

Computation of T values for Thrust Blocks

Test pressure (psi) 150

Pipe Diameter (in)	T value in feet				
	90 degree bend	45 degree bend	22.5 degree bend	11.5 degree bend	Dead End
4	0.25	0.25	0.25	0.25	0.5
6	0.5	0.25	0.25	0.25	0.75
8	1	0.5	0.25	0.25	1.25
10	1.25	0.75	0.5	0.25	1.75
12	1.5	1	0.5	0.25	2
16	2.25	1.5	0.75	0.5	2.75

Test pressure (psi) 200

Pipe Diameter (in)	T value in feet				
	90 degree bend	45 degree bend	22.5 degree bend	11.5 degree bend	Dead End
4	0.5	0.25	0.25	0.25	0.5
6	0.75	0.5	0.25	0.25	1
8	1.25	0.75	0.25	0.25	1.5
10	1.5	1	0.5	0.25	2
12	2	1.25	0.75	0.5	2.5
16	2.75	1.75	1	0.5	3.5

Test pressure (psi) 250

Pipe Diameter (in)	T value in feet				
	90 degree bend	45 degree bend	22.5 degree bend	11.5 degree bend	Dead End
4	0.5	0.25	0.25	0.25	0.75
6	1	0.5	0.25	0.25	1.25
8	1.5	1	0.5	0.25	1.75
10	1.75	1.25	0.75	0.25	2.25
12	2.25	1.5	1	0.5	2.75
16	3.25	2	1.25	0.75	4

Test pressure (psi) 300

Pipe Diameter (in)	T value in feet				
	90 degree bend	45 degree bend	22.5 degree bend	11.5 degree bend	Dead End
4	0.5	0.25	0.25	0.25	0.75
6	1	0.75	0.25	0.25	1.5
8	1.5	1	0.5	0.25	2
10	2	1.25	0.75	0.5	2.75
12	2.5	1.75	1	0.5	3.25
16	3.5	2.25	1.5	0.75	4.25

Thrust = $2PA\sin(\delta/2)$

P = pressure in PSI

A = pipe cross sectional area

Assume soil bearing capacity = 2000 psf

Bearing Area = $2T^2 + 3T(D+6") + (D+6")^2$

**AUGUSTA COUNTY SERVICE AUTHORITY
VERONA, VIRGINIA**

SCALE: NONE

DRAWN BY:

DATE: AUG. 2004

REVISED:

**TYPICAL THRUST BLOCK DETAIL (GENERAL)
FOR HORIZONTAL AND
SAG VERTICAL ANCHORS**

DRAWING NUMBER: G-3B

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