



- NOTES:**
- 1) THRUST BLOCKS ONLY REQUIRED WHEN CALLED OUT ON PLANS. CONCRETE THRUST BLOCKING TO BE POURED AGAINST UNDISTURBED EARTH. KEEP CONCRETE CLEAR OF JOINT AND ACCESSORIES.
 - 3) IF NOT SHOWN ON PLANS, REQUIRED BEARING AREAS AT FITTING SHALL BE AS INDICATED BELOW, ADJUSTED IF NECESSARY, TO CONFORM TO THE TEST PROCEDURE (S) AND ALLOWABLE SOIL BEARING STRESS (ES) STATED IN THE SPECIAL SPECIFICATIONS.
 - 4) BEARING AREAS AND SPECIAL BLOCKING DETAILS SHOWN ON PLANS TAKE PRECEDENCE OVER BEARING AREAS AND BLOCKING DETAILS SHOWN ON THIS STANDARD DETAIL.
 - 5) BUILDING PAPER OR VISQUINE SHALL BE PLACED BETWEEN CONCRETE AND FITTINGS.
 - 6) ALL POURED IN PLACE CONCRETE SHALL HAVE A (28) DAY STRENGTH OF 3,000 P.S.I..
 - 7) BELOW BEARING AREAS BASED ON TEST PROCEDURE OF 150 P.S.I. AND AN ALLOWABLE SOIL BEARING STRESS OF 2,000 POUNDS PER SQUARE FOOT. TO COMPUTE BEARING AREAS FOR DIFFERENT TEST PRESSURES AND SOIL BEARING STRESSES, USE THE FOLLOWING EQUATION: BEARING AREA = (TEST PRESSURE/150) X (2,000/SOIL BEARING STRESS) X (TABLE VALUE). BEARING AREAS IN SQUARE FEET.

FITTING SIZE (IN.)	TEE, WYE, PLUG OR CAP	90° BEND PLUGGED CROSS	TEE PLUGGED ON RUN		45° BEND	22 1/2° BEND	11 1/4° BEND
			A ₁	A ₂			
4	1.0	1.4	1.9	1.4	1.0	-	-
6	2.0	3.0	4.3	3.0	1.6	1.0	-
8	3.8	5.3	7.6	5.4	2.9	1.5	1.0
10	5.9	8.4	11.8	8.4	4.6	2.4	1.2
12	8.5	12.0	17.0	12.0	6.6	3.4	1.7
14	11.5	16.3	23.0	16.3	8.9	4.6	2.3
16	15.0	21.3	30.0	21.3	11.6	6.0	3.0
18	19.0	27.0	38.0	27.0	14.6	7.6	3.8
20	23.5	33.3	47.0	33.3	18.1	9.4	4.7
24	34.0	48.0	68.0	48.0	26.2	13.6	6.8



City of Lake Oswego
Engineering Division
Erica Rooney, P.E. City Engineer

THRUST BLOCKING

W5-03

EFFECTIVE DATE: APRIL 2023

NOT TO SCALE

DRAWING NUMBER