



ROD REQUIREMENTS	
NO. OF RODS	BRANCH SIZE
4"	2
6"	2
8"	4
12"	4
16"	6
24"	6
30"	8
36"	8

**NOTES:**

1. STEEL RODS AND BOLTS SHALL BE 3/4" HOT DIPPED GALVANIZED.
2. SEE STANDARD THRUST BLOCK. TABLES R-7 AND R-8 FOR CONCRETE.
3. CONCRETE SHALL NOT CONTACT BOLTS OR ENDS OF MECHANICAL FITTINGS.

**\*\* Minor Text Edits**

CITY OF RALEIGH				
DEPARTMENT OF PUBLIC UTILITIES				
VALVE RESTRAINT AT TEES AND CROSSES FOR LINES (4"-24")				
DWG. NO.	REVISIONS	DATE	REVISIONS	DATE
R - 12	RRH	3-31-00	D.H.L.	6-16-08
	A.B.B.	4-19-04	J.P.S.	10-19-10