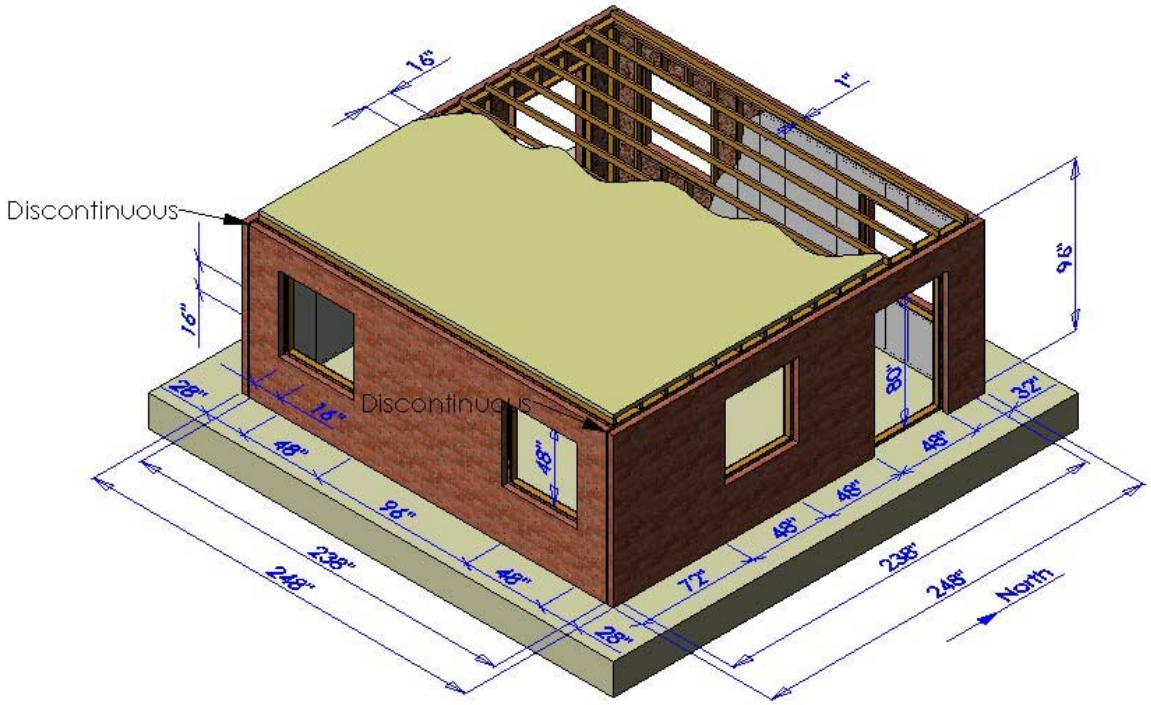
Shake Table Tests of One Story Masonry House

Brick veneer houses are a common kind of construction in many parts of the United States. The system consists of a clay brick wythe backed by a wood-stud frame. The brick wall is connected to the backing through metal veneer anchors. Under the auspices of the Network for Earthquake Engineering Simulation (NEES) program, the US National Science Foundation (NSF) is sponsoring a research project on Performance-based Design of Masonry from October 2006 to September 2009. This research is one-of-the kind systematic and comprehensive study of masonry veneer wall systems. It is carried out as a collaborative effort of researchers from the University of Texas at Austin, UCSD, University of Louisville, North Carolina A&T and Washington State University with substantial input from the industrial participants. The project is led by Prof. Richard of the University of Texas at Austin. The study will lead to a good understanding of the seismic performance of such systems and how the current design practice and code provisions stand. It will also lead to improved analytical tools and design recommendations. A full-scale prototype wood-frame building with brick veneer will be constructed and tested at the UCSD Large Outdoor Shake Table Testing Facility. The prototype is representative of typical low-rise residential constructions. Construction is scheduled to start in December 2008 at the Englekirk Structural Engineering Center (ESEC). Shake table tests are scheduled for late January, 2009. The investigators at UCSD are Benson Shing, Professor of Structural Engineering, and Hussein Okail, Graduate Student Researcher.