

THRUST BLOCKS FOR VERTICAL ELBOWS AT CREST					
D (mm)	TBW (mm)	TBL (mm)	TBH (mm)	NECK REINF.	BLOCK REINFORCEMENT
100	800	800	400	2x5T10/L/M	T10@200 T&B & ALL AROUND
125	1000	1000	400	2x5T10/L/M	T10@200 T&B & ALL AROUND
150	1100	1100	500	2x5T10/L/M	T10@200 T&B & ALL AROUND
200	1200	1200	750	2x5T10/L/M	T10@200 T&B & ALL AROUND
250	1500	1500	750	2x5T10/L/M	T10@200 T&B & ALL AROUND
300	1600	1600	900	2x5T10/L/M	T10@200 T&B & ALL AROUND
350	1800	1800	1000	2x5T10/L/M	T10@200 T&B & ALL AROUND
400	2000	2000	1100	2x5T10/L/M	T10@200 T&B & ALL AROUND
450	2200	2200	1100	2x5T10/L/M	T10@200 T&B & ALL AROUND
500	2400	2400	1200	2x5T10/L/M	T10@200 T&B & ALL AROUND
600	2600	2600	1400	2x5T10/L/M	T10@200 T&B & ALL AROUND
700	3000	3000	1400	2x5T10/L/M	T10@200 T&B & ALL AROUND
800	3200	3200	1600	2x5T10/L/M	T10@200 T&B & ALL AROUND
900	3500	3500	1700	2x5T10/L/M	T10@200 T&B & ALL AROUND
1000	3800	3800	1800	2x5T10/L/M	T10@200 T&B & ALL AROUND

THRUST BLOCKS FOR VERTICAL ELBOWS AT SAG					
D (mm)	FL (mm)	FW (mm)	FD (mm)	BLOCK REINFORCEMENT	NECK REINF.
100	400	400	200	T10@200 T&B IN BOTH DIR.	2x4T10
125	400	400	200	T10@200 T&B IN BOTH DIR.	2x4T10
150	500	500	200	T10@200 T&B IN BOTH DIR.	2x4T10
200	600	600	200	T10@200 T&B IN BOTH DIR.	2x4T10
250	800	800	200	T10@200 T&B IN BOTH DIR.	2x4T10
300	900	900	300	T12@200 T&B IN BOTH DIR.	2x4T10
350	1000	1000	300	T12@200 T&B IN BOTH DIR.	2x4T10/L/M
400	1200	1200	300	T12@200 T&B IN BOTH DIR.	2x4T10/L/M
450	1400	1400	400	T12@200 T&B IN BOTH DIR.	2x4T10/L/M
500	1500	1500	400	T14@200 T&B IN BOTH DIR.	2x4T10/L/M
600	1600	1600	500	T14@200 T&B IN BOTH DIR.	2x4T10/L/M
700	2000	2000	500	T14@200 T&B IN BOTH DIR.	2x4T10/L/M
800	2300	2300	600	T16@200 T&B IN BOTH DIR.	2x4T12/L/M
900	2400	2400	600	T16@200 T&B IN BOTH DIR.	2x4T12/L/M
1000	2500	2500	700	T20@200 T&B IN BOTH DIR.	2x4T12/L/M

THRUST BLOCKS FOR HORIZONTAL BENDS					SIDE WALL & FOOTING REINFORCEMENT
D(mm)	W&H (mm)	L (mm)	t (mm)		
100	500	500	200	T10@200 T&B IN BOTH DIR.	
125	500	500	200	T10@200 T&B IN BOTH DIR.	
150	550	550	200	T10@200 T&B IN BOTH DIR.	
200	700	700	200	T10@200 T&B IN BOTH DIR.	
250	800	800	200	T10@200 T&B IN BOTH DIR.	
300	1000	1100	200	T10@200 T&B IN BOTH DIR.	
350	1100	1200	200	T10@200 T&B IN BOTH DIR.	
400	1200	1300	200	T10@200 T&B IN BOTH DIR.	
450	1300	1500	200	T10@200 T&B IN BOTH DIR.	
500	1400	1700	250	T10@200 T&B IN BOTH DIR.	
600	1500	2000	300	T10@200 T&B IN BOTH DIR.	
700	1700	2300	350	T10@200 T&B IN BOTH DIR.	
800	1900	2600	400	T12@200 T&B IN BOTH DIR.	
900	2100	2900	450	T12@200 T&B IN BOTH DIR.	
1000	2300	3200	500	T12@200 T&B IN BOTH DIR.	

