

ABSTRAK

Judul: Analisis Perbandingan Metode Bekisting Ringlock Scaffolding Dengan Bekisting Alumunium Composite (Aluco) Berdasarkan Biaya dan Waktu (Studi Kasus: Proyek Apartemen Kingland Avenue Tahap II, Nama: Muhammad Fadli Okawarizky, NIM: 41119010077, Dosen Pembimbing: Lily Kholida, S.T.,M.T., 2023.

Teknologi pada dunia konstruksi pada Indonesia berkembang semakin pesat yang ditandai dengan semakin banyaknya penemuan dalam aplikasi proyek konstruksi gedung bertingkat. salah satu perangkat lunak teknologi yang digunakan ialah pada material bekisting. Perencanaan sebuah metode bekisting menjadi sepenuhnya tanggung jawab berasal pihak kontraktor sehingga resiko pada pekerjaan tersebut sudah sempurna wajib ditekan serendah mungkin.

Penelitian ini berfokus pada perbandingan kedua metode antara bekisting ringlock scaffolding dengan bekisting alumunium composite. Tujuan penelitian ini adalah dapat mengetahui perbandingan biaya dan waktu pelaksanaan dari kedua metode bekisting tersebut sekaligus dapat menjadi bahan pertimbangan pemilihan metode bekisting para pemilik proyek serta sebagai media pembelajaran khususnya bidang manajemen konstruksi.

Berdasarkan hasil kajian teori dan kerangka berpikir penggunaan bekisting alumunium composite lebih efektif dari bekisting ringlock scaffolding tidak diperlukan pembongkaran secara keseluruhan perancahnya saat kegiatan pembongkaran serta memiliki produktivitas lebih besar dari bekisting ringlock scaffolding.

Adapun analisis perbandingan bekisting ringlock scaffolding dengan alumunium composite memperoleh hasil, untuk bekisting ringlock scaffolding membutuhkan biaya Rp. 6.370.269.933 dengan waktu pengerjaan berdasarkan metode critical path method adalah 32 hari sedangkan biaya pekerjaan menggunakan bekisting alumunium composite sebesar Rp. 7.229.555.864 dengan waktu pengerjaan menggunakan critical path method adalah 27 hari. Artinya biaya pekerjaan bekisting alumunium composite lebih besar Rp. 859.285.931 dibanding biaya pekerjaan ringlock scaffolding. Sedangkan waktu pekerjaan kedua metode bekisting tersebut menggunakan metode Critical Path Method (CPM), pekerjaan bekisting alumunium composite lebih cepat 5 hari dari pekerjaan bekisting ringlock scaffolding.

Kata kunci: *Ringlock scaffolding, alumunium, perbandingan, bekisting*

ABSTRACT

Title: Comparative Analysis of Ringlock Scaffolding Formwork Method with Aluminum Composite (Aluco) Formwork Based on Cost and Time (Case Study Of Kingland Avenue Apartment Project Phase II), Name: Muhammad Fadli Okawarizky, NIM: 41119010077, Advisor: Lily Kholida, S.T.,M.T., 2023.

Technology in the world of construction in Indonesia is growing more and more rapidly which is characterized by more and more discoveries in the application of multi-storey building construction projects. one of the technological software used is in formwork materials. Planning a formwork method is the full responsibility of the contractor so that the risk of the work is perfect must be minimized as low as possible.

This research focuses on the comparison of the two methods between ringlock scaffolding formwork and aluminum composite formwork. The purpose of this study is to determine the cost comparison and implementation time of the two formwork methods as well as to be a consideration for the selection of formwork methods for project owners and as a learning medium, especially in the field of construction management.

Based on the results of the theoretical study and the framework, the use of aluminum composite formwork is more effective than ringlock scaffolding formwork because it does not require the dismantling of the entire scaffolding during dismantling activities and has greater productivity than ringlock scaffolding formwork.

The comparative analysis of ringlock scaffolding formwork with aluminum composite obtained the results, for ringlock scaffolding formwork costs Rp. 6.370.269.933 with processing time based on the critical path method is 32 days while the cost of work using aluminum composite formwork is Rp. 7.229.555.864 with enforcement time using the critical path method is 27 days. This means that the cost of aluminum composite formwork is Rp. 859,285,931 greater than the cost of ringlock scaffolding work. While the work time of the two formwork methods using the Critical Path Method (CPM) method, the aluminum composite formwork work is 5 days faster than the ringlock scaffolding formwork work.

Keyword: *Ringlock scaffolding, aluminium, comparison, formwork*