

DEVELOPEMENT LENGTH OF BARS

41. THE CALCULATED TENSION OR COMPRESSION IN ANY BAR AT ANY SECTION SHALL BE DEVELOPED ON EACH SIDE OF THE SECTION BY AN APPROPRIATE DEVELOPMENT LENGTH OR END ANCHORAGE OR BY A COMBINATION THERE OF THE DEVELOPEMENT LENGTH L_d IS GIVEN BY

$$L_d = \frac{\Phi \delta_s}{4 T_{bd}}$$

WHERE,

Φ = NOMINAL DIA OF THE BAR

δ_s = STRESSES IN BAR AT THE SECTION CONSIDERED AT DESIGN LOAD EQUAL TO 500 MPa FOR Fe 500 GRADE STEEL.

T_{bd} = DESIGN BOND STRESS FOR BARS IN TENSION(EQUAL TO 1.4 MPa FOR M25 CONCRETE FOR PLAIN BARS IN TENSION, EQUAL TO 2.24 MPa FOR DEFORMED BARS IN TENSION).

NOTE :- (a) FOR BARS IN COMPRESSION ON T_{bd} SHALL BE INCREASED BY 25 %.
 (b) FOR FURTHER DETAILS, REFER IS456-2000.

42. - BLANK -

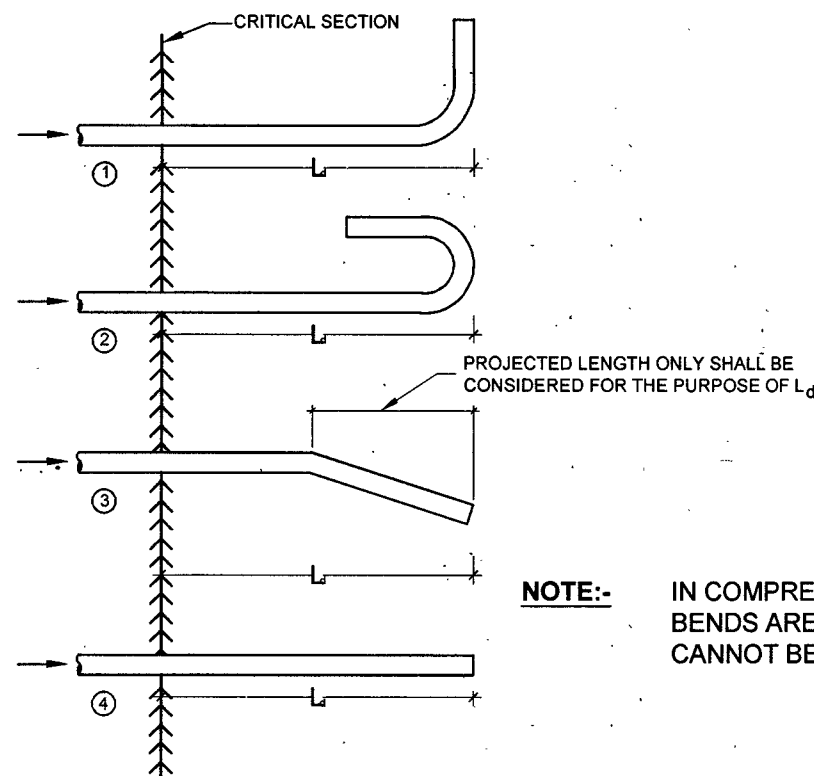


FIG.-8: DEVELOPMENT LENGTH IN COMPRESSION

SNO.	DATE	DESCRIPTION	BY .DIR	DIR(DES)
			INITIAL	

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

Bramhan
 AAD (DESIGN)

DEVELOPMENT LENGTH

DRG. NO.	SHEET NO.
DRG NO CEJZ / STD- 422 /24	6/34

Urf
 DIR (DESIGN)
 FOR CHIEF ENGINEER