STRUCTURAL DESIGN OF
RUSUNAMI PUNCAK PERMAI-B
WITH STEEL ROOFED AND USING SRPMM

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Abstract

Rusunami Puncak Permai-B is in Raya Darmo Permai 3, Surabaya with an intermediate existing soil. The calculation of analyze used 3D frame dimension. The calculation of planning weight quaked used the method of static equivalen analyze. These following rules used as a basic calculation in Indonesia, there are SNI 03-2847-2002, SNI 03-1726-2002, PPIUG 1983, PPBBI 1984 dan PBI 1971. Surabaya is in zone 2 quaked categorize, but in this Final Project it calculated with earthquake zone 4, so in the structural design used a calculation with Intermediate Moment Resisting Frame System (SRPMM). The main structure (beam, sloof, column) and the secondary component (slab, stairs) which are used the reinforced concrete. While roof are using a steel frame structure (rigid frame), which are saddle type of roof. For the substructure, poer and sloof from reinforced concrete. The foundation used the piled foundation. The results of this calculation is the building able to withstand quaked forces that occur them.

Keywords : 3D frame dimension, static equivalen analyze, Intermediate Moment Resisting Frame System.