

UNIVERSITI TEKNOLOGI MARA

**DESIGN AND FABRICATION OF A
PROTOTYPE OF A MULTIPURPOSE
HOUSEHOLD DRYING CLOTH AND
CANOPY**

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ABSTRACT

Nowadays, people only spend most of their time at home and rarely go outside for any purpose due to the current pandemic, including going to the laundromat to clean and dry clothes. Thus, a multipurpose household drying clothes and canopy is convenient for our daily routine. This product is equipped with a canopy that can ease drying clothes and act as a mini shelter for drying clothes or storing household items underneath. The methods employed in developing the multipurpose household drying clothes and canopy include creating a survey to collect data that will be used in the development of this project. Designing in Solidwork software, calculation and machining were included in the methodologies. The outcome of this project is drying clothes that have a multipurpose function to ease people's chores.

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CHAPTER ONE

INTRODUCTION

1.1 Background of Study

A clothesline, also known as a washing line, is any form of thread, string, or twine extended between two points, either outside or inside, above ground level. Clothing that has just been washed is hung out to dry on the line with clothespins or clothes pegs. Washing lines are commonly found in back gardens or on balconies and are attached to a post or a wall. Because of the weight of the normally soaked clothes, longer washing lines often have props holding up pieces in the centre. In modern times, clotheslines are replaced with drying racks because they can save space and are commonly made of stainless steel, and the size and shape will be compact while easy to handle. Stainless steel is used because it is rust-proof so that the rack can last long enough. A canopy is a decorative cloth covering hanged or propped up over something, namely a throne or bed. It is also known as a shelter or projection that resembles a roof. PVC fabric is available in a broad range of colors and textures due to the fact that the look and stiffness of PVC varies greatly depending on how it is treated. It comes in a variety of colors, has a glossy or matte texture, and is used in a variety of products including upholstery, shower curtains, rainwear, and lingerie. The smooth, flexible surface of PVC fabric makes it both durable and simple to clean (Meg Kramer, n.d)[6]. PVC fabric is also heat and fire resistant, making it suitable for heat problems. Structures that require natural sunlight to pass through, PVC Vinyl fabric is an ideal choice. This fabric may be hung over the top to provide some shade and weather cover.

Combining a drying rack with a PVC Vinyl Fabric, a multipurpose household drying clothes and canopy is succeeded. It can be used to hang clothes after being washed and shelter wet clothes whilst being dried or to shelter things outside, such as a car or household items. Thus, it can offer lots of benefits from just a single product.