

1 2 3 4 5 6 7 8

**NOTES**

**GENERAL**

1. THE GENERAL NOTES ON R C C WORKS GIVEN BELOW UNDER VARIOUS CLAUSES ARE APPLICABLE IN RESPECT OF ALL NORMAL R C C BUILDING CONSTRUCTION. IN CASE THE PROVISIONS OF THESE NOTES ARE AT VARIOUS WITH DETAILS GIVEN IN THE MAIN STRUCTURAL DRAWING OF A WORK, DETAILS GIVEN IN THE MAIN STRUCTURAL DRAWING WILL SUPERSEDE THE PROVISIONS OF THESE NOTES.
2. EXECUTIVE ARE ADVISED TO STUDY VARIOUS REFERENCES GIVEN IN THIS DRAWING FOR UNDERSTANDING VARIOUS DETAILING ASPECTS.
3. ALL DIMENSIONS ARE GIVEN IN MILLIMETERS UNLESS OTHERWISE SHOWN.
4. CONTRACTOR TO CHECK AND VERIFY ALL DIMENSION BEFORE EXECUTION OF THE WORK.
5. FIGURED DIMENSION SHALL BE FOLLOWED.

**MATERIALS**

**CEMENT**

6. USE OF 43 GRADE OPC IN NORMAL STRUCTURAL WORK IS RECOMMENDED.
7. PORTLAND POZZOLANA CEMENT (PPC) SHALL BE ALLOWED TO BE USED IN MES WORKS ONLY AFTER ASCERTAINING NON AVAILABILITY OF OPC IN THE REGION BY ACCEPTING OFFICER. PPC SHALL NOT BE USED FOR OVERHEAD RESERVOIRS, UNDERGROUND SUMPS, PRESTIGIOUS BUILDING (TO BE DECIDED BY GE) AND BUILDINGS WITH SPAN MORE THAN 10 METRES. IN COLD CLIMATE REGIONS WHERE TEMPERATURE IS LOWER THAN 15° C, PPC SHALL NOT BE ALLOWED IN WORK.
8. PPC SHALL BE PROVIDED BY GRINDING TOGETHER PORTLAND CEMENT CLINKER AND POZZOLANA. THE FLY ASH CONSTITUENT SHALL NOT BE MORE THAN 25% BY MASS OF PPC. TOTAL CHLORIDE CONTENT IN CEMENT SHALL NOT EXCEED 0.05 PERCENT BY MASS. PPC SHALL MEET THE STRENGTH CRITERIA OF 43 GRADE ORDINARY PORTLAND CEMENT AS LAID DOWN IN IS:8112-1989.
9. CEMENT OF DIFFERENT TYPES SHALL NOT BE MIXED FOR CASTING ANY STRUCTURAL MEMBER.

**STEEL**

10. FOLLOWING TYPES OF STEEL ARE IN USE IN MES WORKS:-
  - (a) REINFORCEMENT STEEL : HIGH STRENGTH DEFORMED STEEL BARS PRODUCED BY THERMO MECHANICAL TREATMENT PROCESS (TMT STEEL BARS OF GRADES Fe-500 D/415 D) MEETING ALL OTHER REQUIREMENTS OF IS:1786.
  - (b) STRUCTURAL STEEL:
    - (i) STANDARD QUALITY - CONFORMING TO IS:2062.
    - (ii) ORDINARY QUALITY-CONFORMING TO IS:1977.
  - (c) GALVANISED STEEL SHEETS (PLAIN AND CORRUGATED) CONFORMING TO IS:277.
  - (d) FABRIC REINFORCEMENT FOR CONCRETE CONFORMING TO IS 1566.
11. TMT STEEL SHOULD BE PRODUCED FROM SAIL BILLETS OR ISI MARKED INGOTS.

**REFERENCES:-**

1. IS:383-2016 SPECIFICATION FOR COARSE AND FINE AGGREGATES FROM NATURAL SOURCES FOR CONCRETE .
2. IS:456-2000 (REAFFIRMED 2021) PLAIN AND REINFORCED CONCRETE-CODE OF PRACTICE.
3. IS:1489 (PART-I) 2015 (REAFFIRMED 2021) PORTLAND POZZOLANA CEMENT SPECIFICATIONS (FLY ASH BASED).
4. IS:1786-2008 (REAFFIRMED 2018) SPECIFICATION FOR HIGH STRENGTH DEFORMED STEEL BARS AND WIRES FOR CONCRETE REINFORCEMENT.
5. IS:4014 (PART-II)-1967 (REAFFIRMED 2018). CODE OF PRACTICE FOR STEEL TUBULAR SCAFFOLDING.
6. IS:13620 -1993 ( REAFFIRMED 2020 ) FUSION BONDED EPOXY COATED REINFORCING BARS .
7. IS:14687-1999 (REAFFIRMED 2014). FALSEWORK FOR CONCRETE STRUCTURES - GUIDLINES.
8. SP:34 (S & T) -1987. HANDBOOK ON CONCRETE REINFORCEMENT AND DETAILING.

SNO.	DATE	DESCRIPTION	DY.DIR INITIAL	DIR(DES)
------	------	-------------	-------------------	----------

**REVISIONS**

DATE	30 MAY 2024
DRN	POOJA T
TCD	
CKD	
SCALE	AS SHOWN
SHT SIZE	A3

**CHIEF ENGINEER  
JALANDHAR ZONE**

**TYPICAL R.C.C. DETAILS**

**MATERIALS**

DRG. NO.

SHEET NO.

1/34

DIR (DESIGN)  
FOR CHIEF ENGINEER

DRG NO CEJZ / STD-422 /24

1 2 3 4 5 6 7 8