



FOR DEAD END PLUG THRUST BLOCK AND VALVE THRUST BLOCK. SEE DRAWING 2511-06 OR 2511-12

REQUIRED DIMENSIONS & BEARING AREA

TEE & DEAD END & VALVE										
DIA (mm)	100	150	200	250	300	350	400	450	500	600
A (mm)	250	370	550	740	930	920	1000	1000	1000	1000
B (mm)	75	100	100	100	100	200	250	350	450	700
AREA (m ²)	0.14	0.28	0.47	0.71	1.00	1.44	1.87	2.35	2.88	4.11
90° BEND										
DIA (mm)	100	150	200	250	300	350	400	450	500	600
A (mm)	350	520	770	860	960	940	1000	1000	1000	1020
B (mm)	75	100	100	150	200	350	450	600	750	1100
AREA (m ²)	0.19	0.39	0.67	1.00	1.41	2.04	2.65	3.32	4.08	5.81
45° BEND										
DIA (mm)	100	150	200	250	300	350	400	450	500	600
A (mm)	190	280	420	470	600	700	850	820	960	950
B (mm)	75	100	100	150	150	200	200	300	300	500
AREA (m ²)	0.12	0.21	0.36	0.54	0.77	1.11	1.44	1.80	2.21	3.15

22.5° BEND										
DIA (mm)	100	150	200	250	300	350	400	450	500	600
A (mm)	100	170	220	290	310	410	440	510	540	640
B (mm)	75	75	100	100	150	150	200	200	250	300
AREA (m ²)	0.06	0.11	0.19	0.28	0.39	0.57	0.73	0.92	1.13	1.61
11.25° BEND										
DIA (mm)	100	150	200	250	300	350	400	450	500	600
A (mm)	100	100	120	160	200	260	310	330	380	470
B (mm)	75	75	75	75	75	75	75	100	100	100
AREA (m ²)	0.03	0.06	0.10	0.14	0.20	0.29	0.37	0.46	0.57	0.81

- NOTES:
- ALL DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE SPECIFIED.
 - DESIGN BASIS:
 - HYDRAULIC PRESSURE 1035kPa (150 psi)
 - SOIL BEARING CAPACITY 72kPa (1500 lb/sq.ft) (MEDIUM SOFT CLAY)
 - TEMPORARY BLOCKING MUST BE APPROVED BY THE ENGINEER.
 - CONCRETE STRENGTH SHALL BE 25MPa AT 28 DAYS.
 - CONCRETE TO BE TYPE SULPHATE RESISTANT ACCORDING TO CSA-A3000-13
 - CONCRETE TO BE CLEAR OF BELLS.
 - CONCRETE TO BE PLACED UNDER ALL FITTINGS.
 - CONCRETE THRUST BLOCK REQUIRED FOR ALL FITTINGS.
 - BEARING SURFACE MUST BE ON UNDISTURBED SOIL.

HORIZONTAL CONCRETE THRUST BLOCK DETAILS

APPROVED MARCH 2017	DRAWN BY DV/CW	APPROVED 	DRAWING NUMBER 2511-03
SCALE N T S	CHECKED BY David M.	DIRECTOR, WATER DISTRIBUTION AND TRANSMISSION	REVISION 0