



U.S. RESILIENCY COUNCIL • 35 VALLEY ROAD, ATHERTON, CA 94027 • WWW.USRC.ORG

# The U.S. Resiliency Council Principles of Formation

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Building on the work of the SEAONC Existing Buildings Ratings Committee over the past four years, and the recommendations of an ATC User's workshop, in 2011 the US Resiliency Council® (USRC) was formed as a 501(c)3 nonprofit organization to establish a rating and accreditation system for certifying the resiliency of buildings to natural and man-made hazards.

The formation of the USRC is a response to the expressed needs of the lending, insurance, building owner, tenant and engineering communities for a seismic performance rating system that:

- Provides an objective methodology for assessing building performance
- Is technically credible within the engineering community
- Clearly communicates building performance to all stakeholders
- Can be used within the real estate transaction process
- Can be used by owners and tenants to make rational risk management decisions
- Unleashes market forces to reward seismically retrofitted buildings

*The overall goal of the USRC is to build community resilience from the ground-up with credible metrics that generate marketplace demand for improved disaster performance.*

The USRC will award Certificate of Resilient Engineering (CoRE®) Ratings, much like the US Green Building Council® issues LEED® ratings. The USRC intends that CoRE Ratings become the standard for quantifying the value of improved disaster resilience, and a key metric for due diligence in real estate transactions. CoRE ratings will be measured along the dimensions of:

- Safety – presence of significant life safety hazards
- Reparability – property damage as percentage of replacement cost
- Functionality – time for restoration of occupancy and normal operation

The USRC will ensure that its rating system maintains the highest quality and credibility in the following ways:

Use of credible technical standards

- The USRC will establish two Boards of Advisors – one a Technical Board to include engineers, architects, regulators and the other a User's Board to include lenders, insurance professionals, building owners, and others with significant knowledge of the building environment.
- The USRC will validate and adopt existing technical standards (e.g. SEAONC EPRS, ATC-58) that have been developed through the efforts of recognized academic and professional engineering experts.

Development of an accreditation program

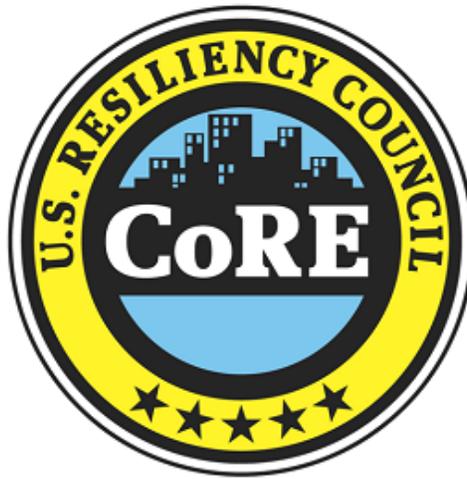
- Only accredited engineering professionals will be permitted to provide USRC authorized CoRE ratings.
- Engineers must meet minimum requirements that demonstrate expertise in engineering analysis and design.
- Accredited engineers will submit CoRE ratings for peer review and/or random auditing.
- Accredited engineers must maintain high standards of professionalism or lose their accreditation.

Development of a peer review process

- The USRC will contract with experienced structural engineers as peer reviewers.
- Peer reviewers will review CoRE ratings when the applicant intends to post the rating on a building.
- Peer reviewers will regularly audit CoRE ratings and accredited professionals when ratings are used for private real estate transactions.

Development of a technical training program

- Provide courses possibly similar to engineering licensing classes.
- Offer engineers courses in evaluation of buildings using adopted methodologies (e.g. ASCE-31, ATC-58).
- Develop supplementary informational material to assist professionals in using adopted methodologies.



**Figure 1: Certificate of Resilient Engineering logo**

CoRE Rating	Safety	Reparability	Functionality
★★★★★	Life Safe	Loss <5%	Occupiable Immediately Functional < 72 hours
★★★★	Life Safe	Loss <10%	Occupiable Immediately Functional < 1 month
★★★	Life Safe	Loss <20%	Occupiable < 1 month Functional < 6 months
Certified	Life Safe	Not estimated	Not estimated
Not Certified	Life Safety Hazard	Not estimated	Not estimated

**Figure 2: Current draft of USRC rating system**