

ABSTRACT

Rahayu Dwijayanti, 15319212

IT Mandiri Bumi Slipi Building Construction Project. Work Implementation Method of Pile Cap and Tie Beam and Calculation Concrete Volume Requirement of Pile Cap Type PC2-A As F-19.

*Departement of Civi Engineering. Faculty of Civil Engineering and Planning.
Gunadarma University*

(XIV+66+Attachment)

IT Mandiri Bumi Slipi Building Project is located in Letjen S. Parman Street, Tomang, Grogol Petamburan, West Jakarta. The building was built on area of 34,490 m² with building an area of 70,028 m² and has 32 floors with 1 basement and podium. PT. Bank Mandiri (Persero), Tbk. as project owner, PT. Ciriayasa Cipta Mandiri as construction management consultant, and KSO PT. Pembangunan Perumahan, Tbk., and PT. Arkonin Engineering Manggala Pratama as main contractor. The type of contract used is a lump sum with contract value is ±Rp. 88.086.000.000,00. Implementation of IT Mandiri Bumi Slipi building was planned for 685 days with a 365 days maintenance time. Observations made in the field are the lower structures of the work pile cap and tie beam. The methods of implementation pile cap and tie beam work are preparatory work, measurement and making a bowplank, work of dig pile, work breakage of the bore pile, work of floor plat and sand landfill, work of the antitermite, sprinkling, reinforcement specification check, work of formwork, checking of location, position, size of pile cap and tie beam, casting work, and curing process. The volume requirements of pile cap type PC2-A as F-19 concrete is 4,92812 m³ and requires 1 unit concrete mixer with the capacity of 7 m³.

Keywordi: Pile Cap, Tie Beam, Implementation Methods, Concrate Volume.