



U.S. Resiliency Council

Safe-at-Home Initiative



Our vision is a world in which people understand and have confidence in the performance of buildings in which they live and work.

Resilient buildings are part of resilient communities

The USRC's mission is to improve community resilience, one building at a time. The performance of a community's housing stock in a natural disaster is essential to its recovery.

The San Francisco Bay Area Planning and Urban Research Association's (SPUR) defined what it means to "shelter-in-place" in their report *Safe Enough to Stay*:

"A resident's ability to remain in his or her home while it is being repaired after an earthquake - not just for hours or days after an event, but for the months it may take to get back to normal... This is a different standard than that employed by the current building code, which promises only that a building meets Life Safety standards. A shelter-in-place residence will not be fully functional, as a hospital would need to be, but it will be safe enough for people to live in after an earthquake."

(<https://www.spur.org/publications/spur-report/2012-02-01/safe-enough-stay>)

For more information

Contact the USRC at evan.reis@usrc.org for more information on how to obtain a USRC rating.

The USRC Safe-at-Home Certificate

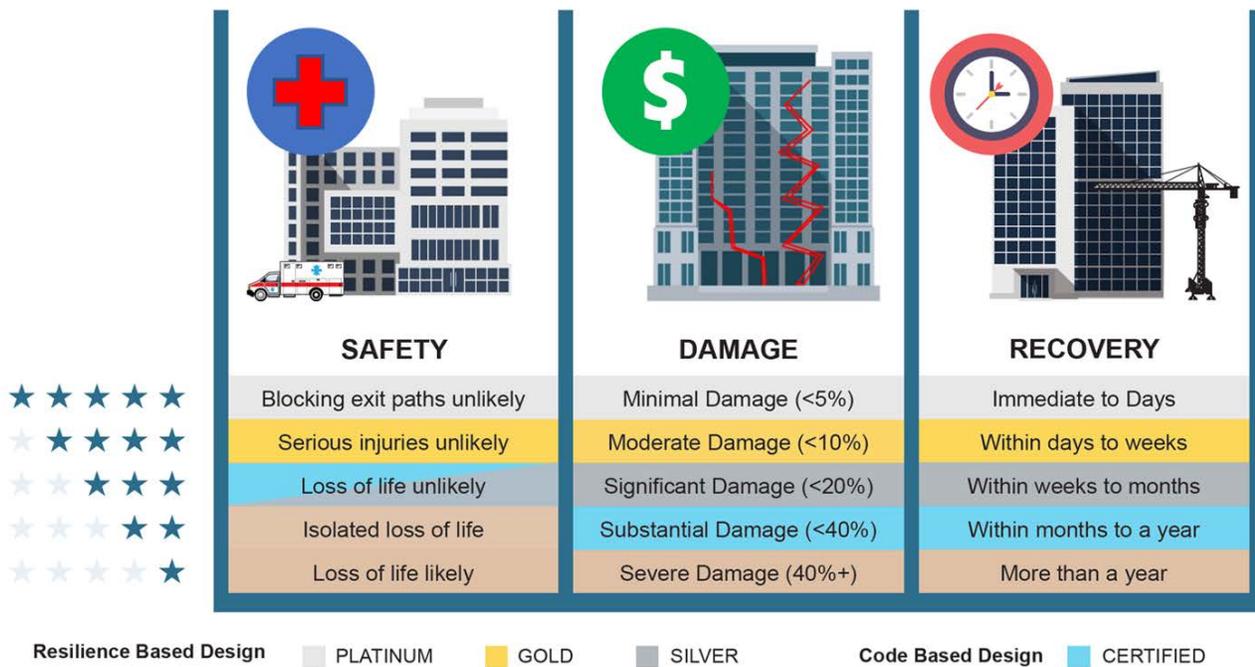
The USRC Safe-at-Home Initiative (SaH) designates multifamily residential properties that are expected to be safe to house people after a damaging earthquake. The USRC expects that buildings with SaH certificates will be valued by the public and local jurisdictions, and will be essential to the resilience of a community. The USRC is working with cities, lenders, and insurers to offer incentives to owners who are able to achieve a SaH designation.

Why is it needed?

With the loss of more than 14,000 homes in the Camp Fire, the projections of between 250,000 to 400,000 "quake refuges" if a major event strikes Southern California, and the chronic lack of affordable housing already impacting many states, the ability of people to stay in their homes following a disaster is a critical concern to community leaders. Apartments, condominiums, and townhomes that are able to safely house their residents will reduce the need for emergency shelter space and scarce resources.

The U.S. Resiliency Council is a 501(c)3 nonprofit organization whose mission is to educate, advocate and promote better tools for assessing, designing and communicating the performance of buildings during earthquakes and other natural hazards; and to develop and implement rating systems that are both credible and meaningful.

