DESIGN MODIFICATION OF WIJAYA KUSUMA UNIVERSITY BUILDING ON SURABAYA WITH STEEL AND CONCRETE COMPOSITE STRUCTURE

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Abstract

Structure of Wijaya Kusuma University building on Surabaya is design by intermediate earthquake zone. Modified from this building were add floor from 8 to 10 and conventional structure was changed to composite steel and concrete structure.

The aim of this thesis is to produce structural design of composite steel and concrete building that rational with structural safety requirements based on SNI 03-2847-2002, SNI 03-1729-2002, SNI 03-1726-2002, and PPIUG 1983.

The final report from structure modification are consist of column, beam, and slab with composite steel and concrete. Floor slab uses bondek and roof slab uses concrete slab, foundation uses pile foundation.

Key words : building, steel and concrete, composite