EARTHQUAKES FACTS & FIGURES

An earthquake is caused by a sudden slip on a fault and it occurs when plates grind and scrape against each other. Stresses in the earth's outer layer push the sides of the fault together. Stress builds up and the rocks slip suddenly, releasing energy in waves that travel through the rock to cause the shaking that we feel during an earthquake.

Damage from recent earthquakes in the United States

Northridge, Ca:
Date: January 17, 1994
Time: 4:31 am
Magnitude: 6.7
Deaths: 57
Injuries: 9,000
Property Damage: $15 billion

Loma Prieta (south of San Francisco), Ca:
Date: October 17, 1989
Time: 5:04 pm
Magnitude: 7.1
Deaths: 62
Injuries: 3,757
Property Damage: more than $6 billion

Quick Facts

- The U.S. Geological Survey estimates that several million earthquakes occur in the world each year, but many go undetected
- The National Earthquake Information Center locates about 35 earthquakes each day or about 14,000 a year
- There is a 100% chance that an EQ will happen today
- A quake that is magnitude of 9.7 is 23,000 times STRONGER than one that is 6.8
- There has not been a rise in the number of magnitude 7.0 or greater earthquakes, records show they actually seemed to decrease in recent years
- Earthquakes can not be predicted
- Animal behavior can not predict earthquakes
- There is no such thing as earthquake weather
- California will not eventually fall off into the ocean
- Los Angeles and San Francisco will one day be adjacent from one another
- The increase in EQ activity does not mean that a large EQ is about to happen
- The decrease in seismicity does not mean that a large EQ is about to happen

(more)

- The USGS expects about 18 major earthquakes (7.0 – 7.9) and one great EQ (8.0 or above) in any given year
- A rolling motion means you are probably far away from the EQ
- A sharp jolting motion means you are probably close to the EQ
- California, Nevada, Idaho, Montana, Hawaii and Alaska have all experienced an EQ of 7.0 magnitude
- When an EQ hits, it is usually better to stay inside if you are already inside and to stay outside if you are already outside
- During an EQ, many more people are injured by falling debris just outside buildings than by what is happening on the inside
- Within the next 30 years there is a 60% probability that Southern California will experience an EQ of greater than 6.7
- Within the next 30 years there is a 67% probability that the Bay Area will experience an EQ of >6.7
- Alaska has experienced at least 12 magnitude 7.0 or larger earthquakes in the last 30 years
- The largest EQ (9.5) in the 20th century occurred in 1960 off the coast of South America in Chile
- The first seismic instruments accurate enough to be used in the scientific study of earthquakes were invented by James Alfred Ewing, Thomas Gray and John Milne – all three were Englishman
- Florida and North Dakota have the smallest number of EQs in the US
- In 1663 the European settlers experienced their first EQ in America

Established in 1992, Safe-T-Proof is the leader in commercial, institutional and governmental disaster preparedness services. Partnering with companies worldwide to minimize the impact of disasters in the workplace and reduce injury, property loss and company downtime, Safe-T-Proof offers hazard mitigation and construction/TI services, seismic anchorage and retrofitting systems, architectural and engineering planning, preparedness products and safety training services, emergency/terrorism awareness training services, and construction and tenant improvement services. 800.377.8888 or www.safe-t-proof.com

# # # #