



**SEISMIC-HAZARD MAPS FOR THE CONTERMINOUS UNITED STATES  
MAP D - HORIZONTAL SPECTRAL RESPONSE ACCELERATION FOR 0.2 SECOND PERIOD (5% OF CRITICAL DAMPING)  
WITH 10% PROBABILITY OF EXCEEDANCE IN 50 YEARS**

By

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**Explanation**

	200
	160
	120
	80
	60
	50
	40
	30
	20
	18
	16
	14
	12
	10
	8
	6
	4
	2
	0

+ 6.2 Point value of spectral response acceleration expressed as a percent of gravity

— 10 — Contour of spectral response acceleration expressed as a percent of gravity

Note: contours are irregularly spaced

**DISCUSSION**  
The acceleration values contoured are the random horizontal component. Reference site condition is firm rock, defined as having an average shear-wave velocity of 760 msec in the top 30 meters, corresponding to the boundary between NEHRP site classes B and C. Documentation, gridded values, and ARC/INFO coverages used to make the maps are available at: <http://geohazards.cr.usgs.gov/eq/>

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California portion of the map produced jointly with the California Division of Mines and Geology. Ken Rukstales prepared the ARC/INFO digital data and formatted the GIS versions of the maps.

**REFERENCES**  
Frankel, A., Mueller, C., Barnhard, T., Perkins, D., Leyendecker, E.V., Dickman, N., Hanson, S., and Hopper, M., 1996, National Seismic-Hazard Maps: Documentation June 1996. U.S. Geological Survey Open-File Report 96-532, 110 p.  
Frankel, A., Mueller, C., Barnhard, T., Perkins, D., Leyendecker, E.V., Dickman, N., Hanson, S., and Hopper, M., 1997, Seismic-Hazard Maps for California, Nevada and Western Arizona/Utah: U.S. Geological Survey Open-File Report 97-130, 12 sheets, scale 1:2,000,000.  
Petersen, M., Bryant, W., Cramer, C., Cao, T., Reichle, M., Frankel, A., Lienkaemper, J., McCrory, P., and Schwartz, D., 1996, Probabilistic Seismic Hazard Assessment for the State of California: California Division of Mines and Geology Open-File Report 96-08, 66 p., and U.S. Geological Survey Open-File Report 96-706, 66 p.

Albers Equal-Area Conic Projection  
Standard Parallels 29.5°N and 45.5°N  
Central Meridian 95°W

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For sale by U.S. Geological Survey, Earthquake Maps, Box 25046, Federal Center, MS-967, Denver, CO 80225