



DEPARTMENT OF BUILDING SURVEYING
FACULTY OF ARCHITECTURE, PLANNING AND SURVEYING
UNIVERSITI TEKNOLOGI MARA

THE CONCEPT AND MAINTENANCE OF DOME

This academic project is submitted in partial fulfillment of the
requirement for the Bachelor Of Building Surveying (Hons.)

MOHD RIMIE JAIZAM BIN ARIFFIN
(2007120597)

OCTOBER 2010

ACKNOWLEDGEMENT



This research was successfully done in partial fulfilment the requirement for the degree of Bachelor of Building Survey. Therefore, I would like to express my thank you to several people for their support to me completing the final year project at Universiti Teknologi Mara.

First, special thanks to my supervisor, Puan Wan Zuriea Bt. Wan Ismail for giving generously her valuable time, advice and continuous encouragement throughout my degree of bachelor program. I appreciate the guidance, dedication and exemplary academic standard of her lead me to the right way in succeeding my thesis.

Secondly, I would like to express thanks to my course mates for giving all their suggestion, opinion, corporation and helps when I needed. Their kindness and helpful are very appreciated. I am also thankful to the parties involved to complete my thesis for their cooperation and experienced shared.

Last but no least, with all appreciation I would like to thank whoever that I have left out in this list.

ABSTRACT

Nowadays, construction is rapidly developing even though problem on defects still occurs especially dome roof in mosque. There are many type of dome roof defect. This research was conducted with the aim to develop an appropriate method of maintenance to prevention of dome roof defects. The appropriate method of maintenance and prevention is needed to guide the contractor in reducing cost of repetitive maintenance, labor and time. The objectives of this research are to identify the common defect, the factor causes the defect and the dome roof maintenance to prevent defect occur in the mosque. A survey was conducted to achieve the objective research. The result indicated that the most common type of dome roof defect is roof roofs and ceiling leaks, the position error of drainage and paint defect. Generally the sources to contributed defect occurred in dome roof are from the unsuitable drainage, heavy rain, unskilled workers, poor in building materials, unsuitable roof design, lack of maintenance and lack of supervision. In conclusion the most agreed preventive method to avoid the dome roof defects by appointing a good contractor and skilled workers, ensuring the installation of dome roof with the correct method, using quality materials and follow the specification, order and scheduled maintenance, oversight seeing on construction sites and quality inspection of the design. It is hoped that the findings can be a guidance to make dome roof repair work more effective and efficient.

TABLE OF CONTENT

TITLE	PAGE
DEDICATION	i
ACKNOWLEDGEMENT	ii
ABSTRACT	iii
TABLE OF CONTENT	v-xii
LIST OF TABLE	xiii-xv
LIST OF FIGURE	xv
LIST OF CHART	xv

CHAPTER 1 : INTRODUCTION

1.1 INTRODUCTION	1-2
1.2 ISSUE OF TOPIC/PROBLEM STATEMENT	3-4
1.3 AIM AND OBJECTIVE OF STUDY	4
1.4 SIGNIFICANT OF STUDY	4
1.5 SCOPE AND LIMITATION OF STUDY	5

CHAPTER 2: LITERATURE REVIEW

2.1 INTRODUCTION OF MAINTENANCE	6
2.2 MAINTENANCE DEFINITION	6-7
2.2.1 MAINTENANCE	7
2.2.1.1 REPAIRING	7
2.2.1.2 REPLACEMENT	8
2.2.1.3 SERVICE	8

CHAPTER 1

INTRODUCTION OF STUDY

1.1 Introduction

World Construction Industry is one of the biggest industries in the whole world. The contribution of this industry towards the global Gross Domestic Product (GDP) revolves around one-tenth of the total amount (CIDB Construction Quarterly Statistical Bulletin). World Construction Industry is also a potential employment generator and provides work to almost seven percent of the total employed person in the whole world. The resources that are utilized in World Construction Industry are also staggeringly high and itself consumes fifty percent of the total world resources. The repairing of any existing building or making certain alterations in the same also comes under Construction Industry.

World construction industry constitutes an important element of the Malaysian economic. Although in account for 2.5 % of the GDP in 2007 (CIDB Construction Quarterly Statistical Bulletin). The Star quoted Mr Datuk Seri Ahmad Husni Hanadzlah Second Finance Minister of Malaysia as saying that the construction industry is expected to register 3.5% growth in 2009, despite the current global economic crisis. He said that when many sectors were facing a growth contraction, the local construction sector was still resilient and a pillar of strength to the Malaysian economy. He added that "The construction sector registered a growth of 1.1% in the first quarter and improved further to 2.8% in the second" (The star, 16 November 2009) .The industry is critical to national wealth creation as it acts as a catalyst for and has multiplier effects to the economic.