

عنوان مقاله:

Seismic Pounding between Adjacent Concrete Frames

محل انتشار:

سومین کنفرانس بین المللی پژوهشهای کاربردی در مهندسی عمران، معماری و مدیریت شهری (سال: 1394)

تعداد صفحات اصل مقاله: 7

نویسندگان:

Roya Moghabeli - Msc student of science and culture University of Tehran

Hossein Parastesh - Assistant Professor, Technical and Engineering department of science and culture University of Tehran

Hamid Lotfollahian - PhD, Gazi University of Ankara

,Mohammad Parvaresh - Msc student of Islamic Azad University, Maraghe branch

خلاصه مقاله:

Investigations of past and recent earthquake damage have illustrated that the building structures are vulnerable to severe damage and/or collapse during moderate to strong ground motion. Among the possible structural damages, seismic induced pounding has been commonly observed in several earthquakes. During an earthquake, different seismic behavior of adjacent buildings, causing the collision and impact which are critical loading conditions in comparison with no-collision condition causes. Amount of buildings without construction joint, increases the importance of investigating this issue. In order to evaluate the effect of impact force on the seismic performance of RC frame structures, two buildings of 6 and 12 story reinforced concrete frame were selected and their seismic performance under the impact of the collision phenomenon is examined. At first frames were designed in SAP software and then have been modeled in OpenSEES software with different heights, hardness under earthquake records, and were analyzed by a set of nonlinear dynamic time history analysis. Then seismic response of these models is investigated through base shear and roof displacement

کلمات کلیدی:

adjacent buildings, Seismic pounding, separation distance, nonlinear dynamic analysis

لینک ثابت مقاله در پایگاه سیویلیکا:

<https://civilica.com/doc/492808>

