



# Seismic Isolation of San Francisco Airport International Terminal

*World's largest seismically isolated building is protected by Friction Pendulum™ bearings*



*San Francisco's International Airport Terminal has dramatic architectural features, including: expansive interior spaces, 80 feet tall columns, 700 feet long roof trusses, and glass exterior walls. The building was designed by Skidmore, Owings and Merrill to resist a magnitude 8 earthquake occurring on the San Andreas fault. The 267 Friction Pendulum™ bearings protect this landmark building from the severe ground shaking that occurs during major earthquakes. With over 22 million cubic feet of interior space, it is the largest isolated building in the world. This project won the 2001 Merit Award for Excellence from the American Institute of Steel Construction and the 2002 Excellence in Structural Engineering Award from the National Council of Structural Engineers for the Most Outstanding Project.*



*The Friction Pendulum™ bearings provide a 3 sec. isolated period and reduce earthquake force demands on the building by 70%. Each bearing can displace up to 20 inches in any horizontal direction while supporting building and seismic loads of up to 6 million pounds. Seismic isolation provided the lowest construction cost for achieving the desired seismic performance. Moreover, the use of Friction Pendulum™ bearings as compared to rubber bearings, allowed for a further reduction in column and beam sizes, and saved an additional 680 tons of structural steel.*



**Earthquake Protection Systems, Inc.**  
451 Azuar Drive, Bldg. 759  
Mare Island  
Vallejo, CA 94592

Tel: (707) 644-5993  
Fax: (707) 644-5995  
E-mail: [eps@earthquakeprotection.com](mailto:eps@earthquakeprotection.com)  
Website: [www.earthquakeprotection.com](http://www.earthquakeprotection.com)

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