The U.S. Resiliency Council (USRC) is pleased to announce the launch of its Building Rating System.

The USRC Building Rating System represents a major step forward in the development of quantifiable and credible metrics to evaluate the expected performance of both new and existing buildings subject to natural and manmade hazards.

“*I have observed clients worldwide take on substantial risk due to misconceptions about their buildings’ expected performance in disasters. I believe that consistent and credible ratings are critical to dispel myths and support effective resilience efforts.*”

- Sorrel Hanson, Senior Engineering Specialist with FM Global, USRC Board Member

“*Seismic due diligence is very important to the commercial lending and real estate industries. Many in the commercial real estate industry consider the current state of PML reporting to be fractured: lacking consistency, credibility, and professional licensing verification. Just as the accountants created the PCAOB (Public Company Audit Oversight Board) to provide credibility to their members audit reports, I am encouraged that the structural engineering profession is finding ways, such as the USRC, to provide consistency, audit procedures and a revocable certification to those who prepare this critical piece of transactional due diligence.*”

- Greg Michaud, Chairman of the Commercial Real Estate Finance Council and Head of Real Estate Finance, Voya Investment Management

“*Improving operational continuity and reducing volatility means reducing the frequency and severity of risk events and improving our clients’ ability to both plan and react to minimize the impact. Building ratings systems such as the USRC allow us to help clients address the root causes of risk, and build operational resiliency.*”

- Tom Neary, AON

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Building performance in disasters is poorly understood and measured

One of the biggest misconceptions about building design is that modern codes result in disaster-proof buildings. In fact, most codes are meant only to prevent collapse, not to prevent injuries, limit damage or permit quick recovery. It is vital to the nation’s financial stability, in particular within the lending industry, to have building rating systems that deliver reliable information to owners, tenants, lenders, insurers, government jurisdictions and other building stakeholders. Existing buyer pay rating systems have been subject to both real and perceived manipulation that has led to a crisis of confidence in the transactional marketplace, much as with the failure in the past decade of credit rating agencies to predict or provide information to investors on the risks of mortgaged backed securities.

The USRC meets these challenges with credibility, consistency and practicality

The USRC Rating System (currently for earthquakes) has been developed through a five year effort involving many of the most respected earthquake engineering professionals and organizations in the country, who have contributed more than $500,000 and 5,000 hours to the goal of developing a system that will deliver the highest level of credibility. The USRC is becoming the gold standard for assessing and quantifying building resilience within the financial, lending and insurance communities. The USRC uses a three-layered approach to ensure confidence in our rating system:

- **Credibility of standards** – USRC Ratings are based on national standards, vetted by a committee of the nation’s leading engineering experts.
- **Credibility of raters** – Only USRC Certified Engineers are allowed to develop USRC ratings. Certification requires years of demonstrated expertise in building assessment. Certified Engineers take USRC training courses and agree to uphold the USRC’s code of conduct.
- **Consistency through review** – USRC Transaction and Verified ratings undergo a technical review process to ensure they are provided in a consistent manner that avoids improper manipulation.

Value of a USRC Rating

- Better understanding of a building’s expected performance during a disaster leads to better financial risk management decisions.
- A high USRC Rating documents a building’s resilience and increases a building’s market value.
- A high level of credibility is achieved by using only Certified Professional Engineers.
- A USRC Rating provides lenders, buyers and tenants a single financial standard they can rely on for real estate and due diligence transactions.

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USRC is supported by the following Founding Members

- AMG Structural Engineers
- Applied Technology Council*
- ARUP
- Bentley Corporation
- Blach Construction
- Brandow and Johnson
- Buehler & Buehler
- City of San Francisco
- Core Brace
- Computers and Structures International
- Degenkolb Engineers
- Dynamic Isolation Systems
- Earthquake Protection Systems
- Earthquake Engineering Research Institute*
- Newmark Capital Realty
- Forell-Elsesser
- FTF Engineering
- GMS, LLP
- Hilti
- Hohbach-Lewin
- HOK
- Holmes Culley
- IAMPO Uniform Evaluation Service*
- International Code Council*
- IDS Group
- Insight Structural Engineers
- John A. Martin
- KPFF
- LA Tall Building Council
- LPA
- Marx Okubo Associates
- MHP Structural Engineers
- MITEK
- Miyamoto International, Inc.
- Nabih Youseff & Assoc.
- National Council of Structural Engineers Associations*
- Partner Engineering and Science, Inc.
- Pacific Earthquake Engineering Research Center*
- Reaveley Engineers and Associates
- Risha Engineers
- Rutherford and Chekene
- Saiful/Bouquet Structural Engineers
- Structural Engineers Association of California*
- SESOL, Inc.
- Simpson, Gumpertz, Heger
- Sika
- Simpson Strong Tie
- SOM
- Saunders Construction Inc.
- Structural Focus
- Taylor Devices
- Thorton Tomasetti
- Walter P. Moore
- Weidlinger
- Wiss, Janney, Elsner
- ZFA

*Nationally Recognized Professional Engineering Research Organizations
What is Included in the USRC Earthquake Rating?

