

Detailed Microzonation Studies around Denizli, Turkey

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Abstract : This study has been presented which is a detailed work of seismic microzonation of the city center. For seismic microzonation area of 225 km² has been selected as the study area. MASW (Multichannel analysis of surface wave) and seismic refraction methods have been used to generate one-dimensional shear wave velocity profile at 250 locations and two-dimensional profile at 60 locations. These shear wave velocities are used to estimate equivalent shear wave velocity in the study area at every 2 and 5 m intervals up to a depth of 60 m. Levels of equivalent shear wave velocity of soil are used the classified of the study area. After the results of the study, it must be considered as components of urban planning and building design of Denizli and the application and use of these results should be required and enforced by municipal authorities.

Keywords : seismic microzonation, liquefaction, land use management, seismic refraction

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