

Earthquake Ground Motion, 0.2 Second Spectral Response International Building Code 2003:

FIGURE 1615(1)

STRUCTURAL DESIGN

FIGURE 1615(1)

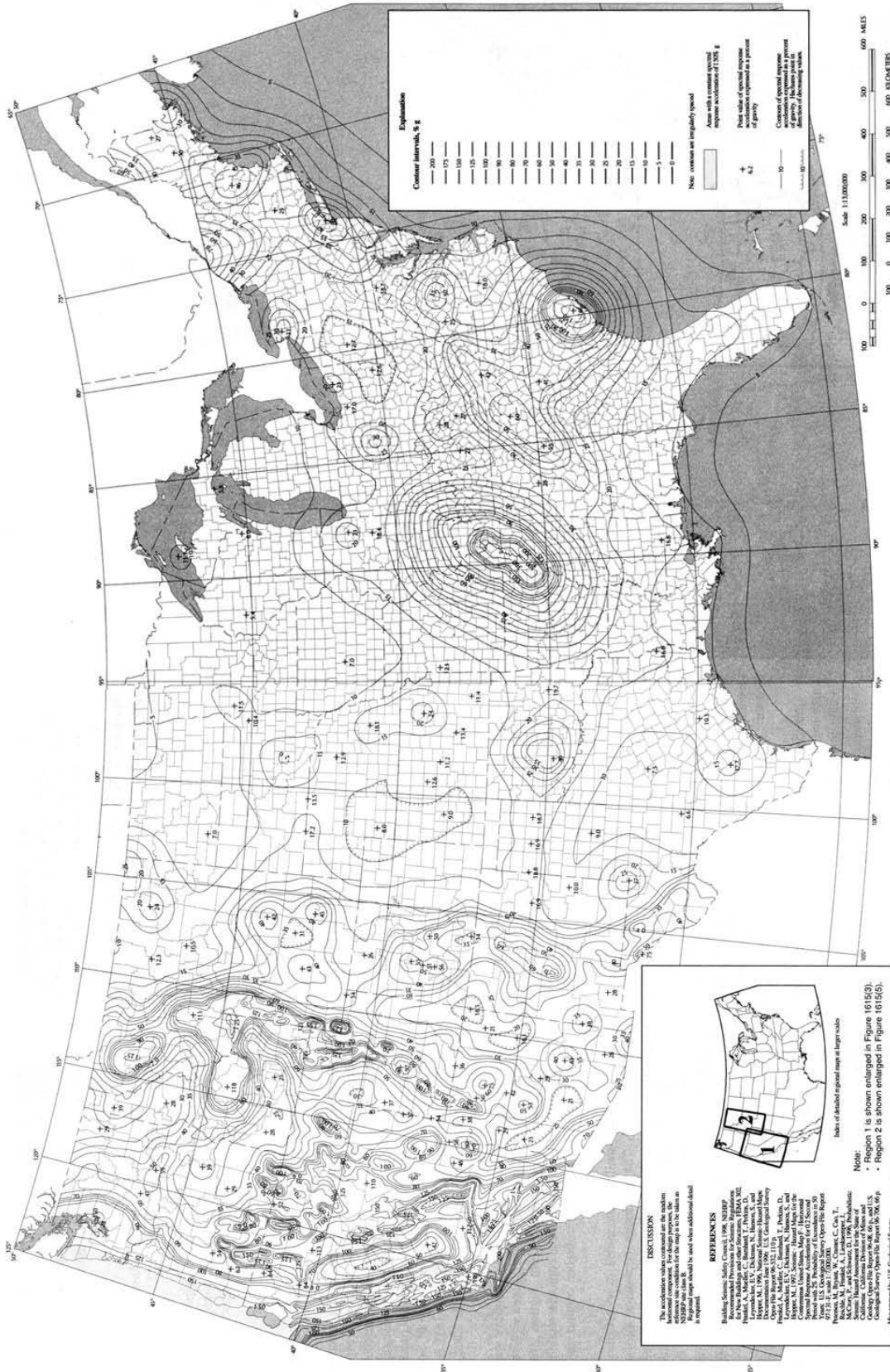


FIGURE 1615(1)—continued
MAXIMUM CONSIDERED EARTHQUAKE GROUND MOTION FOR
THE CONTINUOUS UNITED STATES OF 0.2 SEC SPECTRAL RESPONSE
ACCELERATION (5 PERCENT OF CRITICAL DAMPING), SITE CLASS B

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MAXIMUM CONSIDERED EARTHQUAKE GROUND MOTION FOR
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2000 INTERNATIONAL BUILDING CODE®

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US Geological Survey, Earthquake Hazards Program, ShakeMap Scientific Background at <http://earthquake.usgs.gov/eqcenter/shakemap/background.php>

Spectral Response Maps

Following earthquakes larger than magnitude 5.5, spectral response maps are made. Response spectra portray the response of a damped, single-degree-of-freedom oscillator to the recorded ground motions. This data representation is useful for engineers determining how a structure will react to ground motions. The response is calculated for a range of periods. Within that range, the Uniform Building Code (UBC) refers to particular reference periods that help define the shape of the "design spectra" that reflects the building code.