

GOVERNMENT OF GOA
QUALITY CONTROL LABORATORY
WATER RESOURCES DEPARTMENT

Test Report No.: WRD / QC / F.6-2 / Cube -T : 2575 to 2586,2591 to 2594,2599 to 2602,/ Lab / **166** / 2021 - 22 Dated:-27 /07/2021. Laboratory : Bicholim - Goa.
2606 to 2609,2612 ,2613,2620,2621,2623,2624,2627 to 2630,2632 to 2639 Sub Division V (QC)/WRD/ Bicholim- Goa.

Name of work : Construction of flood protection wall at Bhatirwada in Village Morjim in Pernem Taluka.

Ref. to Requisition No.:MI/ SDIII/WDI/F-58/2021-22/106 Dated :- 06/ 07/ 2021.

Qty. Recived. :42 Sets of cube Date of Receipt:- 09/ 07 / 2021. Tested on: -10 to 16,18,19,23,24,25/07/2021 as per due dates. Ref to CPWD :2009, Vol. I

Sample: Cube Mix 1 : 2 : 4 O.S No. : 6824 to 6835,6840 to 6843,6848 to 6851/SS,79,80,81,82,85,86/RK,6858,6859,6861,6862,6865 to 6868,6870 to 6877/SS.

Lab. Sample No.: 2085 To 2126 Tested By: Mrs.R.R.Kadam.A.E & Mrs. Shirodkar. J.E.

REPORT PAGE 01 OF 06

SR. NO	DISCRIPTION OF SAMPLE	TESTED FOR	RESULTS		Max./Min.Value permissable	% above or below	REMARK
1	Cement concrete cube of mix 1 : 2 : 4 , cast on 12/06/2021. For Ch 0.00 to 40.00 (1)	28 th day compressive strength	215.20	Kg/Cm ²	210.00 Kg/cm ²	3.55	Qty represents - 40.00 Cum for two sets of cubes.
			226.53	Kg/Cm ²			
			210.67	Kg/Cm ²			
			Average	217.47			
2	Cement concrete cube of mix 1 : 2 : 4 , cast on 12/06/2021. For Ch 0.00 to 40.00 (1)	28 th day compressive strength	231.06	Kg/Cm ²	210.00 Kg/cm ²	6.43	----- do -----
			208.40	Kg/Cm ²			
			231.06	Kg/Cm ²			
			Average	223.51			
3	Cement concrete cube of mix 1 : 2 : 4 , cast on 12/06/2021. For Ch 40.00 to 80.00 (1)	28 th day compressive strength	206.14	Kg/Cm ²	210.00 Kg/cm ²	4.99	Qty represents - 40.00 Cum for two sets of cubes.
			217.47	Kg/Cm ²			
			237.85	Kg/Cm ²			
			Average	220.49			
4	Cement concrete cube of mix 1 : 2 : 4 , cast on 12/06/2021. For Ch 40.00 to 80.00 (1)	28 th day compressive strength	228.79	Kg/Cm ²	210.00 Kg/cm ²	7.51	----- do -----
			233.32	Kg/Cm ²			
			215.20	Kg/Cm ²			
			Average	225.77			
5	Cement concrete cube of mix 1 : 2 : 4 , cast on 13/06/2021. For Ch 80.00 to 120.00 (1)	28 th day compressive strength	208.40	Kg/Cm ²	210.00 Kg/cm ²	4.99	Qty represents - 40.00 Cum for two sets of cubes.
			226.53	Kg/Cm ²			
			226.53	Kg/Cm ²			
			Average	220.49			
6	Cement concrete cube of mix 1 : 2 : 4 , cast on 13/06/2021. For Ch 80.00 to 120.00 (1)	28 th day compressive strength	215.20	Kg/Cm ²	210.00 Kg/cm ²	4.63	----- do -----
			226.53	Kg/Cm ²			
			217.47	Kg/Cm ²			
			Average	219.73			

