عنوان مقاله:

Linear and Nonlinear Dynamic Analysis of Masonry Infill RC Framed Buildings

محل انتشار:

تعداد صفحات اصل مقاله: 16

نویسنده:

Ayman Abd-Elhamed - *Faculty of Engineering at Mataria, Helwan University, Cairo, Egypt*

خلاصه مقاله:

This paper aimed to investigate the seismic response of reinforced concrete (RC) frame buildings under linear and non-linear dynamic analysis. Different building models as bare frame and fully masonry infill frame have been developed for performing the analysis. In order to investigate the effect of irregular distributions of masonry infill walls in elevation on the seismic response behavior, an infill frame model with soft story has also been developed. The linear response spectrum (RS) dynamic analysis and the nonlinear time-history (TH) analysis methods are employed. Moreover, the induced energies in terms of input, potential and kinetic are also obtained from the TH analysis. Moreover, the interaction between infill walls and frames leads to considerable change in the induced responses comparable with the bare model.

کلمات کلیدی:

Response Spectrum; Time-History; Masonry Infill; Soft Story

لینک ثابت مقاله در پایگاه سیویلیکا: