

AREAS REQUIRED FOR CONCRETE BLOCKING FOR TEES AND BENDS ETC.

BASED ON TEST PRESSURE OF 200 P.S.I.

ALL AREAS GIVEN ARE IN SQUARE FEET (AGAINST UNDISTURBED EARTH)

SIZE AND DEGREE OF BEND	STATIC THRUST IN POUNDS	FAIRLY DRY CLAY 4000 LBS./FT ²			SOFT CLAY 2000 LBS./FT ²			GRAVEL, COARSE SAND 1600 LBS./FT ²			TIE RODS REQUIRED
		1	2	3	1	2	3	1	2	3	
2 1/2" - 6"											
11-1/4"	1,108	1	1	1	1	1	1	1	1	1	
22-1/2"	2,207	1	1	2	2	2	2	2	2	2	
45°	4,328	2	2	3	3	3	3	3	3	3	
90°	7,996	2	2	4	4	4	4	4	4	4	
PLUG	5,665	2	2	3	3	3	3	3	3	3	2-5/8"Ø
8"											
11-1/4"	1,970	1	1	1	1	1	1	1	1	1	
22-1/2"	3,922	1	1	2	2	2	2	2	2	2	
45°	7,694	2	2	4	4	4	4	4	4	4	
90°	14,215	4	4	8	8	8	8	8	8	8	
PLUG	10,053	3	3	5	5	5	5	5	5	5	2-5/8"Ø
12"											
11-1/4"	4,433	2	2	3	3	3	3	3	3	3	
22-1/2"	8,826	3	3	5	5	5	5	5	5	5	
45°	17,312	5	5	9	9	9	9	9	9	9	
90°	31,983	8	8	16	16	16	16	16	16	16	
PLUG	22,619	6	6	12	12	12	12	12	12	12	4-3/4"Ø
16"											
11-1/4"	7,881	2	2	4	4	4	4	4	4	4	
22-1/2"	15,691	4	4	8	8	8	8	8	8	8	
45°	30,779	8	8	16	16	16	16	16	16	16	
90°	56,861	15	15	29	29	29	29	29	29	29	
PLUG	40,213	10	10	21	21	21	21	21	21	21	6-3/4"

REACTION BEARING AREAS ARE IN SQUARE FEET MEASURED IN A VERTICAL PLANE IN THE TRENCH SIDE AT AN ANGLE OF 90° TO THE THRUST VECTOR.

USE 6" - 90° BEND VALVE FOR HYDRANTS FOR ADDITIONAL SAFETY FACTOR.
(2 - 5/8" Ø ROD IS ADEQUATE FOR 6" F.H. LEG)

DATE:
7/1/93

SCALE:
NTS

REVISIONS
9/1/00 MISC. REVISIONS

STANDARD DETAIL

AREAS REQUIRED FOR CONCRETE BLOCKING FOR TEES & BENDS ETC. (BASED ON TEST PRESSURE OF 200 P.S.I.)

LEXINGTON COUNTY
JOINT MUNICIPAL
WATER AND SEWER
COMMISSION

FILE NO. WL006