Junior Engineer

Assistant Engineer

REPORT PAGE 02 OF 06

SR. NO	DISCRIPTION OF SAMPLE	TESTED FOR	RESULTS		Max./Min.Value permissable	% above or below	REMARK
7	Cement concrete cube of mix 1 : 2 : 4 , cast on 13/06/2021. For Ch 0.00 to 30.00 (2)	28 th day compressive strength	237.85	Kg/Cm ²	210.00 Kg/cm ²	10.39	Qty represents - 42.00 Cum for two sets of cubes.
			212.93	Kg/Cm ²			
			244.65	Kg/Cm ²			
			Average	231.81			
8	Cement concrete cube of mix 1 : 2 : 4 , cast on 13/06/2021. For Ch 0.00 to 30.00 (2)	28 th day compressive strength	226.53	Kg/Cm ²	210.00 Kg/cm ²	6.43	----- do -----
			231.06	Kg/Cm ²			
			212.93	Kg/Cm ²			
			Average	223.51			
9	Cement concrete cube of mix 1 : 2 : 4 , cast on 14/06/2021. For Ch 30.00 to 60.00 (2)	28 th day compressive strength	222.00	Kg/Cm ²	210.00 Kg/cm ²	6.07	Qty represents - 42.00 Cum for two sets of cubes.
			237.85	Kg/Cm ²			
			208.40	Kg/Cm ²			
			Average	222.75			
10	Cement concrete cube of mix 1 : 2 : 4 , cast on 14/06/2021. For Ch 30.00 to 60.00 (2)	28 th day compressive strength	240.12	Kg/Cm ²	210.00 Kg/cm ²	8.23	----- do -----
			226.53	Kg/Cm ²			
			215.20	Kg/Cm ²			
			Average	227.28			
11	Cement concrete cube of mix 1 : 2 : 4 , cast on 14/06/2021. For Ch 0.00 to 40.00 (3)	28 th day compressive strength	226.53	Kg/Cm ²	210.00 Kg/cm ²	4.63	Qty represents - 18.00 Cum for two sets of cubes.
			217.47	Kg/Cm ²			
			215.20	Kg/Cm ²			
			Average	219.73			
12	Cement concrete cube of mix 1 : 2 : 4 , cast on 14/06/2021. For Ch 0.00 to 40.00 (3)	28 th day compressive strength	212.93	Kg/Cm ²	210.00 Kg/cm ²	9.31	----- do -----
			244.65	Kg/Cm ²			
			231.06	Kg/Cm ²			
			Average	229.55			
13	Cement concrete cube of mix 1 : 2 : 4 , cast on 15/06/2021. For Ch 120.00 to 160.00 (1)	28 th day compressive strength	203.87	Kg/Cm ²	210.00 Kg/cm ²	3.55	Qty represents - 40.00 Cum for two sets of cubes.
			217.47	Kg/Cm ²			
			231.06	Kg/Cm ²			
			Average	217.47			
14	Cement concrete cube of mix 1 : 2 : 4 , cast on 15/06/2021. For Ch 120.00 to 160.00 (1)	28 th day compressive strength	240.12	Kg/Cm ²	210.00 Kg/cm ²	6.79	----- do -----
			219.73	Kg/Cm ²			
			212.93	Kg/Cm ²			
			Average	224.26			

