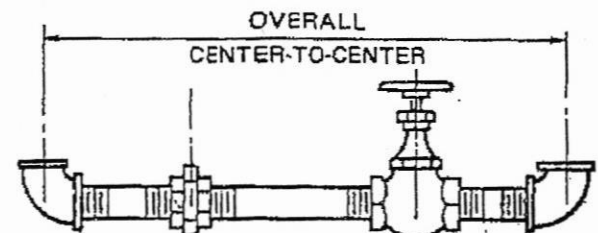
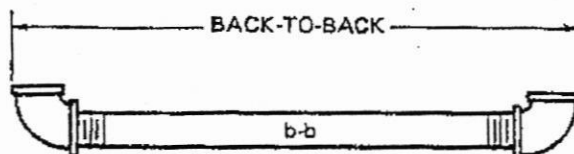
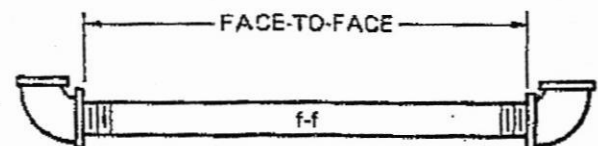
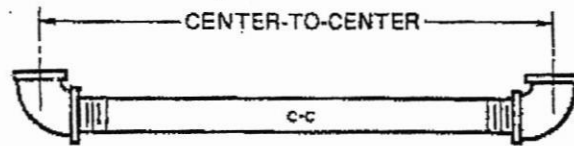
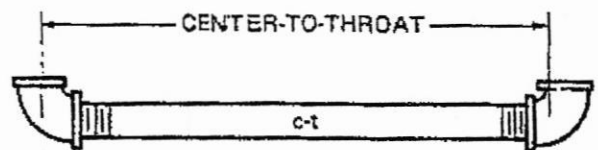
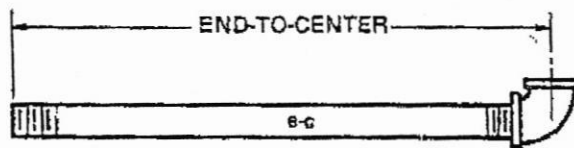
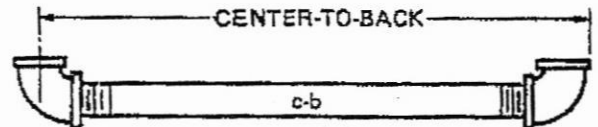
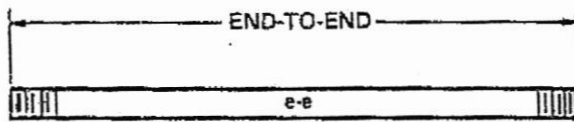


UNIT 8

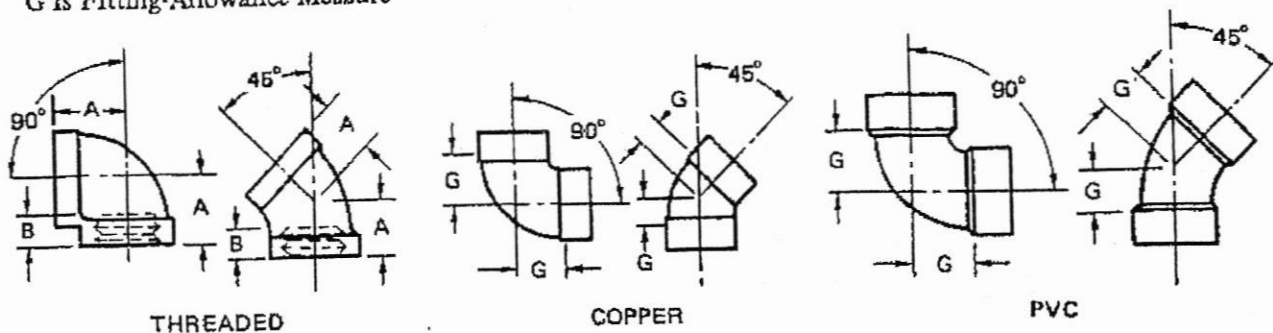
ALLOWANCE FOR THREADED FITTINGS

Pipe length is measured along the centerlines. When two centerlines cross there is a center point. These center points are located in a fitting. Center-to-center and end-to-center measurements are often made on the job. The pipe is cut to an end-to-end length. The end-to-end is always shorter than the center-to-center because the pipe does not thread into a fitting as far as the center point. The illustration shows various ways of measuring pipe.



