

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

Test Report No.: WRD/Q.C./F.6-4/Aggr-T- 231,232/Lab/230/2022-23 **Dated:-05/01/2023.**

Laboratory: Bicholim

Sand –T:- 5333. Cement-T:- 1400.

Sub Div: V (QC)/WRD/Bicholim Goa.

Sub:- Improvement to Protection wall of Nallah down stream side of Airport Gate V.P. Varkhand in Pernem-Taluka.

Ref to requisition No:- MI/S.D.III/WRD/WD-I/F.No-58/2022-23/269 **Dated :- 27/12/2022**

Qty. Received: 1 bags each **Date of Receipt:-** 28/12/2022 **Tested on:-** 30/12/2022 & 01,02/01/2023. **Ref to Specification:** CPWD 2009, Vol. I&IS:4031-4-1968

Sample:Sand,20mm, **O.S. NO:-** 9595,9596,9608 & 9583/SS **Lab. Sample No.:-** 5576 to 5579 **Tested by:-** Mrs. S. B. Naik Shirodkar J.E.

12.5mm size Aggr, Sand, 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.	20.00 mm Size Aggregate:	Particle size distribution:	It is single sized aggregate of 20 mm nominal size.	(Qty. rep. – --m ³)	
2.	12.5 mm Size Aggregate:	Particle size distribution:	It is not single sized aggregate of 12.5 mm nominal size.	(Qty. rep. – -- m ³)	
REMARK: After blending 20 mm aggregate with 12.5 mm aggregates at the ratio of 1:1 by weight; it is satisfying the required criteria for graded aggregate of 20 mm nominal size.					
3.	Coarse Sand: (L.S.No.5578)	i) Silt & Clay by S.A. method ii) Silt by sedimentation iii) Fineness Modulus iv) Grading Zone	: - 4.80% : - 4.34% : - 2.45% : - II		
REMARK: The observed results are within the permissible limits of the Coarse sand.					
4.	Cement: Dalmia Cement, bearing IS:269 Ordinary Portland cement, Manuf. date: W-51, M-Dec,Y-2022 CM/L = 6200022577 Qty. rep. –.	i) Fineness of Cement ii) Consistency of cement iii) Initial Setting Time iv) Final Setting Time	: - 1.28% : - 34.00% : - 145 minutes : - 290 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 REMARK: The observed results are within the permissible limit for Ordinary Portland cement.					

Copy to:1. The Assistant Engineer, SDIII, WDI, WRD, Pernem– Goa.

2. Copy Submitted to The Superintending Engineer, CPO, WRD, Porvorim – Goa for kind information.

3. Copy Submitted to The Executive Engineer, WD I, WRD, Porvorim– Goa.

4. Q.C. Lab file 5. Bill File.

Junior Engineer

Assistant Engineer