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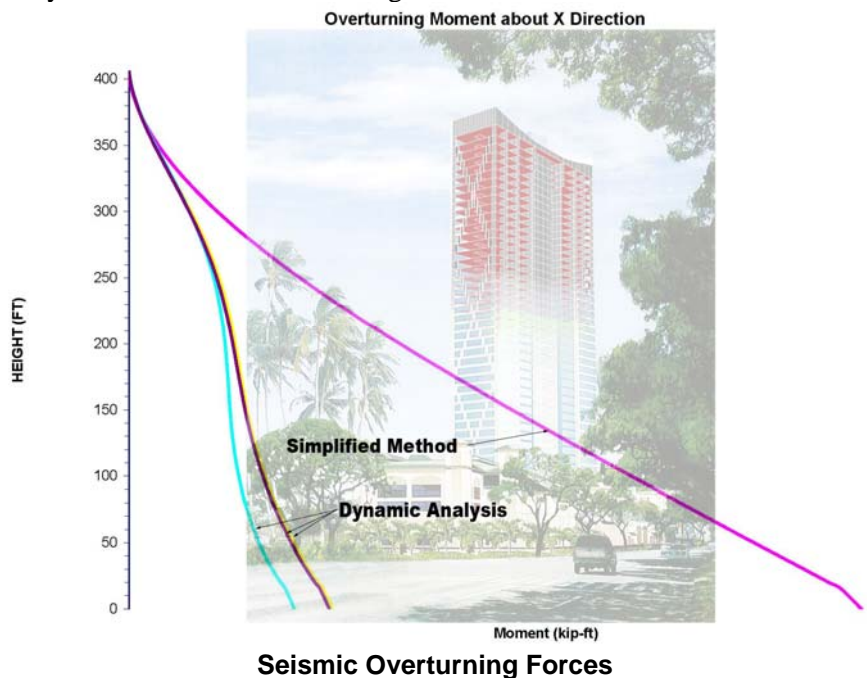
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The October 15th 2006 Kiholo Bay earthquake is a reminder of the impact that natural hazards can have on the built environment. Baldrige & Associates Structural Engineering (BASE) is committed to ensuring public safety through performance-based seismic design. The seismic studies performed by BASE are used to improve the quality of current and upcoming buildings and ensure that safety will not be compromised due to seismic activity.

Building Code provides several design approaches to account for seismic risk. These include simplified static methods that approximate seismic forces and detailed dynamic analysis methods that can more accurately predict performance.

While most engineers will utilize the less time-intensive simplified methods, BASE will often use dynamic analysis in the seismic design on larger projects. The additional effort that we must spend results in a better understanding of the building performance and can often result in significant savings for our clients as well. The graph below indicates the reduced seismic overturning requirements realized in the dynamic analysis of a 400-foot tall building.



“For the past twelve years BASE has maintained a list of design professionals who have committed to volunteering in emergency response after an earthquake. This community service was put to use last year assisting our fellow engineers and architects to respond to the Kiholo Bay earthquake.”