ATC-14

EVALUATING THE SEISMIC RESISTANCE OF EXISTING BUILDINGS

by

APPLIED TECHNOLOGY COUNCIL 3 Twin Dolphin Drive, Suite 275 Redwood City, California 94065

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PREFACE

In January 1983 the National Science Foundation awarded the Applied Technology Council a 3-year grant to develop methods for evaluating the seismic strength of existing buildings. The objective of the project was to develop a comprehensive practical methodology that could guide engineers throughout the United States in evaluating existing buildings to determine potential earthquake hazards and Identify buildings or building components that present unacceptable risk to human lives. This report contains the results of that effort and represents a consensus-based methodology.

H. J. Degenkolb Associates, Engineers, San Francisco, California, a structural engineering firm familiar with seismic design and construction practices and the performance of buildings in earthquakes, served as the project subcontractor. Chris D. Poland served as Principal-in-Charge and was assisted by James 0. Malley, Project Engineer. Neville C. Donovan of Dames & Moore, San Francisco, served as Seismic Loading Consultant. Boris Bresler, Raymond W. Chalker, C. Robert Fuller, James I. Moore, James L. Noland, Daniel Shapiro, and Mete A. Sozen served as members of the Project Engineering Panel. The affiliations of these individuals are provided in Appendix

A.

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Christopher Rojahn ATC Executive Director

TABLE OF CONTENTS

CHAPTER/ SECTION	TITLE	PAGE
	PREFACE	i
	LIST OF FIGURES	vii
	LIST OF TABLES	x
	SYMBOLS AND DEFINITIONS	xi
1	INTRODUCTION	1
1.1	Background	1
1.2	Objectives, Concepts, and Limitations	1
1.3	Organization and Main Components of the Methodology	2
2	STATE OF PRACTICE REVIEW	7
2.1	Literature Survey	7
2.2	Review of Trial Designs and Evaluation Reports	8
2.3	Consultant Interviews	12
3	SEISMIC LOADING CRITERIA	15
3 .1	Introduction and Discussion of Zoning Maps	15 15
3.2	Response Spectra	
3.3	Response Spectra for Different Damping Levels	16
3.4	Ground Motion and Response Spectra for Differing	20
3.4	Probability Levels	20
3.5	Recommended Response Spectra Development Procedures	20
0.0	and Example Computations	25
		20
4	GENERAL METHODOLOGY FOR THE EVAUATION OF	
4.1	EXISTING BUILDINGS	33
4.1	Introduction to the Methodology	33
4.2 4.3	Data Collection Procedures	40
	Building Identification	45
4.4	Analysis Procedures	52
5	SEISMIC EVALUATION OF WOOD-FRAME BUILDINGS	83
5.1	Building Descriptions	83
5.2	Performance Characteristics (Type 1 and Type 2 Buildings).	83
5.3	Examples of Building Performance	85
5.4	Loads and Load Paths	87
5.5	Evaluation of Buildings in Regions of Low Seismicity	88
5.6	Evaluation of Buildings in Regions of High Seismicity	90
6	SEISMIC EVALUATION OF STEEL FRAMED BUILDINGS	95
6.1	Seismic Evaluation of Steel Moment Resisting Frame	
	Buildings	95
6.1.1	Building Description	95
6.1.2	Performance Characteristics	95
6.1.3	Examples of Building Performance	96
6.1.4	Loads and Load Paths	97

TABLE OF CONTENTS (CONT.)

CHAPTER/ SECTION	TITLE	PAGE
6.1.5 6.1.6	Evaluation of Buildings in Regions of Low Seismicity . Evaluation of Buildings in Regions of High Seismicity .	97 100
6.2 6.2.1	Seismic Evaluation of Braced Steel Frame Buildings Building Description	106 106
6.2.2	Performance Characteristics	106
6.2.3	Examples of Building Performance	107
6.2.4	Loads and Load Paths	108
6.2.5	Evaluation of Buildings in Regions of Low Seismicity .	108
6.2.6	Evaluation of Buildings in Regions of High Seismicity .	110
6.3	Seismic Evaluation of Light Steel Moment Frame Buildings with Longitudinal Tension-Only Bracing	117
6.3.1	Building Description	117
6.3.2	Performance Characteristics	117
6.3.3	Examples of Building Performance	118
6.3.4	Loads and Load Paths	118
6.3.5	Evaluation of Buildings in Regions of Low Seismicity .	118
6.3.6	Evaluation of Buildings in Regions of High Seismicity .	120
6.4	Seismic Evaluation of Steel Frame Buildings with Cast-in-Place Concrete Walls	125
6.4.1	Building Description	125
6.4.2	Donformance Characteristics	125
6.4.3	Examples of Building Performance	125
6.4.4	Londo and Lond Dath	120
6.4.5	Evaluation of Buildings in Regions of Low Seismicity	127
6.4.6	Evaluation of Buildings in Regions of High Seismicity .	127
6.5	Seismic Evaluation of Steel Frame Buildings with Infilled Walls of Unreinforced Masonry	137
6.5.1	Building Dependention	137
6.5.2	Performance Characteristics	137
6.5.3	Examples of Building Performance	138
6.5.4	Loads and Load Paths	139
6.5.5	Evaluation of Buildings in Regions of Low Seismicity	140
6.5.6	Evaluation of Buildings in Regions of High Seismicity .	143
7	SEISMIC EVALUATION OF CONCRETE CAST-IN-PLACE BUILDINGS	149
7.1	Seismic Evaluation of Moment Resisting Cast-in-Place	
7.1.1	Concrete Buildings	149
7.1.2	Performance Characteristics	149
7.1.3		149
7.1.4	Examples of Building Performance	150
7.1.5	Loads and Load Paths	152
7.1.6	Evaluation of Buildings in Regions of High Seismicity .	152
		155

TABLE OF CONTENTS (CONT.)

