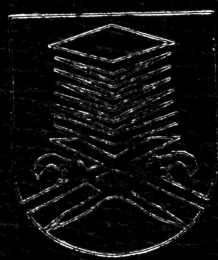


DETERMINATION OF FABRIC THERMAL VALUES FOR WOMEN FABRIC
MADE OF POLYESTER AND COTTON FIBERS



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TABLE OF CONTENTS

<u>CONTENTS</u>	<u>PAGES</u>
LIST OF FIGURE	v
LIST OF TABLE	vii
 <u>CHAPTERS</u>	
1 INTRODUCTION	
1.0 Background of the study	1
1.1 Objective of study	2
1.2 Scope of study	2
2 LITERATURE REVIEW	
2.0 Definition of heat	5
2.1 Types of heat movement	6
2.1.1 Conduction	7
2.1.2 Convection	8
3.1.3 Radiation	9
2.3 Thermal and its effects to human	10
2.4 Thermal effects on textile material	12
2.4.1 Thermal effects on fibers	12
2.4.2 Thermal effects on yarn	14
2.4.3 Thermal effects on fabric	14
2.4.3.1 Fabric thickness	15

2.4.3.2	Fabric weight	16
2.4.3.3	Cloth cover factor	17
2.4.3.4	Fabric construction	18
2.4.3.5	Fabric surface characteristic	18
2.5	Heat measurement and unit	19
2.5.1	The Clo value	20
2.5.2	The tog value	22
2.5.3	The k-value	23
2.5.4	The R-value	23
2.6	Testing for thermal comfort	24
2.6.1	Thermal transmittance test	25
2.6.1.1	Significant and use	25
2.6.1.2	Apparatus	26
2.6.2	Copper-man test	27
2.6.3	Thermography test	28
2.7	Polyester fibers	30
2.7.1	The comfort of polyester	30
3	METHODOLOGY	
3.0	Introduction	32
3.1	Analysis	32
3.1.1	Fiber identification	32
3.1.2	Fabric width	33
3.1.3	Fabric thickness	33

3.1.4	The fabric weight	33
3.1.5	The yarn count	33
3.1.6	Density and Cloth Cover Factor (KC)	34
3.1.7	Crimp and Take-up	35
3.2	Summary of the equipment and standard methods used	36
3.3	Thermal conductivity test	36
3.3.1	Sample preparation	36
3.3.2	Thermal conductivity machine	37
3.3.3	The Clo value conversion	40
3.3.4	Precaution measures	40
4	RESULT	
4.0	Introduction	41
4.1	Fabric analysis result	41
4.1.1	Solubility test result	41
4.1.2	Fabric width result	42
4.1.3	Fabric thickness result	42
4.1.4	Fabric weight result	43
4.1.5	Yarn count result	43
4.1.6	Fabric density result	44
4.1.7	Cloth cover factor (KC) result	45
4.2	The thermal conductivity test result	46
4.2.1	The Clo value result	46

CHAPTER 1

INTRODUCTION

1.0 Background of the study

People wear clothing because it is a part of human basic needs. It gives protection to the wearer and most importantly to keep warm and comfortable. As time passes, people become aware that clothing needs to have additional features in order to keep them comfortable when wearing clothing. For example, people require clothing should have good physical characteristic such as weight, thickness, bulkiness and stiffness. Also fabric or clothing is expected to have better breathable, thermal comfort, smooth surface and durability. Additionally people would expect clothing to have a smooth surface fabric in order to prevent any discomfort toward skin such as irritation. Breathable characteristic in clothing is also expected as it makes wearer feel more comfortable when wearing the clothing. Huge demands in textile tactile properties lead to tremendous research in fabric mechanical properties and comfort performance. One of the significant areas in fabric comfort is fabric thermal properties. Thermal comforts are applied to measure the relationship of thermal influence upon man at work, leisure, and during a critical situation.

Thermal comfort has been defined as “that condition of mind which expresses satisfaction with the thermal environment” by Fanger which provides a sufficiently broad discussion of this topic in his book [1]. He points out that, because of the biological variations of people, the aim is to create optimal thermal comfort by which the highest