

عنوان مقاله:

Reduction of Seismic Vulnerability of Buildings

محل انتشار:

چهارمین کنفرانس بین المللی زلزله شناسی و مهندسی زلزله (سال: 1382)

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خلاصه مقاله:

Earthquake engineering is not pure science, but has been developed through the observation of failure of construction by earthquakes. Sole aim of the earthquake engineering has been "not to repeat the same mistakes in the future event." The common causes of past earthquake damages are reviewed. The statistics of damaged buildings indicate that the percentage of severely damaged buildings is relatively small, but the percentage increased with the number of stories. Existing buildings, designed and constructed using out-dated technology, are susceptible to earthquake attacks. Simple screening methods are needed to identify probably vulnerable buildings by examining the failure modes of vertical structural members. More sophisticated and advanced assessment procedure can be applied to those probably susceptible buildings. Retrofit strategies include the decreasing of deformation demand by adding bracing elements, the increasing deformation capacity of brittle members by shifting modes of failure, by decreasing stiffness irregularity in plan as well as along the height, and use of base isolation and energy dissipating systems.

کلمات کلیدی:

لینک ثابت مقاله در پایگاه سیویلیکا:

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