

Nonstructural Seismic Engineering: Coming of Age and Breaking New Ground

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Abstract. Nonstructural components and systems account for the majority of direct property losses due to earthquake damage to modern buildings. The ATC-120 project was undertaken on behalf of the U.S. National Institute of Standards and Technology to improve technical aspects of nonstructural system design in the areas that will have the largest impact for public safety and economic welfare. The 4-year \$1 million project focused on developing a fundamental understanding of the factors influencing response and creating practical strategies that provide a reliable basis of design for most components.

The keynote address will summarize key project findings focusing on the improved understanding of nonstructural component response to earthquakes. It will recommend a holistic approach to design that integrates the many variables associated with nonstructural design and construction into a technically sound and practical implementation strategy. Additionally, the presentation will include recommendations for building on the accumulated body of knowledge and suggest areas of possible future investigation by the nonstructural community.

Keywords: Nonstructural Components, Seismic Design, Performance Objectives, Nonstructural Response.