STRUCTURAL REDESIGN OF DORMITORY MIDWIFERY BUILDING WITH INTERMEDIATE MOMENT RESISTING FRAME SYSTEM

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Abstract

Keyword : IMRF, static equivalent

Preparation of this final project using object Midwifery Lebo Dormitory Building, where is located in East Java Province Wonoayu. Based on the seismic zoning, Wonoayu including the earthquake region 2, because the re-calculation, it is planned to use a different calculation method than the previous calculation method, the bearer Moment Frame Intermediate System (SRPMM). This system is a system in which the space frame and structural components of joint-jointnya withstand the forces that work through the action of bending, shear, and axial. So the structure can respond to strong earthquakes without collapse inelastic brittle.

Planning and calculations are limited to building structures, which include the building which consists of the main structure (columns and beams), secondary structures (stairs, floor plate),
the steel roof structure and the building which consists of Sloof, foundations, and Poer.

The calculations are carried out in this final project refers to the existing rules on the calculation of SNI 03-2847-2002 on concrete structures, earthquake resistance of SNI 03-1726-2002, Rule Reinforced Concrete Indonesia (PBBI) 1971, Regulation for Imposition of Indonesia Building (PPIUG 1983) and Steel buildings Planning Regulations Indonesia (PPBBI) 1984. While the structural analysis program used SAP.

From the calculations carried out in the form structure calculation reports, drawings both architects and structural detail that can be used as a reference in the implementation of the development.

Key words: SRPM, equivalent static