

**METODE PELAKSANAAN, ANALISIS KEKUATAN DAN RAB  
BEKISTING SEMI SISTEM STRUKTUR SUB DAM 1 WO-C2  
REHABILITASI DAN REKONSTRUKSI SABO DAM MERAPI KALI  
WORO PROV. JAWA TENGAH**

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**INTISARI**

Bekisting adalah cetakan sementara yang digunakan untuk menahan beban selama beton dituang dan dibentuk sesuai dengan bentuk yang diinginkan.

Tujuan dari studi ini adalah untuk menganalisis metode pelaksanaan bekisting semi sistem, menganalisis kekuatan bekisting terhadap beban beton basah dan Rencana Anggaran Biaya pada struktur Sub Dam 1 WO-C2 proyek Sabo Dam Kaliworo.

Berdasarkan hasil analisa dan pembahasan dapat diambil kesimpulan bahwa pekerjaan bekisting terdiri dari beberapa tahap yaitu penyiapan alat, penentuan kemiringan, pemasangan bekisting, dan proses pengecekan melalui *Join Inspection*. Tekanan lateral beton bila dihitung dengan rumus ACI dan CIRIA mempunyai selisih nilai, bila dihitung dengan menggunakan metode ACI  $30,84 \text{ kN/m}^2$  dan berdasarkan CIRIA  $25,30 \text{ kN/m}^2$ . Dengan tekanan lateral beton yang telah dihitung dengan 2 rumus tersebut semua komponen bekisting yang digunakan dalam pembangunan struktur Sub Dam 1 WO-C2 yaitu multiplek phenol film, besi hollow  $50 \times 25 \times 1,5$  dan *plastic cone* aman terhadap momen lentur, gaya geser, defleksi dan tegangan ijin. Harga total pekerjaan pemasangan bekisting pada struktur Sub Dam 1 WO-C2 adalah Rp.149.200.000,00.

**Kata kunci : Bekisting, analisis, metode pelaksanaan, rencana anggaran biaya**

***WORK OF IMPLEMENTATION, STRENGTH ANALYSIS AND BUDGET  
PLAN OF SEMI SYSTEM FORMWORK ON SUB DAM 1 WO-C2  
REHABILITATION AND RECONSTRUCTION OF MERAPI SABO DAM  
WORO RIVER, CENTRAL JAVA***

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***ABSTRACT***

*Formwork is a temporary structure that mold the concrete to the desired size and shape. Formwork can support its own weight and that freshly placed concrete as well as construction live loads including materials, equipment and workmen.*

*The purpose of this study is to analyze the strength against the wet concrete pressure, the work method, and the cost plan of formwork on Sub Dam 1 WO-C2 Sabo Dam construction Kali Woro.*

*Based on the analysis, it can be concluded that the work implementation of formwork consist of several steps, which are the preparation of the materials, determine the angle of formwork, formwork installation, and Joint Inspection to check the properness. Concrete lateral pressure calculated with ACI formula 30,84 kN/m<sup>2</sup> an based on the CIRIA formula 25,30 kN/m<sup>2</sup>. With the concrete lateral pressures that has been calculated as the loads, the components used on the formwork, Phenolic Plywood, Rectangular Hollow Steel 50×25×1,5 and plastic cone can be used because had qualified save against the allowable bending momen, allowable shear stress, allowable deflection and allowable tension. And for the cost of the formwork of Sub Dam 1 WO-C2 is Rp.149.200.000,00.*

***Keywords : Formwork, analysis, work method, budget plan***