BANCO FROM BAMBOO STRIPS (BAMBUSA VULGARIS)

NUR ATIQAH NASUHA BINTI HAZAHARI

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

JULY 2019

TABLE OF CONTENTS

		Page	
ACKI	NOWLEDGEMENTS	iv	
TABL	ABLE OF CONTENTS		
LIST	OF TABLES	vii	
LIST	OF FIGURES	viii	
ABST	RACT	X	
ABST	RAK	xi	
СНАН	PTER 1 GENERAL INTRODUCTION	1	
1.1	Introduction	2	
1.2		3	
1.3		4	
1.4	Objectives of study	4	
СНАІ	PTER 2 LITERATURE REVIEW	5	
2.1	World Bamboo Distribution	5	
	2.1.1 The Benefits of Using Bamboo for Furniture	5	
	2.1.2 Properties of Bamboo	6	
2.2	Term of Design	7	
	2.2.1 Furniture Design	7	
	2.2.2 Benefits of Design in Industries	8	
2.3	Epoxy Resin	9	
2.4	Finishing	10	
	2.4.1 Wax Finish	10	
CHAI	PTER 3 MATERIALS AND METHODS	12	
3.1	Design Process	12	
3.2	Sketch	15	
3.3	Mock-up	15	

3.4	Bamboo strip preparation	16	
3.5	Material preparation	16	
3.6	Product manufacturing process	17	
	3.6.1 Preparation of Bamboo Selection	18	
3.7	Bill of Material	27	
3.8	Part list	28	
CHA	APTER 4 RESULTS AND DISCUSSIONS	29	
4.1	Statistical Analysis	30	
4.2	Analysis of Product Based on Questionnaire	31	
CHA	APTER 5 CONCLUSION AND RECOMMENDATION	40	
5.1	Conclusion	40	
5.2	Recommendation	41	
CIT	ED REFERENCES	42	
APPENDICES			
PUBLICATION OF THE PROJECT REPORT UNDERTAKING PERMISSION FOR REFERENCES AND PHOTOCOPYING			
CUR	RRICULUM VITAE	87	

LIST OF FIGURES

	Page
Figure 3.1: 3D Drawing of Banco	13
Figure 3.2: Isometric Drawing of Banco	13
Figure 3.3: Flow chart design	14
Figure 3.4: Sketch of Banco	15
Figure 3.5 : Mock-up of Banco	16
Figure 3.6: Process Flow Diagram of Bamboo Strips	16
Figure 3.7: Manufacturing process	17
Figure 3.8: Bamboo	18
Figure 3.9: Bamboo Splitting	19
Figure 3.10: Bamboo Strips	19
Figure 3.11: Knot removing process.	20
Figure 3.12: Bark removing process	20
Figure 3.13: Oil application	20
Figure 3.14: Drying process	21
Figure 3.15: Glue application process	21
Figure 3.16: Kossan glue	22
Figure 3.18: Planning process	22
Figure 3.19: Cut the bamboo strips board	22
Figure 3.19: Hole making process	23

ABSTRACT

BANCO FROM BAMBOO STRIPS (BAMBUSA VULGARIS)

Research was carried out to discuss about designs of Banco made from bamboo strips. The uses of this bamboo is for flooring and have their own characteristic and very easy to find because bamboo one of non-woody plant. Bamboo shoot, charcoal, bamboo panels, flooring tiles, handicrafts and housing materials are the potential to make positive contributions to the global environment and economy. Nowadays, a lot of furniture for example benches is made up from solid wood or panel products. By using bamboo, it can be used new alternative as raw materials. In fact, bamboo much more cheaper compare to solid wood and other panel product. Questionnaires were distributed to two hundred correspondents which is student, government, private and self-employed. Then, the data was analysed by using SPSS to require result. Results show that the correspondents give positive feedback. Overall, Banco from bamboo strips is suitable into commercialize to the market.