ABSTRAK

Nuri Meilinda : Perbandingan Kinerja Gedung Tahan Gempa Antara Metode SRPMM dan SRPMK Berdasarkan SNI 1726-2019. Skripsi. Fakultas Teknik Universitas Negeri Medan. 2022.

Pada perencanaan gedung berdasarkan SNI gempa, struktur gedung yang direncanakan yaitu kinerja gedung yang berupa gaya geser dasar (*Base Shear*), simpangan (y) dan simpangan antar lantai (*Story Drift*) dimana akan membandingkan antara sistem rangka pemikul momen menengah (SRPMM) dan sistem rangka pemikul momen khusus (SRPMK) berdasarkan SNI 1726:2019. Perbandingan kinerja gedung direncanakan pada gedung 4 lantai dengan dimensi balok 400 x 500 mm,kolom 500 x 500 m, mutu beton 25 MPa, mutu baja 320 MPa dan beban hidup 250 kg/m^2. Berdasarkan analisa yang dilakukan diperoleh gaya geser dasar SRPMM arah X 181,527 Ton dan arah Y 209,425 Ton sedangkan gaya geser dasar SRPMK arah X dan Y 130,827 Ton. Simpangan maximum dan simpangan antar lantai yang terjadi pada SRPMM lebih besar dibandingkan SRPMK.

Kata kunci: Gaya Geser Dasar, Simpangan Antar Lantai, SRPMM dan SRPMK

ABSTRACT

Nuri Meilinda : *Comparison of the Performance of Earthquake Resistant Buildings Between SRPMM and SRPMK Methods Based on SNI 1726-2019. Essay. Faculty of Enggineering, State University of Medan*. **2022.**

In building planning based on SNI earthquake, the planned building structure is the performance of the building in the form of the base shear force (Base Shear), deviation (y) and the drift between floors (Story Drift) which will compare between the intermediate moment resisting frame system (SRPMM) and the system special moment resisting frame (SRPMK) based on SNI 1726:2019.

Comparison of the performance of the planned building on a 4-storey building with dimensions of beam 400 x 500 mm, column 500 x 500 m, concrete quality 25 MPa, steel quality 320 MPa and live load 250 kg/m2. Based on the analysis, the base shear of SRPMM in the X direction is 181,527 tons and the Y direction is 209,425 tons, while the SRPMK base shear in the X and Y directions is 130,827 tons. The maximum deviation and Story Drift that occur in the SRPMM is greater than the SRPMK.

Keywords: Base Shear, Story Drift, SRPMM and SRPMK