

**WRITING TABLE FROM MEDIUM DENSITY FIBREBOARD
(MDF)**

By

SYUZAIDI SHAFIA

**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**

October 2003

ACKNOWLEDGEMENT

Alhamdulillah to Allah Subhanahuwata'la for giving me patience and courage to finish my thesis project.

I would like to take this opportunity to thank my advisor, Prof. Madya Said B. Ahmad for his support and advice in completing this project. I'm deeply grateful to for his encouragement, suggestions and comments during the completion of this report.

I also would like to express my gratitude to Prof. Madya Dr. Ashari B. Abd. Jalil, Head of Department Furniture Technology and En. Kamarulzaman B. Nordin, project thesis coordinator for his guidance and advice in doing this final project.

I am also thankful to my classmates for their kindness and encouragements. My sincere regards and appreciation also goes to my housemates for supporting me through tough times and their understanding. The love and blessing of my family were essential for the successful completion of this work.

TABLE OF CONTENTS

	Page
ACKNOWLEDGEMENT	iv
TABLE OF CONTENTS	v
LIST OF TABLES	viii
LIST OF FIGURES	ix
LIST OF PLATES	x
LIST OF APPENDICES	xi
LIST OF ABBREVIATIONS	xii
ABSTRACT	xiii
ABSTRAK	xiv
CHAPTER 1	
INTRODUCTION	1
1.1. Objectives of Study	5
1.2. Design Concept	5
CHAPTER 2	
LITERATURE REVIEW	6
2.1. Introduction	6
2.2. Utilization / uses of MDF	8
2.3. Physical and Mechanical Properties of MDF	10
2.4. Factor affecting / influence MDF	12
2.5. Problems of MDF	14

CHAPTER 3	MATERIALS AND METHOD	17
3.1.	Introduction	17
3.2.	Design	17
3.3.	Materials	19
3.3.1	Panel Products	19
3.3.2	Fasteners and Fitting	19
3.4.	Equipment and Machineries	20
3.5.	Methodology	21
3.5.1	Method of Preparation	21
3.5.2	Processing Method	21
3.5.3	Finishing Method	38
3.5.4	Costing Method	39
CHAPTER 4	RESULT AND DISCUSSION	41
4.1	Manufacturing Process	43
4.2	Finishing Process	44
4.3	Problems	45
4.4	Costing	45
CHAPTER 5	CONCLUSION AND RECOMMENDATIONS	47
5.1	Conclusions	47
5.2	Recommendations	48
REFERENCES		49

ABSTRACT

SUITABILITY OF USING MEDIUM DENSITY FIBERBOARD (MDF) IN MAKING FURNITURE PRODUCT

The suitability of using Medium Density Fibreboard in producing the Writing Table was ascertained. Currently MDF is a composite material that is widely used in furniture industry. MDF have special properties that are suitable in making varieties of furniture. The physical characteristic such as smooth surface, dense, flat and stiff, makes it easy to machine and shaped. In making the Writing Table, MDF is the major raw material used. The objective of this study is to produce an actual sized Writing Table with a special emphasis on the material, which is MDF. Given the special properties of MDF, it is easy to fabricate the Writing Table. But unfortunately, MDF also has its problems. Cracking is the major problem that occurs on MDF; usually happening on finishes, especially at the edge of the board. Apart from that, splits can also occur at the edge of the board due to screwing. These problems may be avoided by using suitable screws and by following the right procedure of finishing.