

GOVERNMENT OF GOA  
QUALITY CONTROL LABORATORY  
WATER RESOURCES DEPARTMENT

Test Report No.: WRD / QC / F. 38 / Cube -T : 5381,5382,5383,5384,5385,5386,5389,5390,5394/Lab/184/2022 - 23 Dated:- 02/11/2022.  
5395,5396, 5397,5402,5403,5441,5457.

Laboratory : Bicholim - Goa.  
Sub Division V (QC)/WRD/ Bicholim- Goa.

**Name of work : Flood Mitigation measures and construction of flood water pumping station at Mala, Panaji-Goa.**

Ref. to Requisition No : S.D.IV/WDI/WRD/F.38/22-23/437 Dt.:- 04/10/2022

Qty. Recived. : 16 Sets of cube Date of Receipt:- 04/10/2022. Tested on: - 04,05,07,10,11,14,17,18,20,26 & 31/10/2022 as per due dates. Ref to CPWD :2009, Vol. I

Sample: Cube Mix **M-30, 1:2:4, & 1:1:5:3** O.S No : 9345,9346,9347,9351,9357,9358,9363,9364,9379,9390,9391,9434,9450/SS & 824,825,829/RR. Lab. Sample No: 5258 to 5273 Tested By: Mrs. S.B. Naik Shirodkar. J.E.

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SR.NO.	DISCRIPTION OF SAMPLE	TESTED FOR	RESULTS		Max./Min.Value permissible	% above or below	REMARK
1	Cement concrete cube of mix <b>M30</b> , cast on 06/09/2022. For Eaves Level Beam Concrete Casting.	28 <sup>th</sup> day compressive strength	348.85	Kg/Cm <sup>2</sup>	345.00 Kg/cm <sup>2</sup>	1.33	Qty represents - 7.00 M3 for Two sets of cube.
			332.99	Kg/Cm <sup>2</sup>			
			366.97	Kg/Cm <sup>2</sup>			
		<b>Average</b>	<b>349.61</b>	<b>Kg/Cm<sup>2</sup></b>			
2	Cement concrete cube of mix <b>M30</b> , cast on 06/09/2022. For Eaves Level Beam Concrete Casting.	28 <sup>th</sup> day compressive strength	357.91	Kg/Cm <sup>2</sup>	345.00 Kg/cm <sup>2</sup>	2.21	-----do-----
			337.52	Kg/Cm <sup>2</sup>			
			362.44	Kg/Cm <sup>2</sup>			
		<b>Average</b>	<b>352.63</b>	<b>Kg/Cm<sup>2</sup></b>			
3	Cement concrete cube of mix <b>1:2:4</b> , cast on 07/09/2022. For Chamber PCC.	28 <sup>th</sup> day compressive strength	240.12	Kg/Cm <sup>2</sup>	210.00 Kg/cm <sup>2</sup>	14.34	Qty represents - 5.00 M3.
			246.91	Kg/Cm <sup>2</sup>			
			233.32	Kg/Cm <sup>2</sup>			
		<b>Average</b>	<b>240.12</b>	<b>Kg/Cm<sup>2</sup></b>			
4	Cement concrete cube of mix <b>M30</b> , cast on 09/09/2022. For Chamber Raft.	28 <sup>th</sup> day compressive strength	378.30	Kg/Cm <sup>2</sup>	345.00 Kg/cm <sup>2</sup>	2.43	Qty represents -4.00 M3.
			346.59	Kg/Cm <sup>2</sup>			
			335.26	Kg/Cm <sup>2</sup>			
		<b>Average</b>	<b>353.38</b>	<b>Kg/Cm<sup>2</sup></b>			
5	Cement concrete cube of mix <b>M30</b> , cast on 12/09/2022. For Chamber Wall 1st Lift.	28 <sup>th</sup> day compressive strength	328.46	Kg/Cm <sup>2</sup>	345.00 Kg/cm <sup>2</sup>	1.99	Qty represents -6.00 M3 for Two sets of cube.
			364.71	Kg/Cm <sup>2</sup>			
			362.44	Kg/Cm <sup>2</sup>			
		<b>Average</b>	<b>351.87</b>	<b>Kg/Cm<sup>2</sup></b>			
6	Cement concrete cube of mix <b>M30</b> , cast on 12/09/2022. For Chamber Wall 1st Lift.	28 <sup>th</sup> day compressive strength	355.65	Kg/Cm <sup>2</sup>	345.00 Kg/cm <sup>2</sup>	1.77	-----do-----
			362.44	Kg/Cm <sup>2</sup>			
			335.26	Kg/Cm <sup>2</sup>			
		<b>Average</b>	<b>351.12</b>	<b>Kg/Cm<sup>2</sup></b>			

