Abstract

Reinforced Concrete (R/C) buildings experienced major damage in past earthquakes. Structural damage including column cracking, shear failure and collapse, were due to particular conditions, such as: poor member sizing and detailing, soft stories, building irregularity, bounding, bad quality of construction materials and workmanship. Various approaches and methods to assess the seismic vulnerability of buildings were established through examining a damage indicator: "vulnerability index". In this work, a simplified vulnerability index based on design parameters describing the deficiencies of the structural system is proposed. The global index of each R/C building in the surveyed area is evaluated and normalized