DATA 5
ELBOWS - 90° and 45° - THREADED, COPPER, PVC

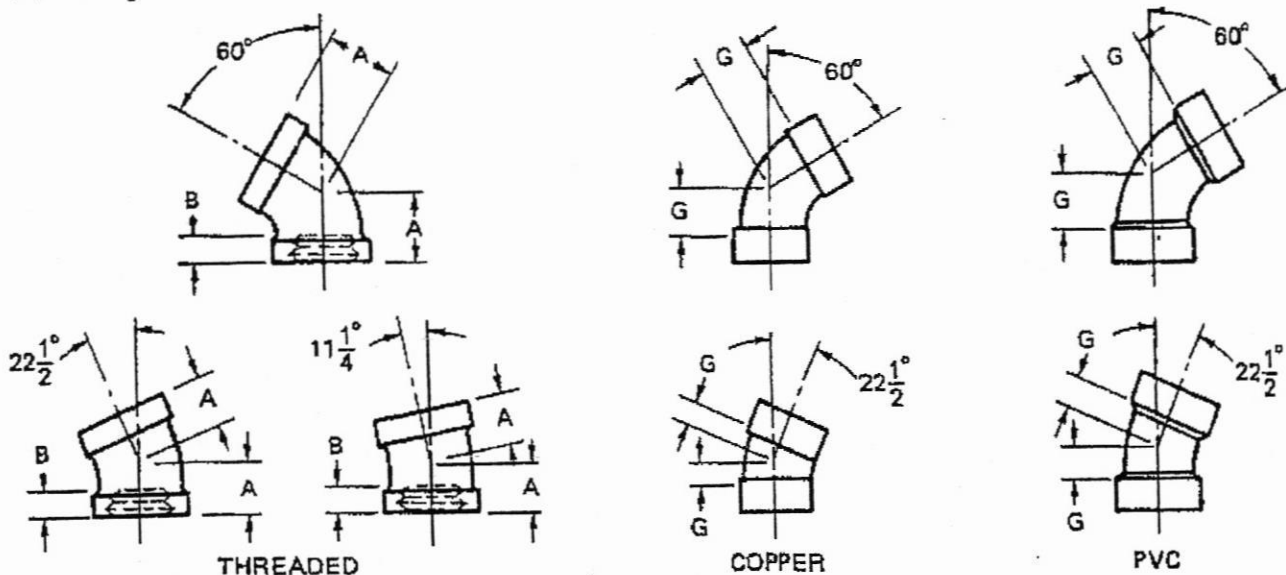
A is Center-to-Face Measure
 B is Thread-in Measure
 G is Fitting-Allowance Measure



Nominal Pipe Size (inches)	Threaded			Copper		PVC	
	90°	45°	B (inches)	90°	45°	90°	45°
	A (inches)	A (inches)		G (inches)	G (inches)	G (inches)	G (inches)
3/8	1	3/4	3/8	5/16	3/16	3/8	1/4
1/2	1 1/8	3/4	1/2	3/8	3/16	1/2	1/4
3/4	1 3/8	1	1/2	1/2	1/4	9/16	5/16
1	1 1/2	1 1/8	1/2	3/4	5/16	11/16	5/16
1 1/4	1 3/4	1 5/16	1/2	1 1/8	7/16	1 9/16	1
1 1/2	1 15/16	1 7/16	1/2	1 5/16	9/16	1 3/4	1 1/8
2	2 1/4	1 11/16	1/2	1 7/8	3/4	2 5/16	1 1/2
2 1/2	2 11/16	2 1/16	3/4				
3	3 1/16	2 3/16	1	2 7/8	1 1/8	3 1/16	1 3/4
4	3 13/16	2 5/8	1	3 3/4	1 1/2	3 7/8	2 3/16

