



**THRUST BLOCK TABLE**

TYPE OF FITTING	90° BEND & BURIES	45° BEND	22 1/2° BEND	11 1/4° BEND	TEE OR DEAD END	
TYPICAL PLAN VIEW						
REQUIRED BEARING TOTAL AREA IN SQUARE FEET						
Pipe Size	4"	2.6	1.4	0.8	0.4	1.9
	6"	5.3	2.9	1.5	0.8	3.8
	8"	9.1	5.0	2.6	1.3	6.5
	10"	13.7	7.5	3.8	1.9	9.7
	12"	19.4	10.5	5.4	2.7	13.7

**THRUST BLOCK NOTES**

1. Thrust blocks to be constructed of 2500 Class 3 Caltrans concrete.
2. Blocks to be poured against undisturbed soil.
3. Joints to be kept free of concrete. Allow working room.
4. Abrupt changes in vertical alignment shall be anchored per gravity block detail.
5. Areas given are for PVC C900 class 200 pipe at a static test pressure of 200 psi in soil with 2,000 psf bearing capacity. Subject to field conditions.
6. Tapping sleeves shall have thrust blocks sized the same as tees.

**THRUST BLOCK DETAIL**

N.T.S.

**THRUST CALCULATION TABLE**

TYPE OF FITTING	90° BEND & BURIES	45° BEND	22 1/2° BEND	11 1/4° BEND	TEE OR DEAD END	
TYPICAL PLAN VIEW						
THRUST FORCE T, IN POUNDS						
Pipe Size	4"	5120	2770	1415	710	3620
	6"	10580	5725	2920	1470	7480
	8"	18200	9850	5020	2525	12865
	10"	27370	14815	7555	3795	19355
	12"	38710	20950	10680	5370	27370

**THRUST CALCULATION NOTES**

1. CALCULATIONS BASED ON NFPA 24, TABLE A.10.8.2(a), 2010 EDITION
2. THRUST CALCULATED FOR 200 PSI STATIC PRESSURE

**THRUST CALCULATIONS**

N.T.S.