

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

Test Report No.: WRD/Q.C./F.6-4/Aggr-T- 9891, 9892 /Lab/188/2021-22 **Dated:** 22 /10/2021. **Laboratory:** Bicholim
Sand –T: 5183, 5185, Cement-1283 **Sub Div:** V (QC)/WRD/Bicholim Goa.

Sub:-Construction of flood protection wall at Tariwada in Ward No. 06 of Village Madapai, Marcel, in V.P. Tivrem Orgao in Priol Constituency of Ponda Taluka.

Ref to requisition No:-WRD/WDXI/SDIV /F.CF/311/2021-22 **Dated:** 04/10/2021.

Qty. Received: 1 bags each **Date of Receipt:** 06/10/2021 **Tested on:** 11 & 12/10/2021 **Ref to Specification:** CPWD 2009, Vol. I&IS:4031-4-1968

Sample:Sand,20mm, **O.S. N:-**7007,7008,7004,7009& 7015/SS **Lab. Sample No.:** 2261 To 2265 **Tested by:** Mrs. Shirodkar.JE.
 12.5mm size aggrt., Cement & C. Sand

R E P O R T 01 OF 02

Sr. No.	Description of sample	Tested for	Results	Max. /Min. value permissible	Remarks
1.	20 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.	Sand: (L.S.No.2263)	i) Silt & Clay by S.A. method ii) Silt by sedimentation iii) Fineness Modulus iv) Grading Zone	: - 4.80% : - 5.40% : - 2.62 : - II		
To be used for----. REMARK: The observed results are within the permissible limits of the coarse sand.					
4.	Cement: JK..Cement, bearing IS:269 Ordinary Portland cement, Manuf. date: W- 40 M-10, Year' 2021 CM/L =0003401033 Qty. rep. –.	i) Fineness of Cement ii) Consistency of cement iii) Initial Setting Time iv) Final Setting Time	: 1.11% : 32.00% : 155 minutes : 310 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 C.C 1:2:4 –. REMARK: The observed results are within the permissible limit for Ordinary Portland cement.					

Junior Engineer

Assistant Engineer

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

Test Report No.: WRD/Q.C./F.6-4/Aggr-T- 9891, 9892 /Lab/188/2021-22 **Dated:**06 /10/2021. **Laboratory:** Bicholim
Sand –T: 5183,5185, Cement-1283 **Sub Div:** V (QC)/WRD/Bicholim Goa.

Sub:-Construction of flood protection wall at Tariwada in Ward No. 06 of Village Madapai, Marcel, in V.P. Tivrem Orgao in Priol Constituency of Ponda Taluka.

Ref to requisition No:-WRD/WDXI/SDIV /F.CF/311/2021-22 **Dated:** 04/10/2021.

Qty. Received: 1 bags each **Date of Receipt:** 06/10/2021 **Tested on:** 11 & 12/10/2021 **Ref to Specification:** CPWD 2009, Vol. I&IS:4031-4-1968

Sample:Sand,20mm, **O.S. N:-**7007,7008,7004,7009& 7015/SS **Lab. Sample No.:** 2261 To 2265 **Tested by:** Mrs. Shirodkar.JE.
12.5mm size aggrt., Cement & C. Sand

R E P O R T 02 OF 02

- 5. Crushed Sand:** i) Silt & Clay by S.A. method :- 13.00% (**Limit of Deleterious material is 15.00% for crushed sand**)
(L.S.No.2265) ii) Silt by sedimentation :- 13.51%
 iii) Fineness Modulus :- 3.124
 iv) Grading Zone :- I

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).

-
- Copy to: 1. The Assistant Engineer, SDIV, WDXI,WRD, Ponda– Goa.
2. Copy Submitted to The Superintending Engineer, CPO, WRD, Porvorim – Goa for kind information.
3. Copy Submitted to The Executive Engineer, W.D. XI, WRD,Ravonfond, Navelim Salcete – Goa
4. Q.C. Lab file 5. Bill File.

Junior Engineer

Assistant Engineer