

**GOVERNMENT OF GOA
QUALITY CONTROL LABORATORY
WATER RESOURCES DEPARTMENT**

Test Report No.: WRD/Q.C./F.6-4/Aggr-T- 325,326/Lab/61/2023-24 **Dated:-** 17/05/2023. **Laboratory:** Bicholim-Goa
Sand –T:- 5392. **Cement-T:-** 1448. **Sub Div:** V (QC)/WRD/Bicholim Goa.
Sub:- Construction of protection wall near house of Sadanand Rane to Gauresh Nagvekar at Chivar Butti in V.P. Anjuna in Siolim Constituency.
Ref to requisition No:- WRD/MI/WDI/SDI/F.57/2023-24/22. **Dated :-** 20/04/2023
Qty. Received: 1 bags each **Date of Receipt:-** 12/05/2023 **Tested on:-** 15 & 16/05/2023. **Ref to Specification:** CPWD 2009, Vol. I&IS:4031-4-1968
Sample: Sand, 20mm, **O.S. NO:-** 1207,1206,1208,1209/RK. **Lab. Sample No :-** 7090 to 7093 **Tested by:-** Mrs. R.R. Kadam A.E.
12.5mm size Aggr, and Cement **R E P O R T 01 OF 01**

Sr. No.	Description of sample	Tested for	Results	Max. /Min. value permissible	Remarks
1.	<u>20.00 mm Size Aggregate:</u>	Particle size distribution:	It is single sized aggregate of 20 mm nominal size.	(Qty. rep. – --m ³)	
2.	<u>12.5 mm Size Aggregate:</u>	Particle size distribution:	It is not single sized aggregate of 12.5 mm nominal size.	(Qty. rep. – -- m ³)	
<u>REMARK:</u> After blending 20 mm aggregate with 12.5 mm aggregates at the ratio of <u>1:1</u> by weight; it is satisfying the required criteria for graded aggregate of 20 mm nominal size.					
3.	<u>Crushed Sand:</u> (L.S.No.7092)	i) Silt & Clay by S.A. method ii) Silt by sedimentation iii) Fineness Modulus iv) Grading Zone	:- 14.20% :- 13.46% :- 2.47% :- II	(Limit of Deleterious material is 15.00% for crushed sand)	
REMARK: The observed results are within the permissible limits for crushed sand (Fine Aggregate) vide table 2 of IS 383: 2016(Clause 5.2.1).					
4.	<u>Cement:</u> JK Super 43 Grade OPC Cement, bearing IS:269 Ordinary Portland cement, Manuf. date: W-19, M-05,Y-2023 CM/L = 0003401033 Qty. rep. –.	i) Fineness of Cement ii) Consistency of cement iii) Initial Setting Time iv) Final Setting Time	:- 1.29% :- 31.50% :- 155 minutes :- 265 minutes	----- (It should not be more than 10%) (It should be in the neighborhood of 35%) ---- (It should not be less than 30 minutes) -- (It should not be more than 600 minutes)	
To be used for - <u>REMARK:</u> The observed results are within the permissible limit for Ordinary Portland cement.					

Copy to:1. The Assistant Engineer, SDI, WDI, WRD, Porvorim– Goa.
2. Copy Submitted to The Superintending Engineer, CPO, WRD, Porvorim – Goa for kind information.
3. Copy Submitted to The Executive Engineer, WDI, WRD, Porvorim– Goa.
4. Q.C. Lab file 5. Bill File.

Assistant Engineer