Junior Engineer

Assistant Engineer

REPORT PAGE 03 OF 06

SR. NO	DISCRIPTION OF SAMPLE	TESTED FOR	RESULTS		Max./Min.Value permissable	% above or below	REMARK
15	Cement concrete cube of mix 1 : 2 : 4 , cast on 15/06/2021. For Ch 160.00 to 175.00 (1)	28 th day compressive strength	226.53	Kg/Cm ²	210.00 Kg/cm ²	10.39	Qty represents - 20.00 Cum for two sets of cubes.
			237.85	Kg/Cm ²			
			231.06	Kg/Cm ²			
		Average	231.81	Kg/Cm²			
16	Cement concrete cube of mix 1 : 2 : 4 , cast on 15/06/2021. For Ch 160.00 to 175.00 (1)	28 th day compressive strength	212.93	Kg/Cm ²	210.00 Kg/cm ²	5.71	----- do -----
			226.53	Kg/Cm ²			
			226.53	Kg/Cm ²			
		Average	222.00	Kg/Cm²			
17	Cement concrete cube of mix 1 : 2 : 4 , cast on 16/06/2021. For Ch 60.00 to 90.00 (2)	28 th day compressive strength	226.53	Kg/Cm ²	210.00 Kg/cm ²	3.91	Qty represents - 42.00 Cum for two sets of cubes.
			208.40	Kg/Cm ²			
			219.73	Kg/Cm ²			
		Average	218.22	Kg/Cm²			
18	Cement concrete cube of mix 1 : 2 : 4 , cast on 16/06/2021. For Ch 60.00 to 90.00 (2)	28 th day compressive strength	215.20	Kg/Cm ²	210.00 Kg/cm ²	5.71	----- do -----
			231.06	Kg/Cm ²			
			219.73	Kg/Cm ²			
		Average	222.00	Kg/Cm²			
19	Cement concrete cube of mix 1 : 2 : 4 , cast on 16/06/2021. For Ch 90.00 to 120.00 (2)	28 th day compressive strength	208.40	Kg/Cm ²	210.00 Kg/cm ²	3.20	Qty represents - 42.00 Cum for two sets of cubes.
			226.53	Kg/Cm ²			
			215.20	Kg/Cm ²			
		Average	216.71	Kg/Cm²			
20	Cement concrete cube of mix 1 : 2 : 4 , cast on 16/06/2021. For Ch 90.00 to 120.00 (2)	28 th day compressive strength	226.53	Kg/Cm ²	210.00 Kg/cm ²	6.79	----- do -----
			235.59	Kg/Cm ²			
			210.67	Kg/Cm ²			
		Average	224.26	Kg/Cm²			
21	Cement concrete cube of mix 1 : 2 : 4 , cast on 17/06/2021. For Ch 120.00 to 150.00 (2)	28 th day compressive strength	231.06	Kg/Cm ²	210.00 Kg/cm ²	4.63	Qty represents - 42.00 Cum for two sets of cubes.
			212.93	Kg/Cm ²			
			215.20	Kg/Cm ²			
		Average	219.73	Kg/Cm²			
22	Cement concrete cube of mix 1 : 2 : 4 , cast on 17/06/2021. For Ch 120.00 to 150.00 (2)	28 th day compressive strength	210.67	Kg/Cm ²	210.00 Kg/cm ²	4.99	----- do -----
			212.93	Kg/Cm ²			
			237.85	Kg/Cm ²			
		Average	220.49	Kg/Cm²			

