

Seismic performance of mega-braced structures equipped with viscous dampers

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The purpose of this study was to investigate the seismic function of the mega-brace equipped structures with the viscous damper. Library of the subject was reviewed thoroughly to collect the theoretical foundations of the research, and for numerical modeling Opensees software was used. The data analysis showed that the structure with mega-braces having dampers has an average drift of 25% to 35% less than the similar structures but without dampers. This indicates that the mega-braced structure with viscous dampers has a better seismic function.

Keyword: Seismic function, mega brace, viscous dumper, time history analysis.