

**NAME OF WORK:- SR to Restoration, Repair and Replacement Works of Court Room and Judge Chamber
at District Court, Rajkot (Damaged due to Fire)**

:MATERIAL TEST SCHEDULE :

Sr. No.	Building Materials	Test to be carried out	Frequency of tests	Acceptance criteria	
1	Water As required	Chemical analysis	Once for approval of source and subsequently in case of doubt.	TDS: (mg./liter) 2000 Sulphate (as SO ₄ : (mg./liter) 400 P.H. value 6.5 to 8.5 Chloride: (mg./liter) 1000 for plain concrete, 500 for RCC work Organic matter : 2000 Inorganic Matter : 3000 Fluoride : (as F) mg/L 1.5 Magnesium : (as Mg) mg/L 100 Alkalinity : (as CaCO ₃) mg/L 600	
2	Cement 0.80 M.T.	(a) Consistency (b) Setting time (i) Initial (ii) Final (c) Finess by specific surface	One test for every 50 M.T. and on change of brand	(a) About 30 % (i) Not less than 30 minutes (ii) Not More than 600 minutes. (b) 2250 Cm ² /g for O.P.C (c)	OR as per IS requirements.

Sr. No.	Building Materials	Test to be carried out	Frequency of tests	Acceptance criteria			
		(d) Compressive Strength, N/mm ² not less than		IS 269-1989 Gr.33	IS 8112-1983 Gr.43	IS12269-1987 Gr.53	
		i) 3 days ii) 7 days iii) 28 days		16 22 33	23 33 43	27 37 53	
		(e) Soundness by lechatelier		(f) not more then 10mm			
3	Sand required As	a)Silt content b)Gradation, fineness Modulus c)Zoning tests d)Sp. Gravity e) Water absorption(%)	On test during working season. Minimum two tests. i.e. prior to Monsoon and after monsoon (Minimum one test for 150 m ³ of material used)	a) Upto 3% b) As per standard fixed under specification. Looking to the purpose of the use. For - Concrete – IS 383-1970 - Masnory Mortar – IS2116-1980 - Plaster – IS 1542-1992 c) Ordinary sand falling under zone (iv) shall not be used. d) As per IS 383 – 1970 e) As per IS 383 – 1970			

Acceptable grade of Concrete and consumption of cement for the same

Concrete Grade	Compressive strength of 15 cms. * cubes in Kg/Cmt. at 28-days conducted in accordance with I.S. 516-1959.		Cement level as per Circular in Kg./Cum.
	Preliminary test Min.	Work test Min.	
M-150	200	150	320.00 Kg./Cum.
M-200	260	200	360.00 Kg./Cum.
M-250	320	250	390.00 Kg./Cum.
M-300	380	300	410.00 Kg./Cum.

Note: Tests as may be directed by Engineer- in - charge irrespective of provisions shown above shall have to be got conducted.

The testing charges to be paid to GERI shall be born by the Govt. and 1% of Estimated amount will be recovered from the bills of contractor towards testing charges.

Signature of Contractor

Deputy Executive Engineer,
Police Campus (R&B) Sub-Dn.
Rajkot.