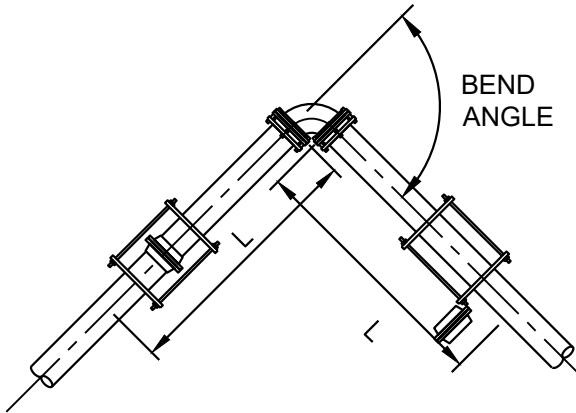


TREAT COMPOUND/COMBINATION BENDS
AS NEXT LARGEST SINGLE FITTING.



BEND ANGLE	NOMINAL PIPE SIZE							
	4"	6"	8"	10"	12"	14"	16"	18"
90	12	17	21	25	30	33	37	41
45	5	7	9	11	13	14	16	17
22.5	3	4	5	5	6	7	8	9
11.25	2	2	3	3	3	4	4	4

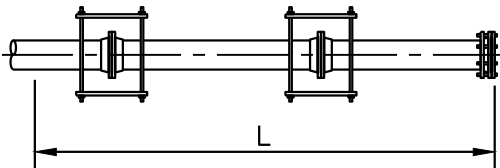
RESTRAINED LENGTHS "L" (IN FEET)

HORIZONTAL BEND

GENERAL NOTES ON USE OF RESTRAINED JOINT LENGTHS & HORIZONTAL BEND

THESE RESTRAINED LENGTH CALCULATIONS ARE BASED ON
THE FOLLOWING DESIGN CRITERIA.

1. ALL JOINTS WITHIN THE LENGTH "L" ON EACH BRANCH
MUST BE RESTRAINED. USE RETAINER GLAND AT
MECHANICAL JOINTS AND HARNESS ON PUSH-ON PIPE
PER SPECIFICATIONS.
2. CALCULATIONS BASED UPON SOIL TYPE ML PER ASTM
D-2487, TRENCH COMPACTION MINIMUM 90% RELATIVE
PER ASTM D-1557 AND D-2937, 1.5 SAFETY FACTOR,
100 PSI TEST PRESSURE, PIPE COVER 3 FT. MINIMUM.
FOR OTHER CONDITIONS, INCREASE LENGTH "L" PER
JOINT RESTRAINT MANUFACTURER REQUIREMENTS.



DEAD END - PVC PIPE SIZE

4	6	8	10	12	14	16	18
35	50	65	77	91	104	117	129

RESTRAINED LENGTHS "L" (IN FEET)

DEAD END FOR PVC PIPE

REVISION DATE	MADERA VALLEY WATER COMPANY		Std. Dwg.
20FEB13	PVC PIPE RESTRAINTS		W-17
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