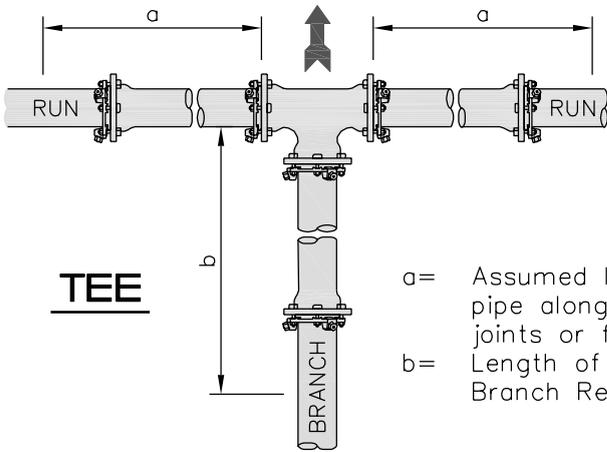
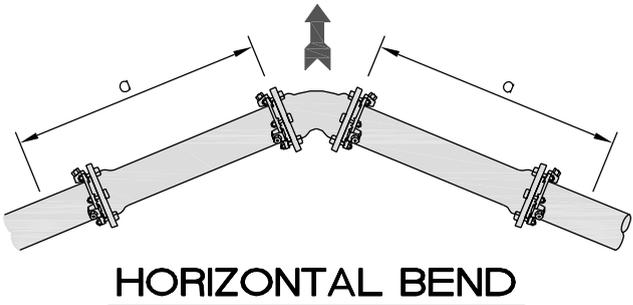


# Restraint Length Chart (for Fittings)

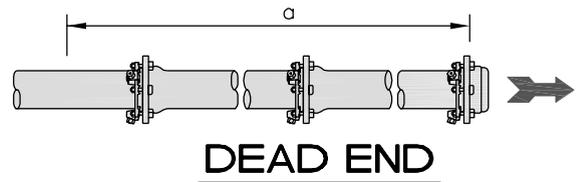
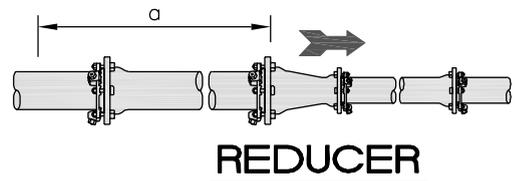
Nominal Size	Tee							Horizontal Bend				Reducer		Dead End
	a		b (branch)					a				a		a
		4"	6"	8"	12"	16"	24"	11 1/4°	22 1/2°	45°	90°	Smaller Line Size	Restraint Length	Restraint Length
6"	9'	1'	14'	-	-	-	-	2'	4'	7'	17'	4"	19'	36'
8"	9'	1'	7'	9'	-	-	-	3'	5'	9'	22'	6"	20'	47'
12"	9'	1'	1'	12'	43'	-	-	3'	6'	13'	30'	8"	35'	65'
16"	9'	1'	1'	1'	33'	61'	-	4'	8'	16'	39'	12"	36'	84'
24"	9'	1'	1'	1'	13'	41'	94'	6'	11'	23'	55'	16"	64'	118'
<i>See Note 1</i>							<i>See Note 2</i>							

## Table Design Assumptions

- Restrained pipe: DIP
- Soil Type: SM, CL (restraint lengths would be less if CL were to be computed)
- Safety Factor: 1.5:1 (covers most installations)
- Trench Bury: Pipe bedding in 4" of loose soil with backfill lightly consolidated to top of pipe.
- Bury Depth: 3 ft.
- Test Pressure: 150 psi



a = Assumed length of solid pipe along run without joints or fittings.  
 b = Length of Restrained Branch Required



### NOTES:

1. If the length of the solid pipe on either side of the tee or the diameters on any leg of the tee varies, this table does not apply and the restraint length must be calculated.
2. If the diameter of the smaller pipe is anything other than what is shown, restraint length must be calculated.
3. If any of the assumptions vary from what is shown in the table, the restraint length must be calculated.



## TOWN of CLAYTON

USE WITH THE TOWN of CLAYTON STANDARD SPECIFICATIONS ONLY

# RESTRAINT LENGTH CHART (FOR FITTINGS)

SCALE: Not To Scale	DETAIL # 2512.05
REVISION DATE: July, 2010	SHEET #: 1 of 1