

Deterministic zone boundary. The ground motion inside the zone shall be taken as the number shown inside the zone

Areas with a constant spectral response acceleration of 150% g

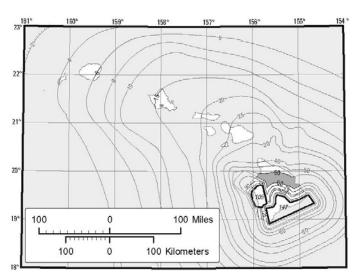
-10-10 444

321

Contours of spectral response acceleration expressed as a percent of gravity. Hachures point in direction of decreasing values

0.2 Second Spectral Response Acceleration (5% of Critical Damping)







Areas with a constant spectral response acceleration of 60% g



Deterministic zone boundary. The ground motion inside the zone shall be taken as the number shown

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Contours of spectral response acceleration expressed as a percent of gravity. Hachures point in direction of decreasing values

1.0 Second Spectral Response Acceleration (5% of Critical Damping)

DISCUSSION

maps prepared by United States Geological Survey (USGS) in collaboration with the Federal Emergency Management Agency (FEMA)-Yunded Building Seismic Safety Council (BSC) and the American Society of Civil Engineers (ASCE). The basis is explained in commentaries prepared by BSSC and ASCE and in the references.

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 Ground motion values contoured on these maps incorporate:

 a target risk of structural collapse equal to 1% in 50 years
 based upon a generic structural fragility

 deterministic upper limits imposed near large, active faults,
 which are taken as 1.8 times the estimated median response
 to the characteristic earthquake for the fault (1.8 is used to

to the characteristic carthquaket for the fault (1.8's used to represent the 84th percentile response), but not less than 150% and 60% of for 0.2 and 1.0 sec, respectively. As such, the values are different from those on the uniform-hazard 1998 USGS National Seismic Hazard Maps for Hawaii posted at http://earthquake.usgs.gov/harmaps. Larger, more detailed versions of these maps are not provided houses it is common detailed.

because it is recommended that the corresponding USGS web tool (http://earthquake.usgs.gov/designmaps or http://contents-ensitute.org) be used to determine the mapped value for a specified location.

REFERENCES

Building Seismic Safety Council, 2009, NEHRP Recommended Seismic Provisions for New Buildings and Other Structures. FEMA P-750/2009 Edition, Federal Emergency Management Agency, Washington, DC.
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FIGURE 1613.2.1(3)

RISK-TARGETED MAXIMUM CONSIDERED EARTHQUAKE (MCER) GROUND MOTION RESPONSE ACCELERATIONS FOR HAWAII OF 0.2- AND 1-SECOND SPECTRAL RESPONSE ACCELERATION (5% OF CRITICAL DAMPING)