

REINFORCEMENT

PLACING

- 28. ASSEMBLY AND PLACING OF REINFORCEMENT SHALL BE AS PER CLAUSE 12 OF IS-456 :2000.
- 29. ROUGH HANDLING, SHOCK LOADING (PRIOR TO EMBEDMENT) AND THE DROPPING OF REINFORCEMENT FROM A HEIGHT SHOULD BE AVOIDED.
- 30. REINFORCEMENT SHOULD BE SECURED AGAINST DISPLACEMENT OUTSIDE THE SPECIFIED LIMIT.
- 31. UNLESS OTHERWISE SPECIFIED BY ENGINEER-IN-CHARGE, THE REINFORCEMENT SHALL BE PLACED WITHIN THE FOLLOWING TOLERANCE.

- (a) FOR EFFECTIVE DEPTH 200 ±10mm
- (b) FOR EFFECTIVE DEPTH MORE THAN 200 mm ±15mm

NOMINAL COVER

- 32. NOMINAL CONCRETE COVER (EXCLUSIVE OF PLASTER OR OTHER DECORATIVE FINISH) TO REINFORCEMENT INCLUDING LINKS SHALL BE AS UNDER FOR NORMEL CONDATIONS(MODERATE EXPOSURE AS PER TABLE 16 OF 15456).
 - (a) BEAMS OF ALL DESCRIPTION - 30mm.
 - (b) COLUMNS OF ALL DESCRIPTION - 40mm.
 - (c) SLABS OF ALL DESCRIPTION - 30mm
 - (d) FOOTING - 50mm.

33. INCREASED COVER THICKNESS FOR DIFFERENT EXPOSURE CONDATIONS SHALL BE PROVIDED AS PER TABLE 16 OF IS:456-2000. FOR MEMBER IN CONTACT WITH WATER THE COVER THICKNESS SHALL BE GOVERNED BY IS: 3370-2021.

LAP SPLICES

- 34. LAP SPlice SHALL NOT BE USED FOR BARS LARGER THAN 32 mm DIAMETER.
- 35. LAP SPLICES SHALL BE CONSIDERED AS STAGGERED IF THE CENTRE -TO -CENTRE DISTANCE OF SPLICES IS NOT LESS THAN 1.3 TIMES THE LAP LENGTH. (FIG - 2)
- 36. LAP LENGTH OF SHALL NOT BE LESS THAN THE DEVELOPMENT LENGTH OF 'LARGEST' LONGITUDINAL REINFORCEMENT BAR IN TENSION.
- 37. WHEN BARS OF TWO DIFFERENT DIAMETERS ARE TO BE SPLICED, THE LAP LENGTH SHALL BE CALCULATED ON THE BASIS OF DIAMETER OF LARGEST BAR.
- 38. (a) LAP SPLICES SHALL NOT BE USED FOR BARS LARGER THAN 32 mm. FOR LARGER DIAMETER BAR MAY BE WELDED. (REF FIG.7)
- (b) WELDING OF LINKS/ TIES IS NOT PERMITTED.

LAP SPLICES IN BEAMS

- (a) LAP SPLICES SHALL NOT BE PROVIDED
 - (i) WITHIN JOINT (COLUMN-BEAM).
 - (ii) WITH IN A DISTANCE OF '2d' FROM FACE OF THE COLUMN ('d' IS EFFECTIVE DEPTH OF BEAM).
 - (iii) WITH IN A QUARTER LENGTH OF BEAM ADJOINING THE LOCATION WHERE FLEXURE YIELDING MAY OCCUR UNDER EARTHQUAKE EFFECTS.
- (b) NOT MORE THAN 50% OF AREA OF STEEL BARS ON EITHER TOP OR BOTTOM FACE SHALL BE SPLICING AT ANY ONE LOCATION.

LAP SPLICES IN COLUMNS

- (a) LAP SPLICES SHALL BE PROVIDED ONLY IN THE CENTRAL HALF OF CLEAR COLUMN HEIGHT AND 'NOT'
 - (i) WITHIN JOINT (COLUMN-BEAM).
 - (ii) WITH IN A DISTANCE OF '2d' FROM FACE OF THE BEAM.
- (b) NOT MORE THAN 50% OF AREA OF STEEL BARS SHALL BE SPLICED AT ONE SECTION.

SNO.	DATE	DESCRIPTION	BY DIR	DIR(DES)
			INITIAL	
REVISIONS				
DATE	30 MAY 2024	CHIEF ENGINEER JALANDHAR ZONE		
DRN	POOJA T			
TCD				
CKD				
SCALE	AS SHOWN			
SHT. SIZE	A3	TYPICAL R.C.C. DETAILS		
<i>P. Bhatnagar</i> MAD (DESIGN)		REINFORCEMENT		
		DRG. NO.	SHEET NO.	
<i>U. M.</i> DIR (DESIGN) FOR CHIEF ENGINEER			4/34	
		DRG NO CEJZ / STD-422 /24		