

ABSTRACT

The Gizi Building Project at Ciawi Regional General Hospital in Bogor Regency is aimed at facilitating COVID-19 patients, as it requires cost and time efficiency. Therefore, the selection of formwork type is one of the crucial decisions in a multi-story building project as it influences costs, construction time, and quality. The formwork method used in the Gizi Building Project at Ciawi Regional General Hospital is conventional formwork. Conventional formwork is a formwork that, after being removed and dismantled into basic parts, can be rearranged into another shape. The materials used consist of wood and plates, while the supporting construction is composed of beams. Considering the various drawbacks of the conventional formwork method and other factors, two formwork methods, namely semi-system and system formwork, are planned. Semi-system formwork is formwork whose basic material is adjusted to the concrete construction, allowing for more repetitions if the concrete construction itself does not undergo changes in shape or size. Meanwhile, system formwork consists of components made of steel. The duration of formwork installation and dismantling is determined by calculating the duration for each zone in the column. This research compares the costs, duration, and labor wages of the conventional, semi-system, and system formwork methods. The results obtained from the analysis include the costs for each formwork type: conventional formwork costs Rp. 1,559,580,001, semi-system formwork costs Rp. 1,510,695.48, and system formwork costs Rp. 2,495,906.42. Labor wages for conventional formwork over 34 days amount to Rp. 5,024,152.80, semi-system formwork is Rp. 4,580,845.20 over 31 days, and system formwork is Rp. 3,210,841.00 over 29.725 days. After reviewing and analyzing the formwork on the second floor, the selected formwork method to continue the construction of the Gizi Building at Ciawi Regional General Hospital is the system formwork method.

Key Words: *Formwork, Cost, Wages, Project, Time.*