PROPERTIES OF WOOD CEMENT BOARD (WCB) MADE FROM SENTANG (Azadirachta excelsa) PARTICLES

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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

JANUARY 2012

ACKNOWLEDGEMENTS

Assalamualaikum warahmatullahi wabarakatuh...

First of all, I would like to thank to the Almighty ALLAH S.W.T for His Blessing and

Strength rendered to me to complete my thesis regarding on Properties of Wood

Cement Board (WCB) Made from Sentang (Azadirachta excelsa) Particles.

I also want to wish my special gratitude to my beloved parents Maidin Othman and

Hawa Bee Mohd Ibrahim for their mental and physical support and their dedication,

love and give inspiration when I down and need them. Also to my siblings Hafizah,

Mohd Hafidz, Haslizawati, Dzul Affendi and Nurul Izzati

Thank to my advisor, Dr Shaikh Abdul Karim Yamani Zakaria whose willingness to

contribute his knowledge, time and effort till I had completed my final project for

guiding, reading and offering comment as the project involved. I gratefully

acknowledge his helpful suggestion.

Also thank to Dr Wan Mohd Nazri Wan Abd Rahman as my coordinator final project

FUR 529. Deep appreciation to associate Prof Dr Jamaludin Kasim as Head of Wood

Technology Centre. Also thank to the all staff especially En. Shahril, En. Nazri and En.

Rosli who help me.

I also would like to thanks to all my friends especially Siti Anis Aniha Isa because they

were given a lot of cooperation to make this project paper become successfully.

Without them, this project will become difficult.

Thanks to all of you!

Iffah Izzah Maidin

iv

TABLE OF CONTENTS

			Page		
DED	DICATIO	ON	iii		
ACK	ACKNOWLEDGEMENTS				
TAB	BLE OF	CONTENTS	v		
LIST	Γ OF TA	BLES	vii		
LIST	r of fic	GURES	viii		
LIST	T OF PL	ATES	ix		
LIST	Γ OF AB	BREVIATIONS	X		
ABS	TRACT		xi		
ABS	TRAK		xii		
		INTRODUCTION			
	Backgro		1		
		Statement	3		
	Justifica		3		
1.4	Objectiv	ves	3		
СНА	DTED I	I LITERATURE REVIEW			
2.1		Cement Board	4		
2.1	2.1.1	Properties of Wood Cement Board	7		
	2.1.1	2.1.1.1 Workability	7		
		2.1.1.2 Fungus and Termites Resistant	7		
		2.1.1.3 Sound Insulation	7		
		2.1.1.4 Health Safety	7		
		2.1.1.5 Moisture Resistant	8		
		2.1.1.6 Fire Resistance	8		
		2.1.1.7 Utilization	8		
	2.1.2		9		
		2.1.2.1 Partition and Wall	9		
		2.1.2.2 Permanent Formwork	9		
		2.1.2.3 Fire Safety Requirements	9		
	2.1.3	Factors Affecting Board Properties	10		
		2.1.3.1 Particle Sizes	10		
		2.1.3.2 Additives	10		
		2.1.3.3 Cement Ratio	11		
2.2	Sentan	ng	12		
	2.2.1	Properties of Sentang	13		
		2.2.1.1 Mechanical Strength Properties	13		
		2.2.1.2 Wood Working Properties	13		
		2.2.1.3 Gluing Properties	14		
		2.2.1.4 Natural Durability	14		
		2.2.1.5 Seasoning Properties	14		
	2.2.2	Uses of Sentang	15		

	APTERI	II MATERIALS AND METHODS		
3.1		imental Design	16 17	
3.2	Proces	ocess Flowchart		
3.3	Field I	ield Procedure		
3.4	Mater	al Preparation	18	
	3.4.1	Sentang spp	18	
	3.4.2	Chipping Process	19	
	3.4.3	Flaking Process	19	
	3.4.4	Screening Process	20	
3.5	Manufacturing Process			
	3.5.1	Blending Process	21	
	3.5.2	Mat Forming	22	
	3.5.3	Cold Press	22	
	3.5.4	Clamping	23	
	3.5.5	Hardening Chamber	23	
	3.5.6	Curing at Room Temperature	24	
	3.5.7	Trimming	24	
3.6	Testings			
	3.6.1	Bending Test	25	
	3.6.2		26	
	3.6.3	Screw Withdrawal	27	
	3.6.4	Water Absorption and Thickness Swelling Tests	28	
СНА	PTER I	V RESULTS AND DISCUSSIONS		
4.1	Properties of Wood Cement Board			
	4.1.1	Effect of Particle Sizes on Modulus of Rupture (MOR)	30 30	
	4.1.2	Effect of Particle Sizes on Modulus of Elasticity (MOE)	31	
	4.1.3	Effect of Particle Sizes on Internal Bonding	32	
	4.1.4	Effect of Particle Sizes on Screw Withdrawal	34	
	4.1.5	Effect of Particle Sizes on Thickness Swelling and Water Absorption	35	
CHA	PTER V	CONCLUSION AND RECOMMENDATIONS	37	
		ERENCES	38 40	
	PPENDICES			
CUR	RICULU	IM VITAE	51	

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ABSTRACT

The mechanical and physical properties of wood cement board from Sentang (Azadirachta excelsa) will determine based on the effect of wood particle sizes in wood cement board manufacturing. The quality of the boards were evaluated by determine the bending properties such as modulus of elasticity (MOE) and modulus of rupture (MOR), internal bonding (IB), screw withdrawal (SW), thickness swelling(TS) and water absorption (WA). The effects of different three particle sizes (0.5mm, 1.0mm and 2.0mm) were determined. All board properties were significantly influenced by particle sizes. Only wood cement board using wood particle size of 2.0mm meet the requirement for mechanical and physical properties as stipulated in MS standard (MS544: 2001)