

ASCE/SEI Standards Committee on the Seismic Rehabilitation of Existing Buildings

On July 19, 2010, the Standards Committee on the Seismic Rehabilitation of Existing Buildings had their second meeting related to updating ASCE 31 and 41. The committee agreed to target issuing the updated standards in the first quarter of 2013. The focus will be on major, substantive changes that are technically warranted, justifiable, and put forth by the various subcommittees. A significant effort is underway to streamline the two documents so that they are seamless and potentially combine to two documents into one standard.

The committee has been subdivided into three subcommittees. The first subcommittee is reviewing the Benchmark Buildings and Checklists in ASCE 31 to determine if they should be revised. The second subcommittee is looking into streamlining and/or combining to two standards. The third subcommittee is working to update ASCE 41. Because of the large scope of ASCE 41, that subcommittee has broken up into various issue teams, each tasked with a specific portion of the document or specific overarching topic. The ASCE 41 issue teams and some topics under consideration are as follows:

- General Provisions
 - Performance Levels – Building Performance vs. Structural Performance
 - Seismic Hazard Levels and Hazard Maps
 - Should ASCE 41 use the same risk-targeted, NGA based MCE as ASCE 7?
 - Should existing buildings be evaluated to a lower hazard?
- Analysis Provisions
 - How to determine m-factors and backbone curves
 - Update rocking analysis provisions
 - Update soil-structure interaction
 - Nonstructural analysis forces
- Geologic Hazards
 - What are the performance levels and criteria for geologic hazards?
 - How should the structural implications of liquefaction be addressed?
- Steel Provisions
 - Incorporating BRBF criteria
 - Reviewing braced frame modeling and acceptance criteria
- Concrete Provisions
 - Interaction equation for linear procedures
 - Development length equation for bottom beam bars
 - Provisions for post-installed and CIP anchors
 - Methodology for selection of modeling parameters and acceptance criteria
 - Circular columns (modeling parameters and acceptance criteria)
 - Beam-column joints tables
 - Wrapped columns (modeling parameters and acceptance criteria)
 - Shear Wall Acceptance Criteria
- Wood Provisions

- Capacities of timber elements
- Modeling and acceptance criteria of timber elements
- How to deal with existing pre-engineered connectors
- Masonry Provisions
 - Review & update URM linear provisions
 - Review & update in-fill linear and nonlinear provisions
 - Review & update reinforced masonry provisions
- Material Testing Provisions
 - How many tests are required?
 - What tests are required?
 - Should testing requirements be based on performance level?
 - Should kappa-factors be based on each component action, not simply 0.75
- Editorial, Consistency, and Clarification
 - Editorial revisions
 - Clarify sections commonly misinterpreted
 - Review formatting and provisions for consistency across material chapters

There are two tiers of committee membership – Voting and Associate. Voting members, who are limited to around 35, are required to attend all committee meetings in person and actively participate in each ballot. Associate members are welcome to attend all committee meetings and provide comment on all the ballots, which must be addressed in the same manner as Voting member comments. All committee members, Voting and Associate, are expected to actively participate on at least one subcommittee or issue team and are encouraged to participate on more if possible. While the roster of Voting members is currently full, we welcome additional participants at the Associate level. Please fill out the membership application at <http://content.seinstitute.org/committees/codeform.html> if you are interested in becoming a member of the committee and e-mail Bob Pekelnicky, RPekelnicky@degenkolb.com to indicate which subcommittee and/or issue team you wish to participate in.

The next committee meeting will be held on October 29, 2010 in the San Francisco Bay area at a venue to be determined. Please contact Bob Pekelnicky if you wish to be informed of the location of the meeting when it is determined or wish to have a copy of the minutes of the first two meetings provided to you.