THRUST BLOCKS FOR REDUCERS						
Reducers P = 40 Bars						
Dn (mm)	dn (mm)	W(mm)	L(mm)	C(mm)	t(mm)	NECK & FOOTING REINFORCEMENT
100	60	600	850	300	300	4T10 T&B IN BOTH DIR.
100	80	600	650	300	300	4T10 T&B IN BOTH DIR.
125	60	650	1200	300	400	T12@200 T&B IN BOTH DIR.
125	80	650	1000	300	300	T12@200 T&B IN BOTH DIR.
125	100	650	800	300	300	T12@200 T&B IN BOTH DIR.
150	60	750	1550	300	550	T12@200 T&B IN BOTH DIR.
150	80	750	1400	300	500	T12@200 T&B IN BOTH DIR.
150	100	750	1200	300	400	T12@200 T&B IN BOTH DIR.
150	125	750	850	300	400	T12@200 T&B IN BOTH DIR.
200	100	900	1950	300	700	T14@200 T&B IN BOTH DIR.
200	125	900	1700	300	600	T14@200 T&B IN BOTH DIR.
200	150	900	1400	300	500	T12@200 T&B IN BOTH DIR.
250	125	1200	2300	300	900	T16@200 T&B IN BOTH DIR.
250	150	1200	2000	300	700	T14@200 T&B IN BOTH DIR.
250	200	2000	3000	300	1100	T16@200 T&B IN BOTH DIR.
300	150	1400	2800	400	1100	T16@200 T&B IN BOTH DIR.
300	200	1400	2200	400	800	T16@200 T&B IN BOTH DIR.
300	250	1400	1500	400	600	T14@200 T&B IN BOTH DIR.
350	200	1600	2900	500	1100	T20@200 T&B IN BOTH DIR.
350	250	1600	2300	500	800	T20@200 T&B IN BOTH DIR.
350	300	1600	1600	500	600	T16@200 T&B IN BOTH DIR.
400	250	1800	3200	500	1200	T25@200 T&B IN BOTH DIR.
400	300	2050	2500	600	900	T20@200 T&B IN BOTH DIR.
450	300	2050	3200	600	1200	T25@200 T&B IN BOTH DIR.
450	350	2250	2500	600	900	T25@200 T&B IN BOTH DIR.
500	350	2250	3250	600	1200	T25@200 T&B IN BOTH DIR.
500	400	2250	2600	600	900	T25@200 T&B IN BOTH DIR.
500	450	2250	2250	600	600	T20@200 T&B IN BOTH DIR.
600	400	2700	4200	800	1800	T25+T16@200 T&B IN BOTH DIR.
600	450	2700	3600	700	1600	T25+T16@200 T&B IN BOTH DIR.
600	500	2700	2700	700	1200	T25@200 T&B IN BOTH DIR.
700	500	3200	4300	700	1800	T27@200 T&B IN BOTH DIR.
700	600	3200	3200	700	1200	T25+T16@200 T&B IN BOTH DIR.
800	600	3900	4300	800	1800	T27@200 T&B IN BOTH DIR.
800	700	3900	3900	800	1200	T25+T16@200 T&B IN BOTH DIR.
900	700	4100	4600	800	2000	T27@200 T&B IN BOTH DIR.
900	800	4100	4100	800	1600	T25+T16@200 T&B IN BOTH DIR.
1000	800	4500	4700	800	2000	T27@200 T&B IN BOTH DIR.
1000	900	4500	4500	800	1600	T25+T20@200 T&B IN BOTH DIR.

