عنوان مقاله:

COMPARISON OF SEISMIC RISK OF LOW RISEIM PORTANT BUILDINGS DESIGNED BYDIFFERENT EDITIONS OF IRANIAN SEISMIC CODE

محل انتشار:

هفتمین کنفرانس بین المللی زلزله شناسی و مهندسی زلزله (سال: 1394)

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خلاصه مقاله:

Buildings with high degree of importance and facilities such as hospitals, police stations, fire stations and other vital facilities play crucial role in crisis and risk management of cities. Th erefore special attention has been paid to design and construct these buildings in order to maintain their perfo rmance during and after the earthquake. Design of important building in Iran is conducted based on the Ira nian code of practice for seismic resistant design of buildin gs (ISC). Since the first lunch of ISC, three ed itions of ISChave been introduced. In this study, improvem ent of seismic safety of important buildings in different editions of ISC are examined and the results are co mpare that with acceptable level of safety. In thi s study, a very important 3-story steel moment resisting fra me is selected and designed base on different e ditions of ISC for high seismic zone. The seismic fragility functions of buildings are estimated in all four soil classifications. The probability of failure of frames are estimated for Tehran and Tabrizwhere are two major citieslocated in high seismic zones. Results shows a go od improvement in safety of different frames in recent editions of ISC, especially from first to second edition. However, the functionality and safety of buuildings were not satisfy the minimum requirement of the co de. In addition the probability of failure of fram es located in softer soil types is higher than others.This in dicated that within any code edition, a constant limit of safety was not provided .indifferent soil types

کلمات کلیدی:

.Seismic Risk, Important Buildings, Seismic Code, Fragility Function