The USRC Earthquake Rating considers the performance of a building’s structure, its mechanical systems, and architectural components such as cladding, windows, partitions, and ceilings. Ratings are based on a ground shaking intensity consistent with the design of new, code complying buildings. USRC Ratings provide key performance metrics along three dimensions:

The SAFETY rating describes the potential for people in the building to get out of the building unharmed after the event.

The DAMAGE (Repair Cost) rating describes the estimated cost to repair the building after the event as a percentage of the building’s replacement cost.

The RECOVERY (Time to Regain Basic Function) rating is an estimate of the minimum time required to effect repairs and to remove safety hazards and obstacles necessary to use the building. Additional time might be needed to restore the building to full operations.

Comparison of PML and USRC Transaction and Verified Ratings

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Types of USRC Ratings

The USRC Transaction Rating provides owners and financial stakeholders with credible and informative building performance metrics essential to the real estate due diligence and transaction process. The Transaction Rating enhances the fractured PML process within the financial, real estate and insurance industries.

USRC Verified Ratings are for building stakeholders seeking detailed information on building performance that can be used for long term capital resilience planning, promotional marketing, and to increase the market value of their properties. Each Verified Rating is technically audited by the USRC and buildings that wish to receive the highest USRC ratings will undergo a detailed review.

Who Uses the Rating System?

Owners look for high USRC ratings to increase building value, leasing rates, and transaction efficiency. In the Tokyo market, office buildings rated on par with a USRC five star rating receive 40 percent higher lease rates than those similar to a three star rating. The benefits of a USRC rating can be similar to the benefits associated with LEED® accredited properties.

Lenders and Insurers use USRC ratings to make informed real estate and insurance pricing decisions.

Architects use the USRC rating as an integral part of resilient design strategies for their clients.

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 planning decisions. The City of Los Angeles has committed to being the first city to adopt and implement a voluntary rating system, based on the USRC.
Membership benefits -
(For more information visit: www.usrc.org/membership)

With your help as a sustaining member, the USRC will become a national platform for:

- Increasing market demand for better performing buildings
- Fostering collaboration among diverse stakeholders and technical experts
- Promoting integrity, stability, consistency and transparency of rating systems
- Educating and advocating for safe buildings and a better public understanding of building performance

Members receive exclusive benefits and opportunities to contribute to the mission of the USRC and to promote their support of a more resilient nation. Members are able to serve on USRC committees that are charged with:

- Developing Rating Systems for hazards including: wind, flood, blast and others
- Ensuring that the USRC Rating System delivers fair, credible, consistent and valuable metrics to stakeholders
- Promoting the USRC to all stakeholders in the built environment

We offer opportunities for members to promote their support of the USRC through branding, use of USRC materials, speaking opportunities on behalf of the USRC, and promotion on the USRC website and in marketing materials.

Budget Needs

As the USRC moves from launch into the operation phase, it will require approximately $700,000 in annual revenue in order to hire staff, promote the Rating System nationwide, and provide the technical review of building ratings.

Anticipated annual budget priorities in 2018:

- Executive Director transitioning into a full time position – $200,000
- Full time administrative and part time bookkeeping staff – $120,000
- Office rent and expenses – $60,000
- Operating expenses (IT, accounting, legal, marketing support, supplies, etc) – $95,000
- USRC promotion at conferences, workshops, and to key stakeholder groups – $100,000
- Development and distribution of marketing materials – $50,000
- Stipends to USRC committee personnel to review Rater applications and provide technical rating reviews – $75,000

The structural engineering community has a proud history of volunteering in the development of guidelines and standards that benefit all building stakeholders. Over the past five years, USRC Founding Members have contributed more than 5,000 hours with in-kind donations of time and expertise. As the USRC grows to provide ratings for other hazards we expect the same volunteer spirit from members as it makes the best use of available resources.

Current and anticipated funding streams

Funding to date has been provided by 64 Founding Members who have contributed more than $700,000 over three years toward administrative, accounting, and legal support; development of marketing materials; travel to promote the USRC at conferences; and other basic operating expenses associated with achieving our launch in November 2015.

The USRC’s goal is to become fully self-sustaining within two years, primarily through awarding Transaction and Verified Ratings, and through the support of sustaining members. Currently our goal is to raise additional operating funds from sustaining members, as we continue to promote the Rating System, work to secure Ratings, and add hazards including wind, flood and blast.

Anticipated funding sources in the future:

Sustaining memberships
(average $3,000 - $10,000 annually per organization) – $150,000 growing to $500,000

Awarding of Transaction Ratings
(average $700 - $1,200 per rating) – $100,000 growing to $500,000

Awarding of Verified Ratings
(average $5,000 - $25,000 per rating) – $150,000 growing to $500,000

Certification of building raters and reviewers
(currently 70+ raters, growing to 500+) – growing to $100,000

Education, conferences and other sources of income – up to $100,000 over time