

EARTHQUAKE RISKS -

UNDERSTANDING THE ISSUES

2 HOURS - CEU

- I WHAT DO WE MEAN BY EARTHQUAKE RISK - TOTAL 80 MINUTES**
 - A. TYPES OF EARTHQUAKES - 20 MINUTES**
 - 1. SLIP STRIKE**
 - 2. SUBDUCTION**
 - 3. MAGNITUDE OF EARTHQUAKE**
 - B. LOCATIONAL RISKS - 20 MINUTES**
 - 1. PROXIMITY TO FAULTS**
 - 2. TYPES OF SOILS**
 - 3. LIQUIFACTION**
 - C. STRUCTURAL RISKS - 40 MINUTES**
 - 1. BUILDING CODES**
 - 2. AGE OF STRUCTURE**
 - 3. SOFT -STORY AND OTHER STRUCTURAL DEFECTS**
 - 4. WHAT DEFICIENCIES ARE MOST LIKELY TO RESULT IN EQ DAMAGE**

- II. ANALYSING THE PROBLEMS - TOTAL 40 MINUTES**
 - A. WHAT IS PML ANALYSIS?**
 - B. WHAT IS THE NEXT GENERATION OF RISK ANALYSIS**
 - C. RECOMMENDATIONS ON WHAT TO LOOK FOR AS AN APPRAISER AND HOW TO REPORT WHAT WE SEE**
 - D. WHAT CAN BE DONE TO PROTECT A BUILDING**

INSTRUCTOR: Russell Berkowitz, Senior Associate FORELL / ELSESSER ENGINEERS

Russell joined the firm in 1999 and is a Senior Associate with 15 years of structural engineering experience. In addition to his project management work, he serves as Lead Analyst heading the overall analysis effort of the firm's most complex structures. Russell's strength lies in his ability to bring energy, dedication, and personality to his collaborations within a project team.

Russell has a passion for the analysis and design of advanced seismic protection systems. His knowledge of state-of-the-art structural analysis and methodologies is instrumental in keeping Forell/Elsesser at the forefront of advanced seismic design and BIM. As Project Manager for the new Pixar Animation Studios project, these qualities were instrumental in optimizing the seismic design of the geometrically complex structure. Russell's experience includes new and retrofit design of educational, commercial, institutional, healthcare, and laboratory structures. Russell is a California licensed Structural Engineer, and received a Bachelor's degree from Cal Poly San Luis Obispo and a Master's degree from UC Berkeley.

His passions outside of the office include training for the infamous Tour of California Death Ride on his bicycle and writing/producing music in his home recording studio.

Professional Associations

Earthquake Engineering Research Institute (EERI), Learning From Earthquakes Team

Structural Engineers Association of Northern California (SEAONC):

Seismology Committee, Chair; Existing Buildings Committee, Former Vice Chair; Ground Motions Seismology Sub-Committee

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