FULLY JOINTED RACK WITHOUT THE USE OF FASTENERS

MUHAMMAD FAIZAL BIN MUSA

Final Year Project Submitted in
Partial Fulfillment of the Requirements for the
Degree of Bachelor of Science (Hons.) Furniture Technology
in the Faculty of Applied Sciences
Universiti Teknologi MARA

JANUARY 2013

ACKNOWLEDGMENTS

Bismillahirrahmanirrahim...

Alhamdulillah, all praises to Allah for the strengths and His blessing in completing this thesis - my Final Year Project.

Special appreciation goes to my advisor, Miss Zaimatul Aqmar Binti Abdullah for her supervision and constant support. Her invaluable help of constructive comments and suggestions throughout this thesis works and also throughout the production of the fully jointed rack have contributed to the success of this study.

I would like to express my appreciation to my friends especially to Mr Zamri and Mr Hadi who have worked hard together to help me to finish my product. Your help and support is highly appreciated.

My acknowledgement also goes to my beloved mother who always pray for me and keep on giving me the moral support and strengths to complete this thesis. Thank you very much.

Muhammad Faizal

TABLE OF CONTENTS

		Page	
TAB LIST LIST LIST ABS	KNOWLEGMENT BLE OF CONTENTS I OF TABLES I OF FIGURES I OF PLATES I OF ABBREVIATIONS STRACT STRAK	iii iv vii viii ix x xi	
СНА	APTER 1 INTRODUCTION		
1.1	General	1	
1.2	Problem Statement	3	
1.3	Justification of Study	4	
1.4	Objective	4	
СНА	APTER 2 LITERATURE REVIEW		
2.1	Furniture	5	
2.2	Furniture Styles	11	
2.3	Hand Tool Used Today	13	
2.4	Power Tools Used Today	14	
2.5	Furniture Raw Material		
	2.5.1 Composite Materials and Wood Composite	15	
	2.5.2 Blockboard	19	
	2.5.3 Edge Band Tape	23	
	2.5.4 Contact Adhesive	24	
2.6	Wood Jointing Systems		

CHAPTER 3 METHODOLOGY

3.1	Material		
3.2	Methodology		
3.3	Design Process		
	3.3.1	Collective of Information	30
	3.3.2	Problem Identification	30
	3.3.3	Design Making	30
	3.3.4	Design Confirmed	32
	3.3.5	Prototype Construction	32
	3.3.6	Prototype Analysis and Confirmation	34
	3.3.7	Production	34
3.4	Final l	Product Process	34
3.5	Data Analysis		
	3.5.1	Bill of Material (Block board)	37
	3.5.2	Questionnaire	
CHA	DTED 4	A DECLUT AND DISCUSSION	
		RESULT AND DISCUSSCION	20
4.1		uction	39 40
4.2		Statistical Analysis	
4.3	Profiles		41
	4.3.1	Genders	41
	4.3.2	Profession	42
	4.3.3	Ages	43
4.4	Discussion		44
•	4.4.1	Furniture Types	44

ABSTRACT

FULLY JOINTED RACK WITHOUT THE USE OF FASTENERS

In this study, Blockboard has been used to produce the fully jointed rack without using any fasteners. The production of this product has been used cross lap joint that required good machining properties in order to get perfect surfaces. The jointing system is quiet difficult due to the angle that needs to be made and the product must be in triangle form. Blockboard has been used as a raw material to produce the product because it is light weight, cheap and has good machining properties. The product was determined as Do It Yourself (DIY) product because it is easy to assemble and easy to carry out. The results of the product that get it from correspondents shows that this product easy to assembled without using any fastener such as nail and screw and low in cost with high quality. Most of the peoples choose this product as a place to load books