CHAPTER/ SECTION	TITLE	PAGE
7.2	Seismic Evaluation of Cast-in-Place Concrete Shear Wall Buildings	164
7.2.1		164
7.2.2		164
	Performance Characteristics	
7.2.3	Examples of Building Performance	165
7.2.4	Loads and Load Paths	167
7.2.5	Evaluation of Buildings in Regions of Low Seismicity .	168
7.2.6	Evaluation of Buildings in Regions of High Seismicity .	170
7.3	Seismic Evaluation of Concrete Frame Buildings with	1.77
F 0 1	Infilled Walls of Unreinforced Masonry	177
7.3.1	Building Description	177
7.3.2	Performance Characteristics	177
7.3.3	Examples of Building Performance	178
7.3.4	Loads and Load Paths	181
7.3.5	Evaluation of Buildings in Regions of Low Seismicity .	181
7.3.6	Evaluation of Buildings in Regions of High Seismicity .	184
8	SEISMIC EVALUATION OF BUILDINGS WITH PRECAST	
0.1	CONCRETE ELEMENTS.	191
8.1	Seismic Evaluation of Tilt-Up Buildings with Precast	
	Bearing Wall Panels	191
8.1.1	Building Description	191
8.1.2	Performance Characteristics	191
8.1.3	Examples of Building Performance	192
8.1.4	Loads and Load Paths	193
8.1.5	Evaluation of Buildings in Regions of Low Seismicity .	194
8.1.6	Evaluation of Buildings in Regions of High Seismicity .	196
8.2	Seismic Evaluation of Precast Concrete Frame and Concrete	
	Shear Wall Buildings	203
8.2.1	Building Description	203
8.2.2	Performance Characteristics	203
8.2.3	Examples of Building Performance	204
8.2.4	Loads and Load Paths	205
8.2.5	Evaluation of Buildings in Regions of Low Seismicity .	206
8.2.6	Evaluation of Buildings in Regions of High Seismicity .	208
9	SEISMIC EVALUATION OF REINFORCED MASONRY BUILDINGS	217
9.1		217
U •1	Seismic Evaluation of Reinforced Masonry Buildings With	
	Diaphragms of Wood or Metal Deck With or Without	
0.1.1	Concrete Fill	217
9.1.1	Building Description	217
9.1.2	Performance Characteristics	217
9.1.3	Examples of Building Performance	218
9.1.4	Loads and Load Paths	220
9.1.5	Evaluation of Buildings in Regions of Low Seismicity .	220
9.1.6	Evaluation of Buildings in Regions of High Seismicity .	223

TABLE OF CONTENTS (CONT.)

CHAPTER/ SECTION	TITLE	PAGE
9.2	Seismic Evaluation of Reinforced Masonry Bearing Wall	
	Precast Concrete Diaphragm Buildings.	230
9.2.1	Building Description	230
9.2.2	Performance Characteristics	230
9.2.3	Examples of Building Performance	230
9.2.4	Loads and Load Paths	231
9.2.5	Evaluation of Buildings in Regions of Low Seismicity .	231
9.2.6	Evaluation of Buildings in Regions of High Seismicity .	234
10	SEISMIC EVALUATION OF UNREINFORCED MASONRY BEARING WALL BUILDINGS	241
10.1	Building Description	241
10.2	Performance Characteristics	241
10.3	Examples of Building Performance	241
10.4	Loads and Load Paths	245
10.5	Evaluation of Buildings in Regions of Low Seismicity .	245
10.6	Evaluation of Buildings in Regions of High Seismicity .	248
11 11 . 1	SEISMIC EVALUATION OF NONSTRUCTURAL ELEMENTS Performance Characteristics of Typical Nonstructural	251
	Elements	251
11.2	Evaluation of Nonstructural Elements	254
12	ILLUSTRATIVE EXAMPLES OF THE USE OF THE METHODOLOGY	259
12.1	Example 1, One-Story Concrete Frame Building with	
19.9	Reinforced Masonry Walls	259
12.2	Example 2, Five-Story Steel Moment Frame Building	272
12.3	Example 3, Nine-Story Reinforced Concrete Shear Wall	005
12.4	Building	285
12.4	Example 4, One-Story Wood Frame Building	294
	REFERENCES CITED	301
	REFERENCES REVIEWED DURING DEVELOPMENT OF	
	METHODOLOGY	307
APPENDIX	A: ATC-14 PROJECT PARTICIPANTS	323
APPENDIX	B: STATE OF PRACTICE REVIEW QUESTIONNAIRE FOR DESIGN PROFESSIONALS	327
APPENDIX	C: FIELD DATA SHEET AND ABBREVIATED EVALUATION CHECKLISTS FOR MODEL BUILDING TYPES IN AREAS OF HIGH SEISMICITY.	337
APPENDIX	D: APPLIED TECHNOLOGY COUNCIL PROJECTS AND REPORT INFORMATION	363