

TABLE 1

SOIL	SAFE BEARING LOAD (LBS/SQ FT)	FACTOR
MUCK	0	0
SOFT CLAY	1000	2.00
SAND	2000	1.00
SAND & GRAVEL	3000	0.67
SAND & GRAVEL CEMENTED WITH CLAY	4000	0.50
SHALE	10000	0.20

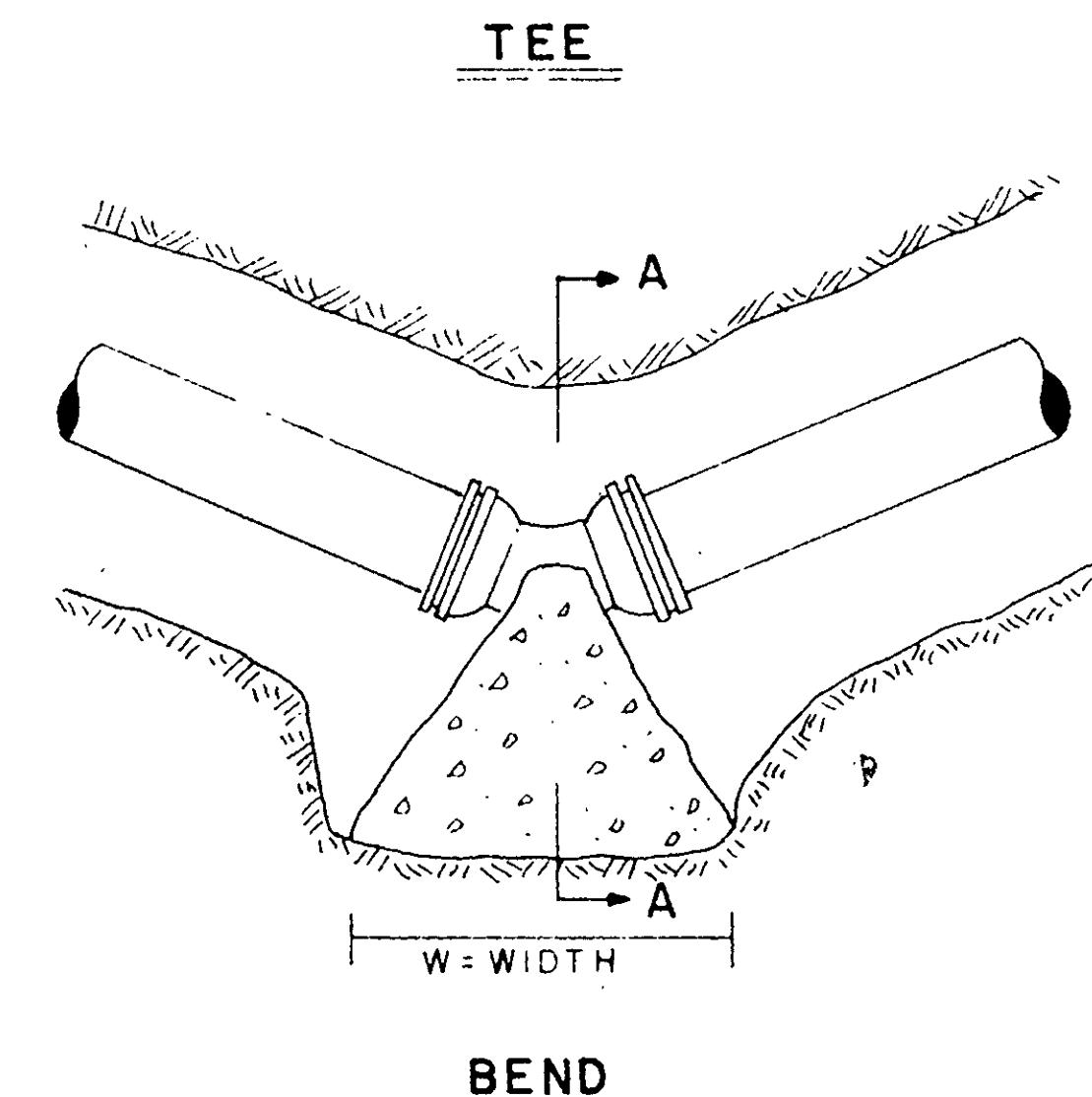


TABLE 2

REQUIRED BEARING AREAS & DIMENSIONS FOR CONCRETE THRUST BLOCKS									
PIPE	TEE	90° (1/4) BEND	45° (1/8) BEND	22 1/2° (1/16) BEND	11 1/4° (1/32) BEND				
2	0.4	0.5 x 1.0	0.5 x 1.0	0.3 x 1.0	0.1 x 1.0				
3	0.8	1.0 x 1.0	1.1 x 1.0 x 1.5	0.6 x 1.5	0.3 x 1.0	0.2 x 1.0	0.2 x 1.0	0.2 x 1.0	0.2 x 1.0
4	1.4	1.0 x 1.0	2.0 x 2.0	1.1 x 1.0 x 2.0	0.6 x 1.5	0.3 x 1.0	0.3 x 1.0	0.3 x 1.0	0.3 x 1.0
6	3.2	1.5 x 2.5	4.5 x 2.5 x 2.5	2.4 x 2.5	1.5 x 2.0	1.2 x 1.5	0.6 x 1.5	0.6 x 1.5	0.6 x 1.5
8	5.7	2.0 x 3.0	8.0 x 2.0 x 4.0	4.3 x 2.5	2.2 x 1.5 x 2.5	1.1 x 1.5	1.1 x 1.5	1.1 x 1.5	1.1 x 1.5
10	8.8	2.5 x 3.5	12.5 x 3.0 x 4.5	6.8 x 2.0 x 3.5	4.5 x 2.5 x 2.5	2.5 x 2.5	1.7 x 2.5	1.7 x 2.5	1.7 x 2.5
12	12.7	3.5 x 3.5	18.0 x 4.0 x 4.5	9.7 x 2.5 x 4.0	5.0 x 2.0 x 2.5	2.5 x 2.0	2.5 x 2.0	2.5 x 2.0	2.5 x 2.0
14	17.3	3.5 x 5.0	24.5 x 4.5 x 5.5	13.3 x 3.5 x 4.0	6.8 x 2.5 x 3.5	3.4 x 2.5	3.4 x 2.5	3.4 x 2.5	3.4 x 2.5
6	22.6	4.5 x 5.0	32.0 x 5.0 x 6.5	17.3 x 5.5 x 4.0	8.8 x 2.5 x 3.5	4.4 x 2.5	4.4 x 2.5	4.4 x 2.5	4.4 x 2.5
18	28.6	5.0 x 6.0	40.5 x 5.5 x 7.0	21.9 x 4.0 x 5.5	11.2 x 3.0 x 4.0	5.6 x 3.0	5.6 x 3.0	5.6 x 3.0	5.6 x 3.0
