

## عنوان مقاله:

Response Modification Factor of Chevron Braced Frame with Pall Friction Damper

## محل انتشار:

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## خلاصه مقاله:

Response modification factors (R-factor) are used in current seismic building codes to reduce earthquake forces associated with seismic design level to determine force levels. In recent years, many authors have shown great interest in the development of seismic structural systems and several theoretical and experimental studies have been conducted to investigate performance of dampers, but little attention is given to the response modification factors of steel-braced frames equipped with friction damper. In this study the effect of pall friction damper, as an additional element to the structure, on the parameters of seismic behavior of steel braced frame is evaluated. Along with the pushover analysis, nonlinear dynamic analysis has been adopted to investigate the components of the behavior factor. For this purpose three steel frames of 5, 8 and 10 stories were analyzed without considering the existence of dampers, then each frame equipped with a friction damper of various slip loads-3, 8, 15, 20, 50 and 100 percentages of weight of the structure- is studied. The results show that behavior factor of chevron braced frame equipped with friction damper depends on its slip load and changing the R-factor can be an appropriate method to design steel frames equipped with friction damper.

## کلمات کلیدی:

Steel Frame, Response Modification Factor, Pall Friction Damper, Push-Over Analysis, Non Linear Dynamic Analysis

## لینک ثابت مقاله در پایگاه سیویلیکا:

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