Junior Engineer

Assistant Engineer

REPORT PAGE 04 OF 06

SR. NO.	DISCRIPTION OF SAMPLE	TESTED FOR	RESULTS		Max./Min.Value permissable	% above or below	REMARK
23	Cement concrete cube of mix 1 : 2 : 4 , cast on 17/06/2021. For Ch 150.00 to 175.00 (2)	28 th day compressive strength	226.53	Kg/Cm ²	210.00 Kg/cm ²	5.35	Qty represents -30.00 Cum for two sets of cubes.
			215.20	Kg/Cm ²			
			222.00	Kg/Cm ²			
		Average	221.24	Kg/Cm²			
24	Cement concrete cube of mix 1 : 2 : 4 , cast on 17/06/2021. For Ch 150.00 to 175.00 (2)	28 th day compressive strength	212.93	Kg/Cm ²	210.00 Kg/cm ²	7.51	----- do -----
			237.85	Kg/Cm ²			
			226.53	Kg/Cm ²			
		Average	225.77	Kg/Cm²			
25	Cement concrete cube of mix 1 : 2 : 4 , cast on 18/06/2021. For Ch 40.00 to 80.00 (3)	28 th day compressive strength	217.47	Kg/Cm ²	210.00 Kg/cm ²	8.23	Qty represents - 42.00 Cum for two sets of cubes.
			226.53	Kg/Cm ²			
			237.85	Kg/Cm ²			
		Average	227.28	Kg/Cm²			
26	Cement concrete cube of mix 1 : 2 : 4 , cast on 18/06/2021. For Ch 40.00 to 80.00 (3)	28 th day compressive strength	237.85	Kg/Cm ²	210.00 Kg/cm ²	7.51	----- do -----
			226.53	Kg/Cm ²			
			212.93	Kg/Cm ²			
		Average	225.77	Kg/Cm²			
27	Cement concrete cube of mix 1 : 2 : 4 , cast on 20/06/2021. For Ch 80.00 to 120.00 (4)	28 th day compressive strength	226.53	Kg/Cm ²	210.00 Kg/cm ²	9.31	Qty represents - 42.00 Cum for two sets of cubes.
			231.06	Kg/Cm ²			
			231.06	Kg/Cm ²			
		Average	229.55	Kg/Cm²			
28	Cement concrete cube of mix 1 : 2 : 4 , cast on 20/06/2021. For Ch 80.00 to 120.00 (4)	28 th day compressive strength	212.93	Kg/Cm ²	210.00 Kg/cm ²	7.51	----- do -----
			226.53	Kg/Cm ²			
			237.85	Kg/Cm ²			
		Average	225.77	Kg/Cm²			
29	Cement concrete cube of mix 1 : 2 : 4 , cast on 21/06/2021. For Ch 120.00 to 160.00 (4)	28 th day compressive strength	226.53	Kg/Cm ²	210.00 Kg/cm ²	10.03	Qty represents - 42.00 Cum for two sets of cubes.
			235.59	Kg/Cm ²			
			231.06	Kg/Cm ²			
		Average	231.06	Kg/Cm²			
30	Cement concrete cube of mix 1 : 2 : 4 , cast on 21/06/2021. For Ch 120.00 to 160.00 (4)	28 th day compressive strength	226.53	Kg/Cm ²	210.00 Kg/cm ²	6.79	----- do -----
			237.85	Kg/Cm ²			
			208.40	Kg/Cm ²			
		Average	224.26	Kg/Cm²			

