

**KILN DRYING OF TIMBER USING SOLAR ENERGY
AND WOOD DEFECTS**

By

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TABLE OF CONTENTS

	Page
APPROVAL SHEET	ii
DEDICATION	iii
ACKNOWLEDGEMENT	iv
LIST OF TABLES	vii
LIST OF FIGURES	viii
LIST OF PLATES	ix
LIST OF ABBREVIATIONS	x
ABSTRACT	xi
ABSTRAK	xii
CHAPTER 1 INTRODUCTION	1
1.1. History of Timber Kiln Drying Solar Energy.....	1
1.2. Objective.....	2
CHAPTER 2 FACTORS THAT INFLUENCES DRYING	
RATE	3
2.1. How wood dries.....	3
2.2. Lumber Thickness.....	4
2.3. Specific Gravity and Weight of wood.....	7
2.4. Shrinkage and swelling.....	8
CHAPTER 3 SOLAR ENERGY	10
3.1. Solar Energy in Timber Kiln Drying.....	10
3.2. Characteristic of Solar Drying.....	12
3.3. External Collector Kilns.....	15
3.4. Air Circulation.....	18
3.5. Greenhouse Kilns.....	19
3.6. How to Solar Kiln Dry Lumber.....	20

CHAPTER 4 OPERATION OF A SOLAR DRYER.....23

 4.1. Preparing the Lumber..... 23

 4.2. Monitoring the Process..... 24

 4.3. Modifications to the Design..... 26

CHAPTER 5 WOOD DEFECTS..... 28

 5.1. Surface checks..... 30

 5.2. Ring Failure..... 32

 5.3. Collapse..... 33

 5.4. Distortion..... 34

 5.5. Casehardening..... 35

 5.6. Honeycomb..... 35

 5.7. Warp..... 36

 5.8. Knots..... 38

 5.8.1 Loose Knots..... 38

 5.8.2 Checked Knots..... 39

 5.9. Discolorations..... 40

CHAPTER 6 DISCUSSIONS..... 42

CHAPTER 7 CONCLUSIONS AND RECOMMENDATIONS..... 45

REFERENCES..... 46

APPENDICES..... 48

VITA..... 50

ABSTRACT

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In this research wood needs to be dried first before we can use it. Solar energy is a convenient method because solar kilns give shorter drying times, produce high quality product and low operating costs compared with open-air drying and lower energy cost compared with other method kiln drying wood. This study assessed the actual performance of an instrumented industrial solar kiln and solar technology of timber. As we know, wood has quality and grade value for the market demand of sawn timber but, the various types of defects that can occur in dried wood products and to show how these defects are related to the kiln drying operation. So, we must control the drying defects using the special drying schedule, relative humidity of wood, moisture content and the person who handle the machine must be more careful in operation solar drying in kiln dried.