

CECM Earthquake Engineering Speaker Series

Seismic Wine Barrel Storage Design

by

Tauras Stockus

Graduate Structural Engineering Program

CSUN

The presented work is to develop an engineered solution to a problem that exists in the storage of wine barrels. The best grape growing region in the United States is in California, but it is also the region with highest seismic activity. The current system of stacking wine barrels for storage is very efficient for static situations. When the stack of wine barrels is acted on by a dynamic load like an earthquake the system can be unstable and a failure occurs with the barrels toppling down. This failure was recently observed in the 2014 Napa Earthquake. The presented work investigates the Napa Earthquake event and develops a seismically resistant steel rack to support the wine barrels through a design earthquake.

Date: Wednesday, May 6, 2015

Time: 7:00 pm – 8:30 pm

Place: JD 1609

Contact: Tzong-Ying K. Hao • (818) 677 6974 • tzong-ying.hao@csun.edu