

QM-Plan > QA-Plan inclusive **Material Flow Recording**
Labour-Intensive Works: Concrete + Asphalt Roads, and Buildings -
<https://www.youtube.com/watch?v=BdzWoQHPu8k>

Quality Management / Quality Assurance

POWERGRID CORPORATION OF INDIA LIMITED
(Quality Assurance & Inspection Deptt.)

**STANDARD FIELD QUALITY PLAN
FOR SWITCHYARD CIVIL WORKS**

Section : FOUNDATION MATERIALS

Sl. No.	Component/Operation & Description of Test	Sampling Plan with basis	Ref. Document & acceptance norm	Testing Agency	Remarks	Check
I.	CHECKING OF FOUNDATION MATERIALS					
A)	CEMENT					
(i)	Fineness	One sample per lot of 100 MT or part thereof	IS:456, IS:269	Manufacturer/ POWERGRID approved lab	Review of manufacturers test certificates (MTCs) and	B
(ii)	Compressive Strength		IS:8111, IS:12269			
(iii)	Initial & final setting time		IS:1489 &			
(iv)	Soundness	from each	POWERGRID			

- 1 _ Reinforcement / steel bars are already (i) properly prepared + **measured (by weight)**, (ii) cut + bend acc. with the steel list, and (iii) placed acc. to drawings
- 2 _ Required “theoretical” **Cement bags**, calculated for the size of the structure, are provided next to the mixing machine.
- 3_ **Actual Cement consumption recorded** in the Field Quality Plan: theoretical and actual used bags (sample next page)



Material consumption very well planned, supplied, and use recorded

Youtube: Labour-Intensive Works: Concrete + Asphalt Roads, and Buildings -

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POWER GRID CORPORATION OF INDIA LIMITED
 Construction of ±500 KV, 2500MW, HVDC Ballia SS
 Pour card for R.C.C.P.C.C

L.O.A. No. C-46002-S656-1/CA-111/2318/11 (2-03-2007)
 Location: **K6TE TOWER**
 Name of Structure: **TOWER**
 Drawing no.:
 Grade of Cement: **OPC-43** Brand name of cement: **BIRLA CEMENT** Batch no: **07/08 Feb-08**
 POUR NO. Dated: **14/03/08**

Sr.no	Particular	Checks
1	Dimension	7.450 X 4.450 X 0.875
2	Excavation bottom level	3.575
3	Cement consumption in Bags (Theoretical)	12.25 Bags

Clearance given for RCC YES
 Signature: **Mangoor Alam** (SUB CONTRACTOR), **K. B. Bhowmik** (SIEMENS LTD), **[Signature]** (POWERGRID)

4	Cement consumption (Actual)	14 Bags
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SUB CONTRACTOR: **[Signature]** (SUB CONTRACTOR), **K. B. Bhowmik** (SIEMENS LTD), **[Signature]** (POWERGRID)

Sr. No.	Particular	Checks
4	Check for Shuttering	Dimension: OK, Alignment & plumb: OK, Level & Height: OK, Rigidity & tightness: OK, Cleaning & Oiling: OK, Joint: OK
5	Reinforcement As per Drawing/DPS a) Rod ✓ b) Spacing ✓ c) Bend ✓	As per BBS (raft)
6	Anchor bolt	1. Dimension: NA, 2. Alignment & level: NA
7	Pocket	1. Dimension: —, 2. Alignment: —
8	Size of Rod Pedestal	6.3 X 7.3 X 0.6/0.2
9	Concrete	1. Grade: M20, 2. W/C Ratio: —, 3. Handling, Mixing, Placing & compaction: —
10	Slump test	1. Quantity for Aggregate: —, 2. Slump: —
11	Final quantity	24.86 m ³
12	Cement consumption in Bags (Theoretical)	198.88
13	Reinforcement steel in KGs	As per B.B.S.
14	Clear Reinforcement	NA

Clearance given for concrete YES
 Signature: **[Signature]** (SUB CONTRACTOR), **K. B. Bhowmik** (SIEMENS LTD), **[Signature]** (POWERGRID)

15	Cement consumption in Bags (Actual)	197 Bags
16	No of Cubes taken	4 Nos (2 Set)
17	Distribution of Cubes	R-K6TE

Signature: **[Signature]** (SUB-CONTR.), **K. B. Bhowmik** (SIEMENS), **[Signature]** (POWERGRID)

FQP = Field Quality Plan

FQP.docx