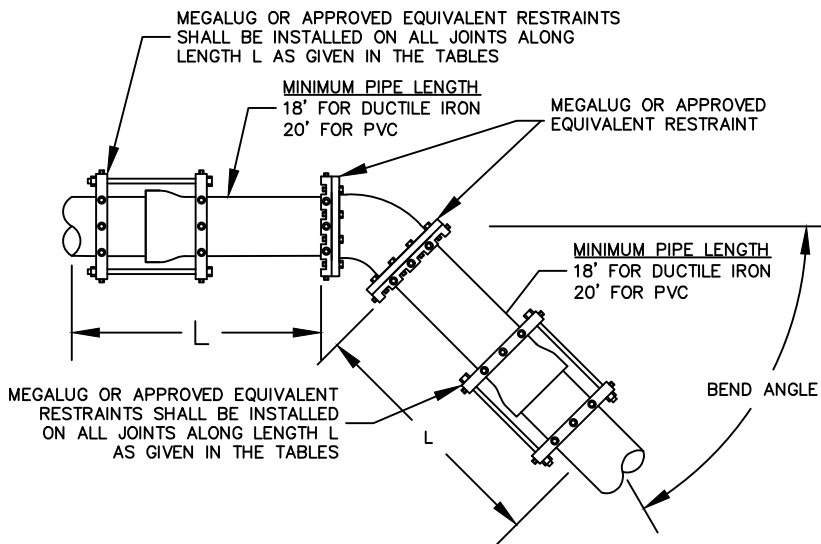


PVC PIPE

MECHANICAL RESTRAINT SPECIFICATION "L" IN FEET FOR BENDS ON SPECIFIED DIAMETERS															
TYPE OF PIPE	12"-4"	12"-6"	12"-8"	12"-10"	12"-12"	10"-4"	10"-6"	10"-8"	10"-10"	8"-4"	8"-6"	8"-8"	6"-4"	6"-6"	4"-4"
PRESSURIZED IRRIGATION	20	20	57	150	150	20	20	74	118	20	34	91	20	55	23
CULINARY WATER	20	20	20	74	74	20	20	29	56	20	20	40	20	20	20

DUCTILE IRON PIPE

MECHANICAL RESTRAINT SPECIFICATION "L" IN FEET FOR BENDS ON SPECIFIED DIAMETERS															
TYPE OF PIPE	12"-4"	12"-6"	12"-8"	12"-10"	12"-12"	10"-4"	10"-6"	10"-8"	10"-10"	8"-4"	8"-6"	8"-8"	6"-4"	6"-6"	4"-4"
PRESSURIZED IRRIGATION	18	18	38	100	100	18	18	49	78	18	23	60	18	36	18
CULINARY WATER	18	18	18	49	49	18	18	19	37	18	18	27	18	18	18



PVC PIPE MECHANICAL RESTRAINT SPECIFICATION "L" IN FEET FOR BENDS ON SPECIFIED DIAMETERS

TYPE OF PIPE	11 1/4° BEND				22 1/2° BEND				45° BEND				90° BEND							
	12"	10"	8"	6"	4"	12"	10"	8"	6"	4"	12"	10"	8"	6"	4"	12"	10"	8"	6"	4"
PRESSURIZED IRRIGATION	20	20	20	20	20	20	20	20	20	20	29	24	21	20	20	69	59	50	39	28
CULINARY WATER	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	48	41	34	26	20

DUCTILE IRON PIPE

MECHANICAL RESTRAINT SPECIFICATION "L" IN FEET FOR BENDS ON SPECIFIED DIAMETERS																				
TYPE OF PIPE	11 1/4° BEND				22 1/2° BEND				45° BEND				90° BEND							
	12"	10"	8"	6"	4"	12"	10"	8"	6"	4"	12"	10"	8"	6"	4"	12"	10"	8"	6"	4"
PRESSURIZED IRRIGATION	18	18	18	18	18	18	18	18	18	18	24	21	18	18	18	58	50	42	33	24
CULINARY WATER	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	40	33	28	21	18

NOTES:

1. ALL RESTRAINING DEVICES SHALL BE INSTALLED ACCORDING TO THESE REQUIREMENTS OR MANUFACTURER SPECIFICATIONS, WHICHEVER IS MOST CONSERVATIVE.
2. FOR TRANSITIONS BETWEEN PVC AND DUCTILE IRON PIPE USE THE PVC TABLE.
3. MECHANICAL RESTRAINTS FOR PIPE LARGER THAN 12" IN DIAMETER MUST BE DESIGNED BY A LICENSED ENGINEER AND APPROVED BY CITY ENGINEER.
4. ALL RESTRAINTS ON VERTICAL BENDS MUST BE DESIGNED BY A LICENSED PROFESSIONAL ENGINEER AND APPROVED BY CITY ENGINEER.
5. MECHANICAL RESTRAINTS MAY ONLY BE USED ON PVC OR DUCTILE IRON PIPE.
6. EXTERNAL BELL RESTRAINTS REQUIRED AT FIRST JOINT FROM FITTING REGARDLESS OF LENGTH/DISTANCE FROM FITTING