

TABLE OF CONTENTS

	<i>PAGE</i>
ABSTRACT	iii
ACKNOWLEDGEMENTS	v
LIST OF FIGURES	IX
LIST OF TABLES	XIV
NOTATION.....	XV
CHAPTER 1	1
1.1 INTRODUCTION.....	1
1.2 BACKGROUND	1
1.3 RESEARCH OBJECTIVES	2
1.4 THESIS LAYOUT	2
CHAPTER 2	4
2.1 INTRODUCTION.....	4
2.2 COMPOSIT COLUMNS UNDER CONCENTRIC LOADING.....	4
2.3 COMPOSITE COLUMNS UNDER ECCENTRIC LOADING	8
2.4 LOCAL AND POST BUCKLING BEHAVIOR OF STEEL BOX COLUMNS	12
2.5 PLATE SLENDERNESS LIMITS.....	13
2.6 BEHAVIOR OF CONCRETE FILLED STEEL BOX COLUMNS.....	14
2.6.1 SHORT COLUMNS	14
2.6.2 LONG COLUMNS	15
2.7 FIBER REINFORCED CONCRETE CLASSIFICATION	16
2.8 STEEL FIBER REINFORCED CONCRETE (SFRC).....	16
2.8.1 CLASSIFICATION OF SFRC	16
2.8.2 STATIC MECHANICAL PROPERTIES.....	17
2.8.2.1 Compressive strength	18
2.8.2.2 Shear strength	19
2.8.2.3 Tensile strength	19
2.8.2.4 Flexure strength	20