ABSTRAK

PERANCANGAN RUMAH SUSUN UNIVERSITAS INDO GLOBAL MANDIRI PALEMBANG

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Perancangan rumah susun Universitas Indo Global Mandiri (UIGM) Palembang bertujuan untuk menyediakan hunian layak, aman, dan terjangkau bagi mahasiswa, khususnya yang berasal dari luar daerah. Perancangan ini dilakukan untuk memenuhi standar keamanan, efisiensi, dan kenyamanan dalam konstruksi bangunan vertikal. Lingkup perancangan mencakup struktur atas seperti atap, pelat dak, pelat lantai, tangga, balok, dan kolom, serta struktur bawah seperti tie beam dan pondasi. Metode perancangan mengacu pada standar nasional Indonesia (SNI) seperti SNI 1727:2020, SNI 2847:2019, dan SNI lainnya yang relevan. Pembebanan struktur mempertimbangkan beban mati, beban hidup, beban angin, dan beban hujan. Pemodelan struktur dilakukan menggunakan perangkat lunak analisis dan desain untuk memastikan kekuatan dan kestabilan bangunan. Selain itu, aspek manajemen proyek turut dibahas melalui penyusunan Rencana Kerja dan Syarat-syarat (RKS), Rencana Anggaran Biaya (RAB), barchart, dan network planning. Hasil perancangan menunjukkan bahwa dimensi elemen struktur dan penulangannya memenuhi syarat teknis yang berlaku. Dengan demikian, rancangan ini diharapkan dapat menjadi acuan dalam pembangunan rusun UIGM yang efisien dan sesuai standar konstruksi.

Kata kunci: Rumah susun, perancangan struktur, beban bangunan, SNI, manajemen proyek.

ABSTRACT

DESIGN OF APARTMENT
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The design of the student apartment at Indo Global Mandiri University (UIGM), Palembang, aims to provide safe, affordable, and livable housing for students, particularly those from outside the region. This project focuses on creating a structurally sound and efficient vertical residential building that meets applicable safety and construction standards. The design scope includes both superstructure components—such as roof, roof slab, floor slab, stairs, beams, and columns—and substructure components—such as tie beams and foundations. Structural analysis and design were carried out in accordance with relevant Indonesian National Standards (SNI), including SNI 1727:2020 for loading, SNI 2847:2019 for reinforced concrete design, and other applicable codes. The structure is designed to resist various loads, including dead loads, live loads, wind loads, and rain loads, using advanced modeling and simulation software to ensure stability and strength. In addition, project management aspects were addressed through the preparation of Work Plan and Specifications (RKS), Budget Plan (RAB), bar charts, and network planning to ensure cost-efficiency and timely execution. The design results indicate that the structural dimensions and reinforcement details comply with engineering standards, making this proposal a comprehensive reference for the planned development of the UIGM student housing facility.

Keywords: Apartment design, structural analysis, building loads, Indonesian Standards (SNI), project management.