STUDI KAPASITAS PENAMPANG KOLOM PADA ZONA RASIO EKSENTRISITAS BEBAN AKSIAL YANG LEBIH BESAR DARI EKSENTRISITAS BALANCE

(Studi Kasus Gedung Integrated Laboratory for Natural Science and Food Technology Universitas Jember)

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RINGKASAN

Wilayah Indonesia merupakan wilayah rawan gempa dikarenakan inonesia terletak pada pertemuan 3 lempeng tektonik dunia. Pemangunan di Indonesia semakin berkembang dan semakin banyak gedung-gedung pencakar langit , dan begitujuga dengan peraturan pembangunan semakin berkembang yakni peraturan SNI-2847-2013 dan SNI-1726-2013 dimana katergori resiko untuk bangunan khususnya Gedung ini (Pendidikan) dari kategori resiko II menjadi kategori resiko IV. Penelitian kapasitas penampang Gedung ini membadingkan dua tinjauan yaitu berdasarkan lampiran B dan berdasarkan factor regangan.

Penelitian dilakukan dengan bantuan *software SAP2000 v.22* dan didapatkan bawah nilai factor reduksi penampang akibat lampiran B yang di tinjau berdasarkan beban aksial lebih besar dibandingkan tinjuan berdasarkan factor reduksi, dapat disimpulkan bahwa dengan semakin besar pengaruh moment akibat gempa tinjauan berdasarkan factor reduksi lebih disarankan digunakan disbanding tinjuan berdasarkan lampiran B.

Kata kunci : *Gedung Pendidikan, Perbandingan Kapasitas Penampang Kolom, Nilai Factor Reduksi, SNI-2847-2013, SNI-1726-2013, Sap200 v.22.*

ABSTRACT

Indonesia is a region prone to earthquakes because it is located at the junction of 3 tectonic plates in the world. Development in Indonesia is increasingly developing and there are more and more skyscrapers, and likewise the development regulations are increasingly developing, the regulations is SNI-2847-2013 and SNI-1726-2013 where the risk category for buildings, especially this building (Education), is from risk category II to risk category IV. This study of the cross-sectional capacity of the building compares two reviews, based on Appendix B and the strain factor.

The research was carried out with the help of SAP2000 v.22 software and it was found that the value of the cross-sectional reduction factor due to Appendix B which is reviewed based on axial load is greater than the review based on the reduction factor, it can be concluded that the greater the effect of the moment due to the earthquake, a review based on the reduction factor is more recommended compared to the review according to Appendixt B.

Keywords : *Education Building, Comparison of Column Cross-sectional Capacity, Reduction Factor Value, SNI-2847-2013, SNI-1726-2013, Sap200 v.22.*