

عنوان مقاله:

Architectural Forms for Enhancing the Seismic Safety of Buildings Equipped with Innovative Seismic Protection Systems

محل انتشار:

دومین کنفرانس بین المللی معماری و سازه (سال: 1390)

تعداد صفحات اصل مقاله: 7

نویسندگان:

Seyed Pouya Seyedin Nour - *Structural Engineering Group, Department of Civil Engineering Islamic Azad University South Tehran Branch Tehran, Iran*

Mahmood Hosseini - *Associate Professor, Structural Engineering Research Center International Institute of Earthquake Engineering and Seismology (IIEES) Tehran, Iran*

خلاصه مقاله:

As a result of existing gap between architectural design and seismic resistant forms in buildings, the need for understanding the relationships between these two major areas can be felt. Architects have some predefined tasks to do but in new areas of designing complicated forms based on both aesthetics and structural engineering, they should know the principles of seismic and structural design. With the world increasing use of innovative seismic protection systems for buildings, both architect and structural engineer should be familiar with principles and application of innovative seismic protection systems, each one in their own area. In this paper, the principles of these systems working based on energy dissipation are explained. The conventional seismic design means such as strength, stiffness, regularity and redundancy are becoming subordinate when using innovative seismic protection systems. New conceptual design for buildings, equipped with these technologies based on flexibility, discontinuity, motion, device insertion, shape and comfort is discussed. According to these principles, new structural solutions, including floating floors and bridge buildings and bell building based on suspension of parts or elements of building in order to conform the complex architectural forms to structural systems are stated. At the end, the expression of earthquake architecture will be defined and different types of this concept dividing into aesthetic and architectural aspect and also building's structure and earthquake engineering are explained

کلمات کلیدی:

innovative seismic protection systems, architectural form and structural system conformation, earthquake architecture

لینک ثابت مقاله در پایگاه سیویلیکا:

<https://civilica.com/doc/119333>

