillment for the
Diploma in Wood Industry,
Faculty of Applied Science,
Universiti Teknologi Mara,
Pahang Darul Makmur.**

APRIL 2007

ACKNOWLEDGEMENTS

Alhamdulillah, thanks to the Almighty God, Allah S.W.T for giving me the strength and endurance and granting the successful completion of my final project. I would like to express my deepest appreciation sincere gratitude to my advisor, Prof Madya Dr Jamaludin Bin Kasim for his full support and guidance.

Thanks, is also extended to my beloved parents for their moral and financial support throughout the years study. To all my beloved friends, thanks a lot for your support till the completion of my project.

Lastly, to someone that is quite special in my life, thanks for your caring, your support and also giving me a lot of support and I really appreciating it. I'm also extend my appreciation to those who are involve direct or indirectly in making this project a reality, and only Allah can repay their kindness.

TABLE OF CONTENT

	Page
APPROVAL SHEET.....	ii
ACKNOWLEDGEMENT.....	iii
DEDICATION.....	iv
TABLE OF CONTENT.....	v
LIST OF FIGURES.....	viii
LIST OF PLATES.....	ix
ABSTRACT.....	x
ABSTRAK.....	xi

CHAPTER ONE

1.0 INTRODUCTION.....	1
------------------------------	---

CHAPTER TWO

2.0 THE ELEMENTS OF JOINTS.....	3
2.1 STRESS SYSTEM.....	3
2.2 GRAIN DIRECTION.....	4
2.3 DIMENSIAL CHANGE.....	4
2.4 SURFACE CONDITION.....	5

CHAPTER THREE

3.0 BASIC TYPES OF JOINTS.....	6
3.1 WORKED JOINTS.....	6
3.1.1 MORTISE AND TENNON.....	6
3.1.1.1 Types of mortise and tenon.....	7

3.1.1.2 Method.....	9
3.1.1.3 Machine.....	11
3.1.2 FINGER JOINTS.....	12
3.1.2.1 Importance.....	13
3.1.2.1 Machine.....	14
3.1.3 BUTT JOINTS.....	15
3.1.3.1 Methods.....	15
3.1.3.2 Nailed Butt Joint.....	16
3.1.4 MITER JOINTS.....	17
3.1.4.1 Method.....	18
3.1.5 LAP JOINTS.....	20
3.1.5.1 Full lap.....	21
3.1.5.2 Half lap.....	21
3.1.5.3 End lap.....	22
3.1.5.4 Cross lap.....	22
3.1.5.5 Dovetail lap.....	23
3.1.5.6 Mitred half lap.....	23
3.1.6 DOVETAIL JOINTS.....	24
3.1.6.1 Methods.....	25
3.1.6.2 Types of dovetail.....	26
3.1.6.3 Machine.....	29
3.2 OTHER JOINTS.....	30
3.2.1 FASTENED JOINTS.....	30
3.2.1.1 Nailed joint.....	30
3.2.1.2 Screwed joints.....	31
3.2.2 CONNECTERS.....	32
3.2.3 GLUES.....	33

JOINTS FOR FURNITURE MAKING

By :

AINORSHAH ISMAWANI ISMAIL

APRIL 2007

ABSTRACT

Joining wood is an important activity in furniture industries. There are many types of joints used to making furniture like mortise and tenon joint, finger joints, butt joints and others. Besides the several joints, fasteners are also used for strength during wood working.