

## عنوان مقاله:

Importance of Separation Distance on Building Pounding under Near-Fault Ground Motion, using the Iranian Earthquake Code

## محل انتشار:

نهمین کنگره بین المللی مهندسی عمران (سال: 1391)

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## خلاصه مقاله:

This paper investigates the effects of building pounding in RC building under near fault ground motion. Building pounding is the collision of adjacent building when ground vibrates, and buildings experience contacts in two typical ways: floor-to-floor and floor-to-column. Using the Iranian code to investigate pounding in RC buildings, three records of near fault earthquakes are used, where the near fault earthquakes have occurred: Kobe, Tabas and Taiwan. For this challenge, two buildings have been modeled with five and nine stories. Their models have been analyzed with the three records mentioned. Distance between buildings is 27 cm, as recommended by Iranian earthquake code. By comparing the computationally calculated time history of lateral displacements with the pre-designed gap, the results of this investigation suggest that there may be a common under-estimation of this gap in considering the Iranian regulatory separation distance between regular buildings

## کلمات کلیدی:

Building Pounding, Collision, Near-Fault Ground Motion, R/C buildings

## لینک ثابت مقاله در پایگاه سیویلیکا:

<https://civilica.com/doc/165328>

