

UNIVERSITI TEKNOLOGI MARA

**FACILITY CONDITION ASSESSMENT IN
MALAYSIAN MULTI-UNIT RESIDENTIAL
BUILDING USING AUDIT TECHNIQUE**

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Thesis submitted in fulfillment of the requirements for the degree of

Masters in Engineering Management

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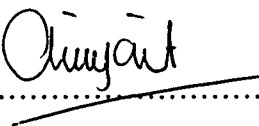
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AUTHOR'S DECLARATION

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ABSTARCT

The purpose of this study is to develop the facility condition assessment technique to assess the condition of the facilities equipped in Malaysian multi-unit residential building. The facility condition assessment consists of three stages which are individual facility rating, level of priority and overall facility condition. The assessment rubrics of individual facility rating are categorized into three categories and each criterion illustrates different characteristics on the condition of facility. The equations of individual and overall facility rating processes are formulated by adapting the statistical approach. The assessment rubric of priority level is designed based on ratings in individual facility rating process. The result of overall facility rating is evaluated through the assessment rubric of overall facility condition. Comparison with other facility evaluation method by conducting a case study on residential buildings within Klang Valley which is concentrating on mechanical and electrical facility systems has been made. In this case study, the results generated from facility condition assessment technique outcomes are more accurate and clearer. By categorizing and evaluating the individual facility rating into functionality, fitness for use and cleanliness, optimizing priority level assessment rubric and evaluating the effectiveness of assessment rubric for overall facility condition, this auditing technique is practical to be used in multi-unit residential buildings.

Keywords: Facility Condition Assessment, Multi-unit Residential Building, Mechanical and Electrical Systems

TABLE OF CONTENTS

AUTHOR’S DECLARATION.....	i
ACKNOWLEDGMENT	ii
ABSTARCT	iii
LIST OF FIGURES	vii
LIST OF TABLES.....	viii
LIST OF ABBREVIATIONS.....	ix
CHAPTER 1	1
INTRODUCTION	1
1.1 Introduction.....	1
1.2 Background of the Study	3
1.3 Problem Statement.....	5
1.4 Research Objectives.....	8
1.5 Scope of the Study	9
1.6 Significance of the Study.....	9
CHAPTER 2	12
LITERATURE REVIEW	12
2.1 Introduction.....	12
2.2 Facilities Management in Residential Building.....	13
2.3 Operations and Maintenance Management in Residential Building	14
2.4 Utilities and Services in Residential Building	15
2.5 Mechanical and Electrical Systems in Residential Building	16
2.6 Assessment Rubric Method	20
2.7 Statistics in Engineering Fields	22
2.8 Facility Inspection Tool (FIT)	24
CHAPTER 3	29
METHODOLOGY	29
3.1 Introduction.....	29
3.2 Individual Facility Rating Process.....	32
3.2.1 Assessment Rubrics of Individual Facility Rating	34
3.2.1.1 Functionality	34
3.2.1.2 Fitness for Use	36