THRUST BLOCKS FOR VERTICAL ELBOWS AT CREST					
D (mm)	TBW (mm)	TBL (mm)	TBH (mm)	NECK REINF.	BLOCK REINFORCEMENT
100	1000	1000	600	2x5T10/L/M	T10@200 T&B & ALL AROUND
125	1200	1200	600	2x5T10/L/M	T10@200 T&B & ALL AROUND
150	1400	1400	700	2x5T10/L/M	T10@200 T&B & ALL AROUND
200	1600	1600	800	2x5T10/L/M	T10@200 T&B & ALL AROUND
250	1800	1800	1000	2x5T10/L/M	T10@200 T&B & ALL AROUND
300	2000	2000	1200	2x5T10/L/M	T10@200 T&B & ALL AROUND
350	2200	2200	1300	2x5T10/L/M	T10@200 T&B & ALL AROUND
400	2500	2500	1400	2x5T10/L/M	T10@200 T&B & ALL AROUND
450	2800	2800	1400	2x5T10/L/M	T10@200 T&B & ALL AROUND
500	3000	3000	1500	2x5T10/L/M	T10@200 T&B & ALL AROUND
600	3500	3500	1500	2x5T12/L/M	T12@200 T&B & ALL AROUND
700	3800	3800	1800	2x5T12/L/M	T12@200 T&B & ALL AROUND
800	4000	4000	2100	2x5T12/L/M	T12@200 T&B & ALL AROUND
900	4300	4300	2300	2x5T12/L/M	T12@200 T&B & ALL AROUND
1000	4800	4800	2300	2x5T12/L/M	T12@200 T&B & ALL AROUND

THRUST BLOCKS FOR VERTICAL ELBOWS AT SAG					
D (mm)	FL (mm)	FW (mm)	FD (mm)	BLOCK REINFORCEMENT	NECK REINF.
100	400	400	200	T10@200 T&B IN BOTH DIR.	2x4T10
125	400	400	200	T10@200 T&B IN BOTH DIR.	2x4T10
150	500	500	200	T10@200 T&B IN BOTH DIR.	2x4T10
200	600	600	200	T10@200 T&B IN BOTH DIR.	2x4T10
250	800	800	200	T10@200 T&B IN BOTH DIR.	2x4T10
300	900	900	300	T12@200 T&B IN BOTH DIR.	2x4T10
350	1000	1000	300	T12@200 T&B IN BOTH DIR.	2x4T10/L/M
400	1200	1200	300	T12@200 T&B IN BOTH DIR.	2x4T10/L/M
450	1400	1400	400	T12@200 T&B IN BOTH DIR.	2x4T10/L/M
500	1500	1500	400	T14@200 T&B IN BOTH DIR.	2x4T10/L/M
600	1800	1800	500	T14@200 T&B IN BOTH DIR.	2x4T10/L/M
700	2000	2000	500	T14@200 T&B IN BOTH DIR.	2x4T10/L/M
800	2300	2300	600	T16@200 T&B IN BOTH DIR.	2x4T12/L/M
900	2600	2600	700	T20@200 T&B IN BOTH DIR.	2x4T12/L/M
1000	2900	2900	800	T20@200 T&B IN BOTH DIR.	2x4T12/L/M

THRUST BLOCKS FOR HORIZONTAL BENDS					SIDE WALL & FOOTING REINFORCEMENT
D(mm)	W&H (mm)	L (mm)	t (mm)		
100	550	550	200	T10@200 T&B IN BOTH DIR.	
125	650	650	200	T10@200 T&B IN BOTH DIR.	
150	700	700	200	T10@200 T&B IN BOTH DIR.	
200	800	900	200	T10@200 T&B IN BOTH DIR.	
250	1050	1050	250	T10@200 T&B IN BOTH DIR.	
300	1200	1400	300	T10@200 T&B IN BOTH DIR.	
350	1350	1600	350	T10@200 T&B IN BOTH DIR.	
400	1400	1700	400	T12@200 T&B IN BOTH DIR.	
450	1500	1900	450	T12@200 T&B IN BOTH DIR.	
500	1700	2100	500	T12@200 T&B IN BOTH DIR.	
600	1900	2500	600	T14@200 T&B IN BOTH DIR.	
700	2300	2800	700	T14@200 T&B IN BOTH DIR.	
800	2600	3200	800	T16@200 T&B IN BOTH DIR.	
900	2900	3500	900	T16@200 T&B IN BOTH DIR.	
1000	3200	4000	1100	T16@200 T&B IN BOTH DIR.	