USRC Building Rating System: Usefulness of Performance Metrics



What does a USRC rating deliver?

The USRC system provides rating users with greater confidence in a building performance evaluation by delivering:

- **Consistency**—Only certified engineers are able to submit applications for a USRC rating.
- **Credibility**—Rating submissions undergo a technical audit by certified reviewers.
- **Value**—Users receive actionable information about building safety, repair cost, and time to regain function.

USRC SAFETY rating

The USRC SAFETY rating reflects the expected performance of the building in terms of loss of life, injury, and egress. A USRC SAFETY rating in this context is an indicator of the risk of personal injuries of various types and seriousness, as well as loss of life.

USRC DAMAGE rating

The USRC DAMAGE rating reflects an estimate of the cost to repair the building after an event, as a percentage of the building’s overall replacement cost (not including the replacement of contents), such that it can continue to be used as it was at the time the rating was last issued.

USRC RECOVERY rating

The USRC RECOVERY rating is an estimate of the time until a property owner or tenant is able to enter and use the building for its basic intended functions. It represents a minimum timeframe to carry out needed repair and to remove major safety hazards and obstacles to occupancy and use. It does not address the condition of external infrastructure (e.g. utilities, transportation) that provide access and services to the building.

USRC Building Rating System: Safe-at-Home Requirements

Who uses the rating system?

Building owners, brokers, buyers, lenders, insurers and tenants all benefit from the USRC rating system.

Owners with properties that receive high USRC ratings will benefit from an increase in perceived value, potentially increasing leasing rates and transaction efficiency—the same kind of benefits associated with LEED® accredited properties.

Lenders and Insurers use USRC ratings to inform real estate transactions associated with lending decisions and defining insurance products.

Tenants value the USRC rating as it relates to both safety and recovery time following a major event.

Governments and Institutions use USRC ratings to identify safe buildings and make long-term strategic plans for reducing reconstruction costs and recovery time following a major disaster. As a comparison, over 40 jurisdictions in California require “Green” or LEED® certification of new public and private developments to improve long term sustainability.

USRC ratings add value

The U.S. Resiliency Council Safe-at-Home certificate provides a means for owners to achieve a USRC designation that sets their buildings apart as contributing to a resilient community and as good long term investments. The USRC is actively engaging with communities, lenders and insurers to incentivize USRC rated buildings with expedited permits, reduced mortgage and insurance rates, and other recognition of their lower risk and value to their communities.

How do I apply for a USRC Safe-at-Home certificate?

More than 40 leading structural engineering and architectural firms with expertise in the seismic design of new buildings are members of the USRC. A list can be found at <http://www.usrc.org/index/members>.

These firms have been briefed on the Safe-at-Home initiative and would be happy to work with you to achieve a certificate.

If you are working with your own architect or engineer who is not a USRC member, have them contact the USRC at evan.reis@usrc.org. We will be pleased to brief them on the initiative so that they can help you achieve a Safe-at-Home certificate.

USRC Building Rating System: Safe-at-Home Requirements

Safe-at-Home Certificate Checklist

- Building has received a USRC rating with at least three stars in the Safety and Recovery dimensions.
- USRC Rating certificate is attached.
- The building contains on site:
 - Smoke detectors
 - CO2 detectors
 - Fire extinguishers
- Building owner has a contractor on call to provide within two to three weeks, temporary weather protection of walls, windows and roofs that may be damaged (not required with USRC 5 star Recovery rating).
- Building owner has a contractor on call to provide within a month to make repairs of toilets, water fixtures, door security hardware and refrigeration (not required with USRC 4 or 5 star Recovery rating).
- Confirm that there is not a taller adjacent building that may pose a collapse risk because it may be unenforced masonry, or non ductile concrete.
- Confirm that there is a neighborhood disaster center within walking distance of the building that is expected to be able to help meet residents' basic needs not available within the building.
- Submit Safe-at-Home Certificate fee to the USRC (\$2,000).



For More Information

To learn whether your building may be eligible to receive a USRC Safe-at-Home certificate contact the U.S. Resiliency Council.

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The performance of a building during and after an earthquake may differ from the description associated with its assigned Rating or a SaHF designation, due to the qualitative nature of the Rating or designation, the uncertainties inherent in the underlying evaluation, as-built conditions of the building that may not be visible and/or in conformance with the design documents, and the variability of events to which the building is exposed. The USRC Rating or SaHF designation themselves are not engineering work products and do not represent an engineering opinion. The USRC is not responsible for engineering work products by the engineer who performed the evaluation. USRC expressly disclaims any and all liability relating to claims involving building performance under any circumstances.