INTISARI

DANINDRA AZIZ NURZAIN, 2021, *Evaluasi Perbandingan Biaya dan Waktu Pekerjaan Pelat Lantai Metode Konvensional dengan Metode Bondek.* (dibimbing oleh Ir. Bambang Herumanta, MT.)

Struktur pelat lantai berperan penting dalam bangunan gedung untuk menumpu beban yang bekerja diatasnya. Ada beberapa jenis pelat lantai berdasarkan metode pelaksanaannya, yaitu metode konvensional, metode bondek, metode keramik beton, metode halfslab, dan metode full precast. Pemilihan metode yang tepat perlu direncanakan agar sesuai dengan perencanaan waktu maupun biaya. Tujuan dari studi ini adalah untuk menganalisis efisiensi dan efektifitas antara penggunaan pelat beton metode konvensional atau pelat beton metode bondek.

Studi ini juga bertujuan untuk mengetahui biaya dan durasi yang dikeluarkan untuk pekerjaan pelat lantai metode konvensional dan bondek. Metode yang digunakan dalam studi ini adalah metode observasi, metode interview, metode diskriptif, dan metode analisis. Daftar harga bahan dan upah menggunakan daftar harga di Kabupaten Sleman tahun 2020. Serta analisa harga satuan pekerjaan menggunakan Permen PUPR No.28/PRT/M/2016.

Hasil perhitungan rencana anggaran biaya pelat lantai metode konvensional sebesar Rp3.635.650.000, sedangkan metode bondek sebesar Rp2.377.140.000. Bedasar rencana biaya pelat lantai bondek lebih efisien sekitar 34.62%, dikarenakan adanya selisih harga sebesar Rp1.258.510.000. Hasil perhitungan waktu pekerjaan pelat lantai metode konvensional selama 178 hari dengan biaya upah pekerja sebesar Rp1.399.384.000, sedangkan metode bondek selama 84 hari dengan biaya upah pekerja sebesar Rp582.267.000. Berdasar perbandingan waktu pelat lantai bondek lebih efektif sekitar 52,81%, dikarenakan adanya selisih waktu sebesar 94 hari. Berdasarkan perbandingan biaya upah pekerja, pelat lantai bondek lebih efisien sekitar 58,39%, dikarenakan adanya selisih biaya upah sebesar Rp817.117.000. Dari hasil analisa dan pembahasan, disimpulkan bahwa pelat bondek lebih efektif dan efisien dalam hal anggaran biaya, durasi pekerjaan, dan biaya upah tenaga kerja

Kata Kunci: pelat lantai; perbandingan biaya; perbandingan waktu

ABSTRACT

DANINDRA AZIZ NURZAIN, 2021, *Evaluation of Cost and Time Comparison of Conventional Methods of Floor Slabs with Composite Methods.* (*Supervised by* Ir. Bambang Herumanta, MT.)

The slab structure plays an important role in the building to support the loads that work on it. There are several types of floor slabs based on the method of implementation, namely the conventional method, the composite method, the concrete ceramic method, the half-slab method, and the full precast method. Selection of the right method needs to be planned to suit the planning of time and cost. The purpose of this study is to analyze the efficiency and effectiveness between the use of conventional method concrete slabs or bondek method concrete slabs.

This study also aims to determine the costs and duration incurred for floor slab work with conventional and composite methods. The method used in this study is the observation method, interview method, descriptive method, and analysis method. The list of material prices and wages uses a price list in the Sleman City in 2020. As well as an analysis of the unit price of the work uses the PUPR Regulation No 28/PRT/M/2016.

The result of the calculation of the budget plan for the conventional method of floor plate costs is IDR 3,635,650,000, while the composite method is IDR 2,377,140,000. Based on the plan, the cost of composite floor plates is around 34.62% more efficient, due to a price difference of IDR 1,258,510,000. The results of the calculation of the work time of the conventional method floor slabs for 178 days at a cost of wages for workers of IDR 1,399,384,000, while the composite method for 84 days with a cost of wages of workers of IDR 582,267,000. Based on the comparison of the time composite floor slabs are about 52.81% more effective, due to a time difference of 94 days. Based on the comparison of worker wage costs, composite floor plates are about 58.39% more efficient, due to the difference in wage costs of IDR 817,117,000. From the results of the analysis and discussion, it is concluded that composite plates are more effective and efficient in terms of budget costs, work duration, and labor costs.

Keywords: floor plates; comparison of costs; time comparison