عنوان مقاله:

Comparing of loading history and hysteresis diagram from reinforced concrete frame subjected to cyclic loads between ABAQUS software and experimental study

محل انتشار:

سومين كنفرانس بين المللي علوم و مهندسي (سال: 1395)

تعداد صفحات اصل مقاله: 6

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خلاصه مقاله:

The nonlinear finite element method is one the most effective methods of predictingthe behavior of RC beams from zero-load to failure and its fracture, yield and ultimatestrengths. The advantage of this method is its ability to make this prediction for all sections of the assessed RC beam and all stages of loading. This paper compares the experimental results obtained for a RC frame with the numerical results calculated by ABAQUS software, and plots both sets of results as hysteresis—displacement diagrams. This comparison shows that the numerical FEM implemented via ABAQUS software produce valid and reliable results for load bearing capacity of RC frames subjected to cyclic loads, and therefore has significant cost and time efficiency advantages over the alternative approach

كلمات كليدى:

ABAQUS, reinforced concrete frame, loading history

لینک ثابت مقاله در پایگاه سیویلیکا:

https://civilica.com/doc/491670

