عنوان مقاله:

The impact of increased bay and height of buildings have ashear wall on Redundancy coefficient

محل انتشار:

چهارمین کنفرانس بین المللی علوم و مهندسی (سال: 1395)

تعداد صفحات اصل مقاله: 5

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خلاصه مقاله:

Redundancy coefficient is considered as important parameter with asignificant role in the optimal and economic design of structures andthe value of their behavior factor. The goal of this paper was to studythe redundancy coefficient of 6, 8, and 10 storey RC frames with RCshear walls by changing different parameters and evaluating theresults through a numerical approach using finite element modeling inABAQUS software. This procedure was used to evaluate the effect ofseismic parameters, the number of bays, and the number of shearwalls. To verify the validity of finite element model, the loadinghistory and hysteresis plots of a real RC frame experiment wascompared with the simulated results obtained by the used model. Itwas observed that for a structure with fixed length, as the height ofstructure increased, its redundancy coefficient decreased. Also, theductility of structure decreased significantly with the increase in thenumber of bays having a shear wall

کلمات کلیدی:

redundancy coefficient, RC frame, shear wall