# UNIVERSITI TEKNOLOGI MARA

# DESIGN AND FABRICATION OF CEMENT APPLY HELPER


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# ABSTRACT

Build a wall is a main process to make a building. Wall is built by assemble the brick together using cement. This process will take a lot of energy and time. The main objective for this project is to solve that two problem. For the first problem is to minimize energy that be using to build the wall. The ideal design for this project is to make sure the product must ha light weight and move smoothly during the work. This Cement Apply Helper machine with an affordable price will make the workers at the site smile and can have a healthy body.

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Finally, this dissertation is dedicated to my father and mother for the vision and determination to educate me. This piece of victory is dedicated to both of you. Alhamdulilah.

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# CHAPTER ONE
# INTRODUCTION

## 1.1 Background of Study

During the time I helped my father at his work, I realized that to build a wall is not an easy task. Wall is a continuous vertical brick or stone structure that encloses or divides an area of land. Every brick that will using to make a wall must be cement together to create a strong wall. This process is the hardest to do. It is because when the work started it will from begin from floor. It will make it harder for the older people who has a back pain. This Cement Apply Helper Machine will reduce the pain and help the worker to work more efficiently and more can work more longer.

In designing process, strength, durability and efficient of the product must been given the most consent. It is because the product is to help reduce the load of work towards the workers. If this product design fail the purpose of this product will not be achieved and make a lot of problems for the workers. The design must also concern about the altitude of the wall. If the product cannot be use in certain high is the fail product.

My aim for this product is to help people that work in building industry. The most person that been aim by this product is the person that must work in this industry even though they already reached their age to take it easy at home. This product is made for them to make their body can be use longer. So they can carry their grandchildren on their shoulder.

## 1.2 Problem Statement

Low back pain is common and can be extremely painful. It can be difficult to cope with the severe pain but fortunately it is rarely due to serious disease. There are things that employers can do to manage back pain and other musculature disorders(MSDs) in the workplace. People can be helped to remain in work or helped to make an earlier return to