



MINIMUM DIMENSIONS IN FEET FOR CONCRETE BLOCKING

BEND DEGREES	SIZE	A (FT)	B (FT)	C (IN)	D (FT)	VOLUME CU.YDS APPROX	THRUST LBS
	6"	1.0	2.0	6	1.0	0.04	1,385
	8"	1.0	2.0	7	1.0	0.05	2,465
	10"	1.0	2.0	9	1.0	0.07	3,850
11 1/4	12"	1.0	2.5	11	1.5	0.12	5,550
	14"	2.0	2.5	11	2.0	0.24	7,550
	16"	2.0	2.5	12	2.0	0.26	9,860
	20"	2.0	3.5	15	2.5	0.48	15,405
	24"	2.0	4.0	18	3.0	0.7	22,185
	6"	1.0	2.0	6	1.0	0.04	2,760
	8"	1.0	2.0	7	1.5	0.06	4,905
	10"	1.0	2.0	9	2.0	0.1	7,665
22 1/2	12"	1.0	3.0	11	2.0	0.16	11,040
	14"	2.0	3.5	11	2.5	0.37	15,025
	16"	2.0	3.5	12	3.0	0.45	19,625
	20"	2.0	4.0	15	4.0	0.74	30,665
	24"	3.0	5.0	18	4.5	1.47	44,160
	6"	1.0	2.0	6	1.5	0.06	5,415
	8"	1.0	2.5	7	2.0	0.1	9,625
	10"	2.0	3.5	9	2.5	0.31	15,040
45	12"	2.0	3.5	11	3.0	0.41	21,655
	14"	2.0	4.0	11	3.75	0.56	29,475
	16"	3.0	5.0	12	4.0	1.45	38,495
	20"	4.0	6.0	15	5.0	2.06	60,145
	24"	4.0	7.5	18	6.5	3.35	91,610
	6"	1.0	2.5	12	2.0	0.13	10,005
	8"	2.0	3.0	14	3.0	0.38	17,785
	10"	2.5	4.5	18	3.0	0.74	27,785
90	12"	3.0	5.0	20	4.0	1.24	40,010
	14"	3.0	5.5	24	5.0	1.77	54,460
	16"	4.0	6.5	26	5.5	2.91	71,125
	20"	4.0	8.0	32	7.0	4.68	111,135
	24"	5.0	10.0	40	8.0	8.5	160,035
	6"	1.0	2.5	12	1.5	0.1	7,070
	8"	1.7	3.25	14	2.0	0.27	12,565
	10"	2.0	4.0	18	2.5	0.5	19,635
TEES AND PLUGS	12"	2.5	4.5	20	3.25	0.91	28,275
	14"	3.0	5.0	24	4.0	1.41	38,485
	16"	3.0	5.0	26	5.0	1.77	50,265
	20"	4.0	7.0	32	5.75	3.69	78,540
	24"	6.0	9.0	40	6.5	7.94	113,100

NOTES:

ENGINEER SHALL VERIFY SOIL CONDITIONS BEFORE THRUST BLOCK DESIGN IS IMPLEMENTED.

DESIGN DATA

1. DIMENSION OF THRUST BLOCK IN FEET BASED ON 2000 POUNDS PER SQUARE FOOT SOLI BEARING PRESSURE AND 250 PSI TEST PRESSURE. ACTUAL INSIDE DIAMETER OF DIP, CLASS 50, USED AS STANDARDS.
2. CONCRETE SHALL BE CLASS A, 3000 PSI. UNDER ADVERSE CONSTRUCTION CONDITIONS, CONCRETE SHALL BE "HIGH EARLY" TYPE.

REVISIONS

City of Cumming
 Department of Utilities - Distribution and Collection Division



**THRUST RESTRAINT:
 DOWNWARD THRUST**

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