

ABSTRACT

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Universitas Bunda Mulia – Tower 2 Construction Building Project

The Method Implementation Of Foundation Raft Work And Calculation Of Reinforcement For Raft Basement 2 Grid – As Ef.1 – 3

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Number Of Pages XV + 94 + Lampiran

Construction project of Bunda Mulia University Building – Tower 2, located at Jalan Sutera Barat Kav. 5 & 7 Alam Sutera, Tangerang, Banten. Bunda Mulia University Building – Tower 2 has an area of $\pm 91,449,68$ m² and a building height of $\pm 110,600$ mm. Bunda Mulia University Building – Tower 2 consists of 2 basement floors, 11 parking areas, 1 sports area floor, 5 office floors, and 8 campus floors. Construction of this project began in february 2021 and is expected to be completed in september 2022. PT. Perkasa Internusa Mandiri as the owner, PT. Pulauintan as the main contractor and PT. Jaya Construction Management as a supervisory consultant. With a contract value of \pm Rp.216,000,000,000.00. the construction of high-rise buildings such as apartments, campuses and offices always uses a raft foundation in its construction. Raft foundation plays a very important role to withstand heavy construction loads. The method of implementing the raft foundation in the Bunda Mulia University Building construction project - Tower 2 consists of determining the raft axle, installation of formwork, fabrication of reinforcement, installation of raft reinforcement, check list of reinforcement, installation of raft tents, casting of rafts, and curing. Reinforcement requirements for raft basement foundation 2 grid – as EF.1 – 3 where the need for the main reinforcement layers 1 – 5 is 888 rods, the need for extra layer 3 reinforcement is 23 rods, the total iron/reinforcement installed in layers 1 – 5 is 56,059.08 kg, the total iron/reinforcement is installed extra layer 3 is 966.75 kg, so the total amount of reinforcement required for the basement raft foundation 2 grid – as EF.1 – 3 is 911 bars and installed iron/reinforcement 57,025.83 kg

Keywords: Methode Implementation, Raft Foundation And Reinforcement Requirements