20	35.3	5.5 x 6.5	50.0 x 6.5 x 8.0	27.0 x 4.5 x 6.0	13.8 x 3.5 x 4.0	6.9 x 3.5	6.9 x 3.5	6.9 x 3.5	6.9 x 3.5

NOTES:
 1. APPLIES TO 5/8" RODS AS WELL.
 2. ALL THRUST BLOCKS SHALL BE 3000 PSI. Poured concrete.
 3. CONCRETE TO BE PLACED SO AS NOT TO INTERFERE WITH REMOVING OR INSTALLING ANY OF THE JOINING HARDWARE.
 4. VALUES FOR TEE ALSO APPLY TO END PLUGS, CAPS AND TAPPING SLEEVES.
 5. REQUIRED BEARING AREA ARE DUE TO THRUSTS CAUSED BY 100 PSI WORKING PRESSURE PLUS 50% (75 PSI) SURGE ALLOWANCE RESULTING IN 225 PSI TOTAL INTERNAL PRESSURE, NOMINAL PIPE DIAMETER.
 6. REQUIRED BEARING AREAS ARE BASED ON ALLOWABLE SOIL BEARING CAPACITY OF 2000 LBS PER SQ FT. FOR SAND DUE TO OTHER SOILS, THE BEARING AREA SHOULD BE DETERMINED BY THE ENGINEER BY MULTIPLYING THE AREA GIVEN IN TABLE 1 BY THE APPROPRIATE PIPE SIZE AND FITTING BY THE LISTED FACTOR.
 7. MUCK, PLAT OR RECENTLY PLACED FILL, ALL THRUSTS SHALL BE RESTRICTED BY PILES OR RODS TO SOLID FOUNDATIONS, OR BY REMOVING SUCH UNSTABLE MATERIAL AND REPLACEMENT WITH MATERIAL OF SUFFICIENT STABILITY TO RESIST THE THRUSTS, ALL AS PER.
 8. THIS BEARING AREA W DETERMINED BY SIZE OF PIPE 1
 9. THIS BEARING AREA W DETERMINED BY SIZE OF PIPE 2
 10. POLYETHYLENE OR BUILDING PAPER TO PREVENT CONCRETE FROM BONDING TO PLUG AND HARDWARE.
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