

ABSTRAK

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Konsentrasi : Manajemen Konstruksi
Title : **“MODEL DINAMIS MODULAR CONSTRUCTION RESIDENTIAL HIGH-RISE BUILDING BERBASIS RISK MANAGEABILITY UNTUK MENINGKATKAN KINERJA WAKTU PROYEK”**
Dosen Pembimbing : Dr. Ir. Albert Eddy Husin, M.T.

Konstruksi modular telah diterapkan pada bangunan bertingkat rendah selama tiga dekade terakhir, penerapannya pada bangunan bertingkat masih kurang dari 1% di dunia. Dengan demikian, penelitian konstruksi modular residential highrise-building di Indonesia menjadi sangat penting. Hubungan antar tahap pada konstruksi modular lebih ketergantungan dibandingkan konstruksi konvensional.

Studi ini bertujuan untuk mengembangkan skenario perbaikan meningkatkan kinerja waktu proyek berbasis risk manageability dengan memodelkan dan mensimulasikan kinerja waktu proyek modular konstruksi. Variabel penelitian diperoleh dari hasil studi dan pendapat para ahli.

Dari hasil penelitian diperoleh 15 faktor risk managementability mempengaruhi kinerja waktu konstruksi modular residential high-rise building. tanpa perlakuan risiko menunjukkan time overrun hasil simulasi tertinggi pada approval drawing 12,79 hari kemudian design standard 12.79 hari dan supply chain 12.78 hari. Hasil skenario#5 menunjukkan alternatif optimis dengan persentase 53,55% time overrun proyek dari 126 hari, 25,25% menjadi 59,17 hari, 11,8%, artinya time overrun <20% maka dapat dilakukan pelaksanaan konstruksi.

.Keywords: *Modular Construction, Residential High-Rise Building, Risk Manageability, Kinerja Waktu*

ABSTRACT

Name : Dinal Aulia

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Consentration : Construction Management

Title : **“DYNAMIC MODEL IN MODULAR CONSTRUCTION ON HIGH-RISE RESIDENTIAL BUILDINGS BASED RISK MANAGEABILITY TO IMPROVE PROJECT TIME PERFORMANCE”**

Counsellor : Dr. Ir. Albert Eddy Husin, M.T.

Modular construction has been applied to low-rise buildings over past three decades, its application to high-rise buildings is still less than 1% in world. Thus, research for residential modular construction in Indonesia very important. Relation between parts on modular construction more dependence than conventional construction.

This study aims to develop improvement scenarios to improve project time performance base risk manageability by modeling and simulating project time performance of modular construction. The research variables were obtained based on results of literature study and from experts.

For research result obtained 15 factors risk manageability that affect time performance of the modular construction residential high-rise building. without any treatment of risks showed a time overrun with highest simulation result to approval drawing of 12.79 days then design standard of 12.79 days and supply chain 12.78 days. Results of scenario #5 show an optimistic alternative with a 53.55% percentage so that the projectdelays from 126 days, 25.25% to 59.17 days, 11.8%, means time overrun <20% and can be implementation for construction.

Keywords: Modular Construction, Residential High-Rise Building, Risk Manageability, Time Performance