

12. WELL DEFINED RING ON THE CROSS SECTION SHALL BE FORMED AFTER IMMERSING THE STEEL IN 5 PERCENT DILUTED HNO SOLUTION FOR TMT STEEL BARS FOR BEING FIT IN MES WORKS. IN CASE OF FAILURE OF RING FORMATION, NO STEEL SHALL BE ACCEPTED FROM FIRM. THE NAME OF FIRM SHOULD BE IMMEDIATELY INFORMED TO DESIGN SECTION OF CE JALANDHAR ZONE BY GARRISON ENGINEER THROUGH FAX.

13. THE ELONGATION SHALL NOT BE LESS THAN 18 PERCENT FOR TMT.

14. THICKNESS, CONTINUITY AND ADHESION OF COATING SHALL BE TESTED AT A FREQUENCY OF NOT LESS THAN ONE FULL LENGTH BAR IN EVERY TWENTY BARS FOR EACH SIZE FOR FUSION BONDED EPOXY COATED REINFORCING BARS AS PER IS : 13620 - 1993 BY GARRISON ENGINEER.

15. GARRISON ENGINEER SHALL KEEP A WRITTEN CERTIFICATE THAT THE COATED REINFORCING BARS MEET THE REQUIREMENT OF IS : 13620 - 1993 FROM MANUFACTURER.

**AGGREGATE**

16. AGGREGATE SHALL COMPLY WITH THE REQUIREMENTS OF IS:383-2016. COARSE AGGREGATE SHALL CONSISTS OF CRUSHED STONE. FINE AGGREGATE CONFIRMING TO GRADING ZONE IV SHOULD NOT BE USED IN REINFORCED CONCRETE. COARSE AND FINE AGGREGATE SHALL BE BATCHED SEPARATELY.

17. THE MAXIMUM QUANTITY OF DELETERIOUS MATERIALS IN FINE AGGREGATES SHALL NOT EXCEED THE LIMITS AS SPECIFIED IN TABLE-1.

**TABLE -1:**

SL NO.	DELETERIOUS SUBSTANCES	MAXIMUM PERCENT BY WEIGHT
(1)	(2)	(3)
1.	COAL AND LIGNITE	1
2.	CLAY LUMPS	1
3.	MATERIALS FINER THAN 75 μ IS SIEVE	3
4.	SHALE	1

TOTAL OF PERCENTAGES OF ALL DELETERIOUS MATERIAL SHALL NOT BE MORE THAN 5 PERCENT OF FINE AGGREGATE BY WEIGHT.

18. THE UNIFORMITY OF THE QUALITY, SIZE AND GRADING OF AGGREGATE SHALL BE ENSURED BY CONDUCTING REGULAR TEST.

**WATER**

19. WATER USED FOR MIXING AND CURING SHALL BE CLEAN AND FREE FROM INJURIOUS AMOUNTS OF OILS, ACIDS, ALKALIS, SALTS, SUGAR, ORGANIC MATERIAL OR OTHER SUBSTANCES THAT MAY BE DELETERIOUS TO CONCRETE OR STEEL. REF TO IS 3025 (PART-22) CLAUSE 8.1 AND IS-3025 (PART-23) CLAUSE 8.

20. WATER FOUND SATISFACTORY FOR MIXING IS ALSO SUITABLE FOR CURING CONCRETE. HOWEVER, WATER USED FOR CURING SHOULD NOT PRODUCE ANY OBJECTIONABLE STAIN OR UNSIGHTLY DEPOSIT ON THE CONC SURFACE. THE PRESENCE OF TANNIC ACID OR IRON COMPOUND IS OBJECTIONABLE.

SNO.	DATE	DESCRIPTION	BY.DIR	DIR(DES)
			INITIAL	
<b>REVISIONS</b>				
DATE	30 MAY 2024	<b>CHIEF ENGINEER JALANDHAR ZONE</b>		
DRN	POOJA T			
TCD				
CKD				
SCALE	AS SHOWN	<b>TYPICAL R.C.C. DETAILS</b>		
SHT SIZE	A3			
<i>Po Morrison</i> AAD (DESIGN)		MATERIALS		
<i>[Signature]</i> DIR (DESIGN) FOR CHIEF ENGINEER		DRG. NO.	SHEET NO.	
		DRG NO CEJZ / STD-422 /24	2/34	