

List of Figures

Figure C1-1	Rehabilitation Process	1-5
Figure C1-2	Target Building Performance Levels and Ranges	1-23
Figure 1-1	General Horizontal Response Spectrum.	1-34
Figure 2-1	In-Plane Discontinuity in Lateral System	2-10
Figure 2-2	Typical Building with Out-of-Plane Offset Irregularity.	2-10
Figure 2-3	Component Force Versus Deformation Curves	2-13
Figure C2-1	Generalized Component Force-Deformation Relations for Depicting Modeling and Acceptance Criteria	2-15
Figure 2-4	Backbone Curve for Experimental Data	2-29
Figure 2-5	Alternative Force-Deformation Curve	2-29
Figure C3-1	Plausible Force Distribution in a Flexible Diaphragm.	3-5
Figure C3-2	Diaphragm and Wall Displacement Terminology	3-13
Figure 3-1	Idealized Force-Displacement Curves	3-20
Figure 4-1	Presumptive Expected Capacities of Piles or Piers in Granular Soils	4-12
Figure 4-2	Presumptive Expected Capacities of Piles or Piers in Cohesive Soils	4-13
Figure C4-1	Outline Procedure for Consideration of Rocking Behavior	4-17
Figure 4-3	(a) Idealized Elasto-Plastic Load-Deformation Behavior for Soils (b) Uncoupled Spring Model for Rigid Footings	4-19
Figure 4-4	Elastic Solutions for Rigid Footing Spring Constraints	4-20
Figure C4-2	(a) Foundation Shape Effect (b) Foundation Embedment Effect.	4-22
Figure 4-5	Vertical Stiffness Modeling for Shallow Bearing Footings	4-23
Figure 4-6	Passive Pressure Mobilization Curve	4-26
Figure C4-3	Idealized Concentration of Stress at Edge of Rigid Footings Subjected to Overturning Moment	4-27
Figure 5-1	Generalized Force-Deformation Relation for Steel Elements or Components	5-13
Figure 5-2	Definition of Chord Rotation	5-13
Figure 5-3	Top and Bottom Clip Angle Connection	5-24
Figure 5-4	Double Split Tee Connection	5-25
Figure 5-5	Bolted Flange Plate Connection	5-26
Figure 5-6	Bolted End Plate Connection	5-26
Figure 6-1	Generalized Force-Deformation Relations for Concrete Elements or Components	6-13
Figure C6-1	Identification of Component Types in Concrete Shear Wall Elements	6-44
Figure 6-2	Plastic Hinge Rotation in Shear Wall where Flexure Dominates Inelastic Response	6-48
Figure 6-3	Story Drift in Shear Wall where Shear Dominates Inelastic Response	6-48
Figure 6-4	Chord Rotation for Shear Wall Coupling Beams	6-48
Figure 7-1	Generalized Force-Deformation Relation for Masonry Elements or Components	7-11
Figure C7-1	Effective Height and Differential Displacement of Wall Components	7-12
Figure C7-2	Compression Strut Analogy–Concentric Struts	7-26
Figure C7-3	Compression Strut Analogy–Eccentric Struts	7-26

Figure C7-4	Compression Strut Analogy–Perforated Infills.	7-26
Figure 8-1	Generalized Force-Deformation Relation for Wood Elements or Components	8-12
Figure C9-1	Idealized Hysteretic Force-Displacement Relation of a Lead-Rubber Bearing	9-5
Figure C9-2	Force-Displacement Loops of a High-Damping Rubber Bearing	9-6
Figure C9-3	Tangent Shear Modulus and Effective Damping Ratio of High-Damping Rubber Bearing ..	9-7
Figure C9-4	Analytical Force-Displacement Loops of High-Damping Rubber Bearing	9-8
Figure C9-5	Idealized Force Displacement Loops of Sliding Bearings	9-10
Figure C9-6	Coefficient of Friction of PTFE-based Composite in Contact with Polished Stainless Steel at Normal Temperature	9-11
Figure C9-7	Definition of Effective Stiffness of Seismic Isolation Devices	9-12
Figure C9-8	Idealized Force-Displacement Loops of Energy Dissipation Devices with Recentering Capability	9-28
Figure 9-1	Calculation of Secant Stiffness, K_s	9-32