DATA 6
ELBOWS – 60°, 22 1/2°, and 11 1/4° – THREADED, COPPER, PVC

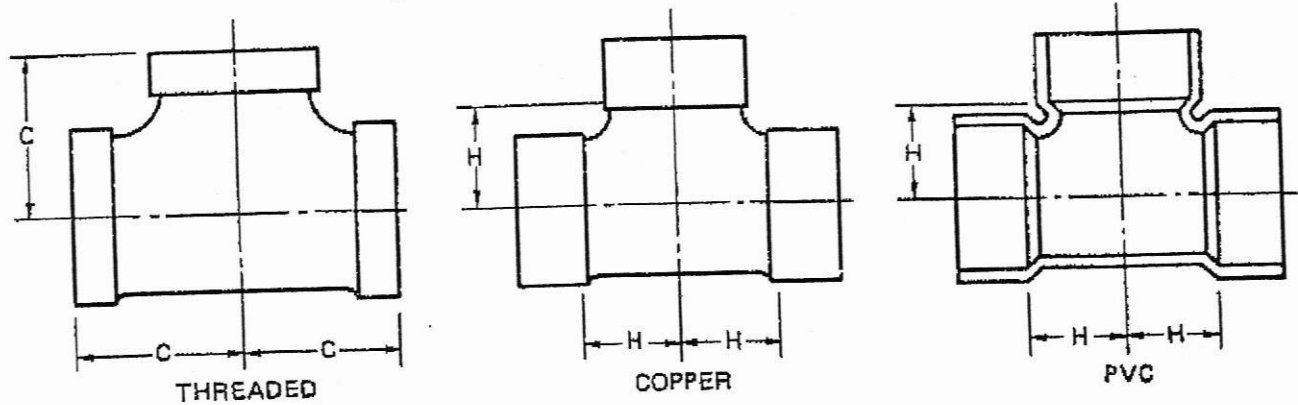
A is Center-to-Face Measure
 B is Thread-in Measure
 G is-Fitting Allowance Measure



Nominal Pipe Size (inches)	Threaded			B (inches)	Copper		PVC	
	60°	22 1/2°	11 1/4°		60°	22 1/2°	60°	22 1/2°
	A (inches)	A (inches)	A (inches)		G (inches)	G (inches)	G (inches)	G (inches)
1 1/4	1 9/16	1 1/8	1 1/16	1/2	5/8	3/16		
1 1/2	1 3/4	1 1/4	1 1/4	1/2	13/16	1/4	1	1/2
2	2 3/16	1 1/2	1 3/8	1/2	1 1/16	5/16	1 5/16	11/16
2 1/2	2 1/2	2	1 5/8	3/4				
3	2 13/16	1 15/16	1 13/16	1	1 5/16	1/2	1 11/16	13/16
4	3 3/8	2 1/8	2 1/4	1	2 3/16	11/16	2 1/16	1

DATA 7
TEES - THREADED, COPPER, PVC

C is Center-to-Face Measure
B is Thread-in Measure
H is Fitting-Allowance Measure



Size (inches)	Threaded C (inches)	B (inches)	Copper H (inches)	PVC H (inches)
3/8	1	1/2	5/16	3/8
1/2	1 1/8	1/2	3/8	1/2
3/4	1 3/8	1/2	1/2	9/16
1	1 1/2	1/2	3/4	11/16
1 1/4	1 3/4	1/2	*	*
1 1/2	1 15/16	1/2		
2	2 1/4	1/2		
2 x 1 1/2	2 1/4	1/2		
2 1/2	2 11/16	3/4		

**Copper and PVC use a Tee Wye on vent lines*