Junior Engineer

Assistant Engineer

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SR.NO.	DISCRIPTION OF SAMPLE	TESTED FOR	RESULTS		Max./Min.Value permissible	% above or below	REMARK
7	Cement concrete cube of mix <b>1:1:5:3</b> , cast on 13/09/2022. For 90 Degree Bend Block.	28 <sup>th</sup> day compressive strength	262.77	Kg/Cm <sup>2</sup>	265.00 Kg/cm <sup>2</sup>	5.71	Qty represents -6.00 M3 for Two sets of cube.
			271.83	Kg/Cm <sup>2</sup>			
			305.81	Kg/Cm <sup>2</sup>			
			<b>Average</b>	<b>280.14</b>			
8	Cement concrete cube of mix <b>1:1:5:3</b> , cast on 13/09/2022. For 90 Degree Bend Block.	28 <sup>th</sup> day compressive strength	246.91	Kg/Cm <sup>2</sup>	265.00 Kg/cm <sup>2</sup>	4.86	-----do-----
			276.36	Kg/Cm <sup>2</sup>			
			310.34	Kg/Cm <sup>2</sup>			
			<b>Average</b>	<b>277.87</b>			
9	Cement concrete cube of mix <b>1:1:5:3</b> , cast on 16/09/2022. For Block Concrete.	28 <sup>th</sup> day compressive strength	255.97	Kg/Cm <sup>2</sup>	265.00 Kg/cm <sup>2</sup>	5.43	Qty represents -3.00 M3.
			285.42	Kg/Cm <sup>2</sup>			
			296.75	Kg/Cm <sup>2</sup>			
			<b>Average</b>	<b>279.38</b>			
10	Cement concrete cube of mix <b>M30</b> , cast on 19/09/2022. For Chamber Wall 2nd Lift.	28 <sup>th</sup> day compressive strength	348.85	Kg/Cm <sup>2</sup>	345.00 Kg/cm <sup>2</sup>	2.21	Qty represents -6.00 M3 for Two sets of cube.
			335.26	Kg/Cm <sup>2</sup>			
			373.77	Kg/Cm <sup>2</sup>			
			<b>Average</b>	<b>352.63</b>			
11	Cement concrete cube of mix <b>M30</b> , cast on 19/09/2022. For Chamber Wall 2nd Lift.	28 <sup>th</sup> day compressive strength	351.12	Kg/Cm <sup>2</sup>	345.00 Kg/cm <sup>2</sup>	1.12	-----do-----
			366.97	Kg/Cm <sup>2</sup>			
			328.46	Kg/Cm <sup>2</sup>			
			<b>Average</b>	<b>348.85</b>			
12	Cement concrete cube of mix <b>M30</b> , cast on 20/09/2022. For Chamber Wall Slab.	28 <sup>th</sup> day compressive strength	351.12	Kg/Cm <sup>2</sup>	345.00 Kg/cm <sup>2</sup>	2.43	Qty represents -4.00 M3.
			364.71	Kg/Cm <sup>2</sup>			
			344.32	Kg/Cm <sup>2</sup>			
			<b>Average</b>	<b>353.38</b>			

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SR.NO.	DISCRIPTION OF SAMPLE	TESTED FOR	RESULTS		Max./Min.Value permissible	% above or below	REMARK
13	Cement concrete cube of mix <b>M30</b> , cast on 22/09/2022. For 2500m3/hr Pump Foundation.	28 <sup>th</sup> day compressive strength	339.79	Kg/Cm <sup>2</sup>	345.00 Kg/cm <sup>2</sup>	2.87	Qty represents -7.5.00 M3 for Two sets of cube.
			369.24	Kg/Cm <sup>2</sup>			
			355.65	Kg/Cm <sup>2</sup>			
		<b>Average</b>	<b>354.89</b>	<b>Kg/Cm<sup>2</sup></b>			
14	Cement concrete cube of mix <b>M30</b> , cast on 22/09/2022. For 2500m3/hr Pump Foundation.	28 <sup>th</sup> day compressive strength	344.32	Kg/Cm <sup>2</sup>	345.00 Kg/cm <sup>2</sup>	3.52	-----do-----
			353.38	Kg/Cm <sup>2</sup>			
			373.77	Kg/Cm <sup>2</sup>			
		<b>Average</b>	<b>357.16</b>	<b>Kg/Cm<sup>2</sup></b>			
15	Cement concrete cube of mix <b>M30</b> , cast on 28/09/2022. For Lintel Beam & Chajja Mezanine Floor.	28 <sup>th</sup> day compressive strength	353.38	Kg/Cm <sup>2</sup>	345.00 Kg/cm <sup>2</sup>	1.55	Qty represents -4.00 M3.
			353.38	Kg/Cm <sup>2</sup>			
			344.32	Kg/Cm <sup>2</sup>			
		<b>Average</b>	<b>350.36</b>	<b>Kg/Cm<sup>2</sup></b>			
16	Cement concrete cube of mix <b>1:1:5:3</b> , cast on 03/10/2022. For Block Concrete.	28 <sup>th</sup> day compressive strength	283.16	Kg/Cm <sup>2</sup>	265.00 Kg/cm <sup>2</sup>	8.85	Qty represents -4.00 M3.
			289.95	Kg/Cm <sup>2</sup>			
			292.22	Kg/Cm <sup>2</sup>			
		<b>Average</b>	<b>288.44</b>	<b>Kg/Cm<sup>2</sup></b>			

Copy to: 1. The Assistant Engineer , SD IV , WD I , WRD, Porvorim - 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**

**Assistant Engineer**