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REPORT PAGE 05 OF 06

SR. NO	DISCRIPTION OF SAMPLE	TESTED FOR	RESULTS		Max./Min.Value permissable	% above or below	REMARK
31	Cement concrete cube of mix 1 : 2 : 4 , cast on 25/06/2021. For Ch 160.00 to 175.00 (4)	28 th day compressive strength	210.67	Kg/Cm ²	210.00 Kg/cm ²	4.27	Qty represents - 18.00 Cum for two sets of cubes.
			219.73	Kg/Cm ²			
			226.53	Kg/Cm ²			
		Average	218.98	Kg/Cm²			
32	Cement concrete cube of mix 1 : 2 : 4 , cast on 25/06/2021. For Ch 160.00 to 175.00 (4)	28 th day compressive strength	215.20	Kg/Cm ²	210.00 Kg/cm ²	8.59	----- do -----
			231.06	Kg/Cm ²			
			237.85	Kg/Cm ²			
		Average	228.04	Kg/Cm²			
33	Cement concrete cube of mix 1 : 2 : 4 , cast on 25/06/2021. For Ch 0.00 to 60.00 (5)	28 th day compressive strength	237.85	Kg/Cm ²	210.00 Kg/cm ²	6.79	Qty represents - 22.00 Cum for two sets of cubes.
			208.40	Kg/Cm ²			
			226.53	Kg/Cm ²			
		Average	224.26	Kg/Cm²			
34	Cement concrete cube of mix 1 : 2 : 4 , cast on 25/06/2021. For Ch 0.00 to 60.00 (5)	28 th day compressive strength	231.06	Kg/Cm ²	210.00 Kg/cm ²	4.99	----- do -----
			212.93	Kg/Cm ²			
			217.47	Kg/Cm ²			
		Average	220.49	Kg/Cm²			
35	Cement concrete cube of mix 1 : 2 : 4 , cast on 26/06/2021. For Ch 60.00 to 120.00 (5)	28 th day compressive strength	208.40	Kg/Cm ²	210.00 Kg/cm ²	4.99	Qty represents - 22.00 Cum for two sets of cubes.
			237.85	Kg/Cm ²			
			215.20	Kg/Cm ²			
		Average	220.49	Kg/Cm²			
36	Cement concrete cube of mix 1 : 2 : 4 , cast on 26/06/2021. For Ch 60.00 to 120.00 (5)	28 th day compressive strength	212.93	Kg/Cm ²	210.00 Kg/cm ²	8.59	----- do -----
			233.32	Kg/Cm ²			
			237.85	Kg/Cm ²			
		Average	228.04	Kg/Cm²			
37	Cement concrete cube of mix 1 : 2 : 4 , cast on 26/06/2021. For Ch 120.00 to 175.00 (5)	28 th day compressive strength	226.53	Kg/Cm ²	210.00 Kg/cm ²	8.95	Qty represents - 20.00 Cum for two sets of cubes.
			240.12	Kg/Cm ²			
			219.73	Kg/Cm ²			
		Average	228.79	Kg/Cm²			
38	Cement concrete cube of mix 1 : 2 : 4 , cast on 26/06/2021. For Ch 120.00 to 175.00 (5)	28 th day compressive strength	226.53	Kg/Cm ²	210.00 Kg/cm ²	6.43	----- do -----
			231.06	Kg/Cm ²			
			212.93	Kg/Cm ²			
		Average	223.51	Kg/Cm²			

Junior Engineer

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REPORT PAGE 06 OF 06

SR. NO	DISCRIPTION OF SAMPLE	TESTED FOR	RESULTS		Max./Min.Value permissable	% above or below	REMARK
39	Cement concrete cube of mix 1 : 2 : 4 , cast on 27/06/2021. For Ch 0.00 to 100.00 (6)	28 th day compressive strength	237.85	Kg/Cm ²	210.00 Kg/cm ²	8.95	Qty represents - 15.00 Cum for two sets of cubes.
			231.06	Kg/Cm ²			
			217.47	Kg/Cm ²			
			Average	228.79			
40	Cement concrete cube of mix 1 : 2 : 4 , cast on 27/06/2021. For Ch 0.00 to 100.00 (6)	28 th day compressive strength	210.67	Kg/Cm ²	210.00 Kg/cm ²	5.71	----- do -----
			219.73	Kg/Cm ²			
			235.59	Kg/Cm ²			
			Average	222.00			
41	Cement concrete cube of mix 1 : 2 : 4 , cast on 27/06/2021. For Ch 100.00 to 175.00 (6)	28 th day compressive strength	215.20	Kg/Cm ²	210.00 Kg/cm ²	6.07	Qty represents - 12.00 Cum for two sets of cubes.
			222.00	Kg/Cm ²			
			231.06	Kg/Cm ²			
			Average	222.75			
42	Cement concrete cube of mix 1 : 2 : 4 , cast on 27/06/2021. For Ch 100.00 to 175.00 (6)	28 th day compressive strength	222.00	Kg/Cm ²	210.00 Kg/cm ²	5.71	----- do -----
			208.40	Kg/Cm ²			
			235.59	Kg/Cm ²			
			Average	222.00			

Copy to: 1. The Assistant Engineer , SD III , WD I , WRD-Pernem - Goa.

2. Copy submitted to The Superintending Engineer ,CPO,WRD, Sinchai Bhavan, Porvorim Goa for kind Information.

3. Copy submitted to The Executive Engineer , WD I ,WRD, Porvorim- Goa.

4. QC Lab File. 5. Bill File.

Junior Engineer

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