ABSTRACT

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Jakarta Intercultural School Library Project. Beam Implementation Method and Calculation of Casting Volume of Concrete on Roof Beams in Partial 4 " Department of Civil Engineering. Faculty of Civil Engineering and Planning.
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(xiv + 76 + Attachments)

Jakarta Intercultural School Library Project is located on Jalan Terogong Raya No. 33, RW 06, Cilandak Barat, Cilandak Sub-District, South Jakarta, DKI Jakarta. *This project was built with a planning area of ± 4,880 m^2 with a total building area of ± 4,880 m^2*. *The owner of this project is Jakarta Intercultural School*, *PT. xxx acts as a construction management consultant and the main contractor for this project is PT. xxx. The type of contract used is lump sum fixed price with a contract value of Rp. 64.700.000.000. This project has an implementation time of 15 calendar months with a maintenance period of 365 calendar days*. *The beam is a rigid part of the structure of a building and is designed to regulate and transfer loads to the support column elements. The purpose of this observation is to determine the implementation process in the beam work and to calculate the volume casting to be used. The beam implementation method in the Jakarta Intercultural School Library Project consists of fabricating formwork panels on beams, lower beam formwork by installing scaffolding, beam reinforcement, installing side beam formwork panels, floor plate formwork panels, floor plate reinforcement, casting and curing. Obtained the volume of concrete on the partial roof beams 4. The total volume of concrete required is 99.31754 m3, and the total volume of reinforcement required is 2.220530742 m3, so the total volume of concrete 4 beams for the partial roof floor is 97.097009258 m3. rounded to 98 m3. And the required number of Ready Mix trucks is 14 trucks*

Keywords: *Beam, Implementation Method, Casting Volume, Lumpsum*