THRUST BLOCKS FOR VERTICAL ELBOWS AT CREST					
D (mm)	TBW (mm)	TBL (mm)	TBH (mm)	NECK REINF.	BLOCK REINFORCEMENT
100	1200	1200	700	2x5T10/L/M	T10@200 T&B & ALL AROUND
125	1500	1500	700	2x5T10/L/M	T10@200 T&B & ALL AROUND
150	1800	1800	700	2x5T10/L/M	T10@200 T&B & ALL AROUND
200	2000	2000	1000	2x5T10/L/M	T10@200 T&B & ALL AROUND
250	2500	2500	1000	2x5T10/L/M	T10@200 T&B & ALL AROUND
300	2600	2600	1200	2x5T10/L/M	T10@200 T&B & ALL AROUND
350	3000	3000	1400	2x5T10/L/M	T10@200 T&B & ALL AROUND
400	3200	3200	1600	2x5T10/L/M	T10@200 T&B & ALL AROUND
450	3500	3500	1700	2x5T12/L/M	T12@200 T&B & ALL AROUND
500	3800	3800	1800	2x5T12/L/M	T12@200 T&B & ALL AROUND
600	4000	4000	2300	2x5T12/L/M	T12@200 T&B & ALL AROUND
700	4500	4500	2500	2x5T12/L/M	T12@200 T&B & ALL AROUND
800	5000	5000	2600	2x5T12/L/M	T12@200 T&B & ALL AROUND
900	5500	5500	2700	2x5T12/L/M	T12@200 T&B & ALL AROUND
1000	6000	6000	2800	2x5T14/L/M	T12@200 T&B & ALL AROUND

Block Size = 40" Bore	THRUST BLOCKS FOR VERTICAL ELBOWS AT SAG					
	D (mm)	FL (mm)	FW (mm)	FD (mm)	BLOCK REINFORCEMENT	NECK REINF.
	100	400	400	200	T10@200 T&B IN BOTH DIR.	2x4T10
	125	500	500	200	T10@200 T&B IN BOTH DIR.	2x4T10
	150	600	600	200	T10@200 T&B IN BOTH DIR.	2x4T10
	200	800	800	200	T10@200 T&B IN BOTH DIR.	2x4T10
	250	1000	1000	300	T12@200 T&B IN BOTH DIR.	2x4T10/L/M
	300	1200	1200	300	T12@200 T&B IN BOTH DIR.	2x4T10/L/M
	350	1400	1400	400	T12@200 T&B IN BOTH DIR.	2x4T10/L/M
	400	1600	1600	400	T14@200 T&B IN BOTH DIR.	2x4T10/L/M
450	1800	1800	500	T14@200 T&B IN BOTH DIR.	2x4T10/L/M	
500	2000	2000	500	T14@200 T&B IN BOTH DIR.	2x4T10/L/M	
600	2400	2400	600	T16@200 T&B IN BOTH DIR.	2x4T12/L/M	
700	2800	2800	700	T20@200 T&B IN BOTH DIR.	2x4T12/L/M	
800	3200	3200	800	T20@200 T&B IN BOTH DIR.	2x4T12/L/M	
900	3600	3600	900	T25@200 T&B IN BOTH DIR.	2x4T14/L/M	
1000	4000	4000	1000	T25@200 T&B IN BOTH DIR.	2x4T14/L/M	