STRUCTURAL REDESIGN OF TYPE B SMKN SURABAYA BUILDING WITH INTERMEDIATE MOMENT RESISTING FRAME SYSTEM

1st Name : Wahyu Rifai
Reg. Number : 3107 030 058
2nd Name : Risman Widiantoro
Reg. Number : 3107 030 061
Departement : Diploma III Teknik Sipil FTSP - ITS
Conseulor Lecturer : Ir. Sungkono, CES

Abstract

This Type B SMKN 06 Surabaya built in Margorejo Street, Surabaya with intermediate existing soil. For the force analyzing used 3D frame dimension. The calculation of planning weight earthquake used the method of response static ekuivalen analyzing. These are following rules used as a basic calculation in Indonesia. Surabaya area categorize earthquake zone 2, while in this Final Project calculating with earthquake zone 3, so in the structural redesign calculation of Type B SMKN 06 Surabaya used a calculation with Intermediate Moment Resisting Frame System (SRPMM). The main structure of Type B SMKN 06 (beam, sloof, column, and foundation) and the secondary component (slab and stairs) which are used the reinforced concrete. While roof are using rigid joint structure with 1 types of roof, which are saddle type of roof. For the substructure used poer and sloof from reinforced concrete for the foundation used the piled foundation.

Keywords : 3D frame dimension, static ekuivalen response, Intermediate Moment Resisting Frame System.