

EVALUASI GEDUNG RAWAT INAP RSUD DR. DARSONO, PACITAN DENGAN METODE PUSHOVER ANALISIS BERDASARKAN ATC 40

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ABSTRAK

RSUD Dr. Darsono merupakan Rumah Sakit Umum Daerah Kabupaten Pacitan yang mana satu-satunya rumah sakit pemerintah di daerah tersebut. Oleh karena itu, RSUD Dr. Darsono perlu peningkatan fasilitas pelayanan baik dalam kualitas maupun kuantitasnya untuk meningkatkan sarana kesehatan di rumah sakit tersebut agar tingkat kesehatan masyarakat sekitar Rumah Sakit Umum Daerah Pacitan meningkat. Tujuan dari penelitian ini adalah mengetahui *performance point struktur* Gedung Rawat Inap di RSUD Dr. Darsono berdasarkan ketentuan ATC 40 dan mengetahui perilaku/kinerja struktur Gedung Rawat Inap di RSUD Dr. Darsono berdasarkan evaluasi ATC 40. Hasil analisis pushover didapatkan nilai titik kinerja (*performance point*) gedung tersebut untuk push x adalah $S_a = 0,874$ dan $S_d = 0,03$ sedangkan untuk nilai dari push y adalah $S_a = 0,949$ dan $S_d = 0,021$. Sedangkan hasil analisis push x, nilai *maksimum total drift* = 0,0034 dan nilai *maksimum inelastic drift* 0,00314. Sedangkan push y, nilai *maksimum total drift* 0,0020 dan nilai *maksimum inelastic drift* 0,00184. Berdasarkan ATC-40 hasil dari perhitungan tersebut masuk kedalam kelas *Immediate Occupancy (IO)* yang artinya apabila terjadi gempa, hanya sedikit kerusakan struktural yang terjadi. Karakteristik dan kapasitas sistem penahan gaya vertikal dan lateral pada struktur masih sama dengan kondisi dimana gempa belum terjadi, sehingga bangunan aman dan dapat langsung dipakai.

Kata Kunci: Evaluasi Kinerja Struktur, Rumah Sakit, *Pushover Analysis*, ATC 40.

EVALUATION OF THE INPATIENT BUILDING OF DR. DARSONO, PACITAN USING PUSHOVER ANALYSIS METHOD BASED ON ATC 40

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ABSTRACT

RSUD Dr. Darsono is the Regional General Hospital of Pacitan Regency which is the only government hospital in the area. Therefore, RSUD Dr. Darsono needs to improve service facilities both in quality and quantity to improve health facilities at the hospital so that the level of public health around the Pacitan Regional General Hospital increases. The purpose of this study was to determine the performance point of the Inpatient Building structure at RSUD Dr. Darsono is based on the provisions of ATC 40 and knows the behavior/performance of the Inpatient Building structure at RSUD Dr. Dr. Darsono based on ATC 40 evaluation. The results of the pushover analysis showed that the building's performance point values for push x were $S_a= 0,092$ and $S_d= 0,362$ while for push y values were $S_a= 0,113$ and $S_d= 0,0264$. While the results of push x analysis, the maximum value of total drift = 0.0034 and the maximum value of inelastic drift is 0.00314 . While push y, the maximum value of total drift is 0.0020 and the maximum value of inelastic drift is 0.00184. Based on ATC-40, the results of these calculations are included in the Immediate Occupancy (IO) class, which means that when an earthquake occurs, only slight structural damage occurs. The characteristics and capacity of the vertical and lateral force resisting systems on the structure are still the same as the conditions where the earthquake had not occurred, so that the building is safe and can be used immediately.

Keywords: ATC 40, Hospital, Pushover Analysis, Structure Performance Evaluation.