



R&D at R+C

A longstanding commitment to research and development has kept Rutherford + Chekene at the forefront of structural/seismic engineering for five decades. As members of numerous professional engineering organizations and technical committees, R+C has helped to draft new codes and develop innovative approaches to seismic evaluation and design. R+C's code development projects include:

- *AISC Seismic Provisions for Structural Steel Buildings*
- *ASCE 7, Minimum Design Loads for Buildings and Other Structures*
- *ATC-40, Seismic Evaluation and Retrofit of Concrete Buildings*
- *ATC-43, Evaluation and Repair of Earthquake-Damaged Concrete and Masonry Wall Buildings*
- *ATC-52-4: Community Action Plan for Seismic Safety (CAPSS) for the City and County of San Francisco—clarifications as to how owners should repair and strengthen their damaged buildings after an earthquake in document, "Here Today—Here Tomorrow: The Road to Earthquake Resilience in San Francisco"*
- *ATC-58-1, Seismic Performance Assessment of Buildings (Methodology and Implementation Guides)*
- *ATC-58-2 Report, Preliminary Evaluation of Methods for Defining Performance*
- *ATC-60, Quantification of Building System Performance and Response Parameters*
- *ATC-76-5: Integration of Collapse Risk Mitigation Standards and Guidelines for Older Reinforced Concrete Buildings into National Standards, Phase I*
- *ATC-83: Improved Procedures for Characterizing and Modeling Soil Structure Interaction for Performance Based Engineering, Bret Lizundia was on the Project Technical Committee. Gyimah Kasali peer reviewed the geotechnical scope.*
- *FEMA 154 Rapid Visual Screening of Buildings for Potential Seismic Hazards: A Handbook*
- *FEMA 178 (ATC-22) and FEMA 310 (update), NEHRP Handbook for Seismic Evaluation of Existing Buildings*
- *FEMA 273, Guidelines for the Seismic Rehabilitation of Buildings*
- *FEMA 350, Recommended Seismic Design Criteria for New Steel Moment Frame Buildings*
- *FEMA 356, Prestandard and Commentary for the Seismic Rehabilitation of Buildings*
- *FEMA 443, Building a Disaster-Resistant University*
- *FEMA 547/ICSSC RP-7, Techniques for the Seismic Rehabilitation of Existing Buildings*
- *FEMA 427, Primer for Design of Commercial Buildings to Mitigate Terrorist Acts*
- *ICSSC RP-4, Standards of Seismic Safety for Existing Federally Owned or Leased Buildings*
- *ICSSC RP-5, Guidance on Implementing Executive Order 12941 on Seismic Safety of Existing Federally Owned or Leased Buildings.*
- *ICSSC RP-6, Standards of Seismic Safety for Existing Federally Owned and Leased Buildings.*
- *ICSSC RP-8, Standards of Seismic Safety for Existing Federally Owned or Leased Buildings (Update to ICSSC RP-6)*



- National Earthquake Hazard Reduction Program (NEHRP) Standards, *NEHRP Recommended Provisions for the Development of Seismic Regulations for New Buildings*, 1997, 2000 and 2003 Editions
- SEAOC's *Recommended Guidelines for the Practice of Structural Engineering in California*
- *2003 SEAOC Bluebook: Concrete Chapter*