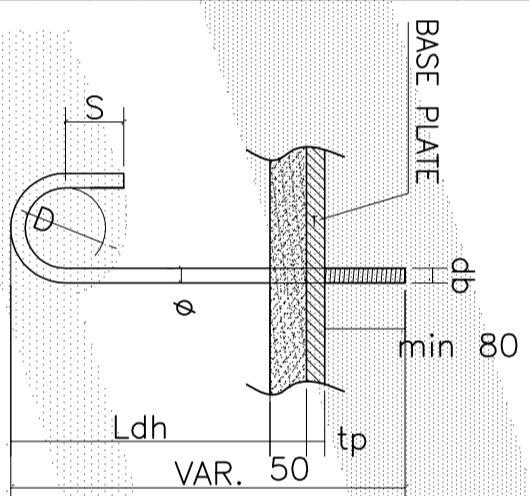
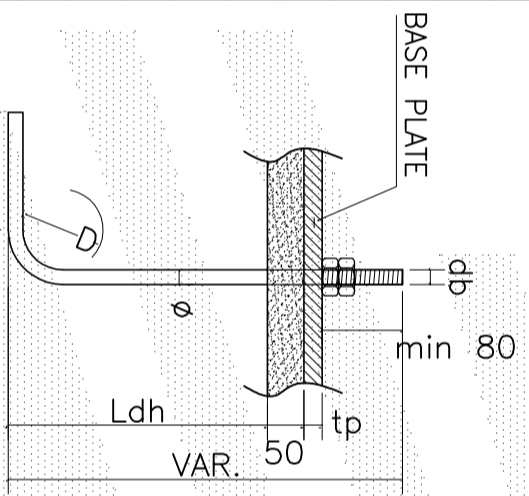


STANDARD ANCHOR BOLT (ACI 05-7.1 & 12.5 & DIN6915)
 - Ldh MUST INCREASE 20% FOR EPOXY-COATED REINFORCEMENT
 - Ldh MUST INCREASE 30% FOR LIGHTWEIGHT CONCRETE

REBAR AND BOLT PROPERTY	ANCHOR BOLT DIMENSION									
	90&180-DEGREE				D mm	S mm		90	180	
	min Ldh mm					90	180			
MATERIAL TYPE	Fy Mpa	db mm	φ mm	f'c= 21 MPa	f'c= 25 MPa	f'c= 28 MPa	f'c= 30 MPa	90&180 DEGREE	90	180
All	300	10	12	200	180	170	170	75	150	65
		12	14	230	210	200	200	85	170	65
		16	18	300	270	260	250	110	220	75
		20	22	360	330	310	300	135	270	90
		22	25	410	380	360	350	150	300	100
		24	28	410	380	360	350	150	300	100
	400	27	30	500	450	430	410	250	360	120
		30	32	530	480	460	440	260	390	130
		36	40	660	600	570	550	400	480	160
		10	12	260	240	230	220	75	150	65
		12	14	310	280	270	260	85	170	65
		16	18	400	360	340	330	110	220	75
All	400	20	22	480	440	420	410	135	270	90
		22	25	550	500	480	460	150	300	100
		24	28	550	500	480	460	150	300	100
		27	30	650	600	570	550	250	360	120
		30	32	700	650	610	590	260	390	130
		36	40	880	800	760	730	400	480	160
	ANV	10	12	330	300	290	280	75	150	65
		12	14	390	350	330	320	85	170	65
		16	18	490	450	430	410	110	220	75
		20	22	600	550	520	500	135	270	90
		22	25	690	650	590	570	150	300	100
		24	28	690	650	590	570	150	300	100
ANV	27	30	820	750	710	690	250	360	120	
	30	32	880	800	760	730	260	390	130	
	36	40	1100	1000	950	820	400	480	160	



J BOLT
SCALE 1:10



L BOLT
SCALE 1:10

OVERLAP LENGTH OF BARS IN TENSION = $A_x B_x E_x F_x db$ (ACI 05- 12.15.1)
 * LAP SPLICES SHALL NOT BE USED FOR BARS LARGER THAN NO. 36

A: FROM BELLOW TABLE

B: BUNDLED BARS COEFFICIENT (ACI05-12.14.2.2 & 12.4)

B=1.33 FOR FOUR-BAR BUNDLE
 B=1.20 FOR TREE-BAR BUNDLE
 B=1.00 INDIVIDUAL BARS
 * ENTIRE BUNDLES SHALL NOT BE LAP SPICED.
 * ONLY INDIVIDUAL BARS ARE LAP SPICED ALONG THE BUNDLE.

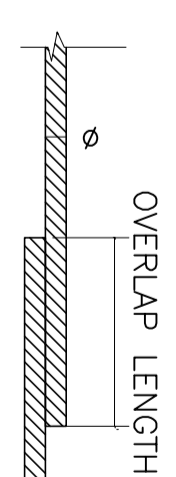
E: EPOXY COEFFICIENT (ACI 05- 12.2.4)

FOR EPOXY-COATED BARS OR WIRES WITH COVER LESS THAN 3db, OR CLEAR SPACING LESS THAN 6db FOR ALL OTHER EPOXY-COATED BARS OR WIRES FOR UNCOATED REINFORCEMENT

F: FRESH CONCRETE COEFFICIENT (ACI 05- 12.2.4)

WHERE HORIZONTAL REINFORCEMENT IS PLACED SUCH THAT MORE THAN 300 mm OF FRESH CONCRETE IS CAST BELOW THE DEVELOPMENT LENGTH OR SPLICE

db: REBAR DIAMETER



OVERLAP LENGTH

REBAR DIAMETER	PARAMETER "A" FOR CALCULATING OVERLAP LENGTH				
	f'c= 21 MPa	f'c= 25 MPa	f'c= 28 MPa	f'c= 30 MPa	
Fy=300 Mpa	42	38	36	35	
Fy=400 Mpa	52	48	45	44	
Fy=400 Mpa	55	51	48	46	
Fy=500 Mpa	69	63	60	58	
Fy=500 Mpa	69	63	60	58	
20<db<36	86	79	75	72	

OVERLAP LENGTH SCHEDULE

SCALE N:S

STANDARD ANCHOR BOLT

SCALE N:S



CLIENT: --	PROJECT TITLE: --
DRAWING TITLE: STANDARD ANCHOR BOLT & OVERLAP	DATE: 97-08
WEBSITE: WWW.BTS-CO.NET E-MAIL: INFO@BTS-CO.NET TEL&FAX: 0313 393 2235 MOBILE: 0913 080 1331	DESIGNED: SH.FATEMI DRAWN: SH.FATEMI CHECKED: MAUZADEH APPROVED: IFAROKHYFAR
B.T.S. DRAWING No.	SCALE: A2
PGA 97/01/BL/D/C/02/001	AS SHOWN: A2
	SIZE: 1
	SHEETS NO.: 1
	REV.: A