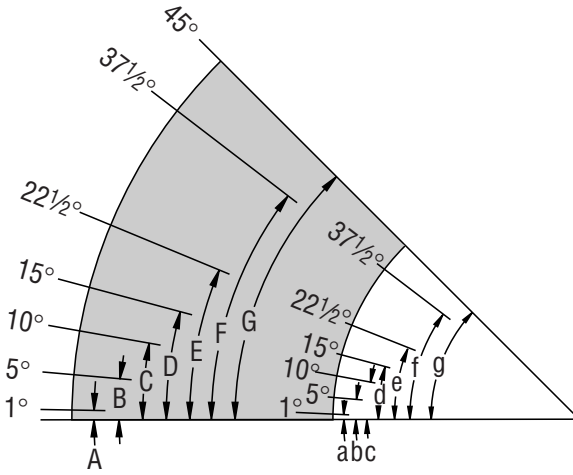
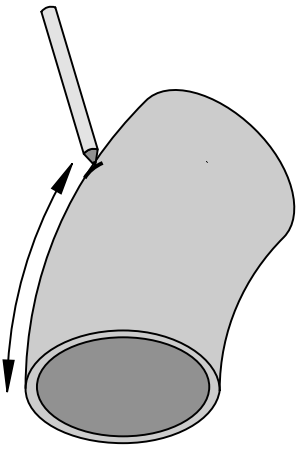


# HOW TO CUT ODD-ANGLE ELBOWS

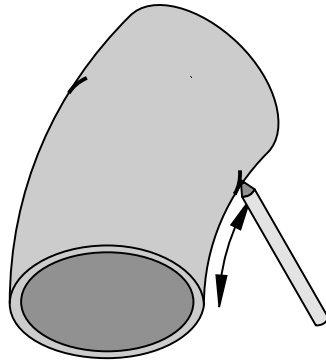


NOM SIZE	OUTSIDE ARC						
	A	B	C	D	E	F	G
2	5/32	3/8	23/32	13/32	121/32	23/4	39/32
2 1/2	3/32	7/16	29/32	111/32	21/32	33/8	41/16
3	7/32	9/16	11/8	15/8	215/32	43/32	429/32
3 1/2	1/8	5/8	19/32	129/32	227/32	43/4	511/16
4	9/32	23/32	17/16	25/32	31/4	513/32	615/32
5	3/16	29/32	125/32	211/16	41/32	623/32	81/16
6	7/32	11/16	25/32	37/32	427/32	81/16	921/32
8	9/32	17/16	227/32	49/32	613/32	1011/16	1213/16
10	11/32	125/32	39/16	511/32	8	1311/32	16
12	7/16	21/8	41/4	63/8	99/16	1531/32	195/32
14	1/2	27/16	47/8	75/16	11	185/16	22
16	9/16	213/16	519/32	83/8	129/16	2015/16	251/8
18	5/8	31/8	69/32	97/16	141/8	239/16	289/32
20	11/16	31/2	7	1015/32	1523/32	263/16	3113/32
22	3/4	327/32	711/16	1117/32	179/32	2813/16	349/16
24	27/32	43/16	83/8	129/16	1827/32	3113/32	3711/16
26	29/32	417/32	93/32	135/8	2013/32	341/32	4027/32
30	11/32	51/4	1015/32	153/4	239/16	391/4	471/8
34	15/32	529/32	1127/32	1713/16	2623/32	4417/32	533/8
36	17/32	61/4	1217/32	187/8	287/32	47	5617/32
42	17/16	75/16	145/8	22	3231/32	5431/32	6515/16

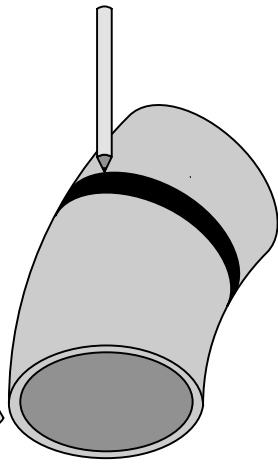
## HOW TO CUT ODD-ANGLE ELBOWS



**Step1**  
Measure distance on outside arc using the values from the table on the previous page and make a mark.



**Step2**  
Measure distance on inside arc using the values from the table below and make a mark.



**Step1**  
Wrap tape around elbow and mark cutting line

Nom SIZE	INSIDE ARC						
	AA	BB	CC	DD	EE	FF	GG
2	1/32	5/32	5/16	15/32	23/32	13/16	17/16
2 1/2	3/32	3/16	13/32	19/32	29/32	1 1/2	1 13/16
3	3/32	1/4	1/2	23/32	13/32	1 13/16	25/32
3 1/2	1/16	9/32	9/16	27/32	19/32	2 1/8	29/16
4	1/16	5/16	2 1/32	3 1/32	1 15/32	27/16	2 15/16
5	5/32	13/32	13/16	1 1/4	1 27/32	33/32	3 23/32
6	3/32	1/2	1	1 1/2	27/32	3 23/32	4 15/32
8	1/8	1 1/16	1 11/32	2	3 1/32	5 1/32	6 1/32
10	5/32	27/32	1 11/16	2 17/32	3 25/32	6 5/16	7 9/16
12	7/32	1	2 1/32	3 1/16	4 9/16	7 19/32	9 1/8
14	1/4	17/32	27/16	3 2 1/32	5 1/2	9 5/32	11
16	9/32	1 13/32	2 13/16	4 3/16	6 3/16	10 15/32	12 5/8
18	5/16	19/16	3 1/8	4 23/32	7 1/16	11 25/32	14 1/8
20	1 1/32	1 3/4	3 1/2	5 1/4	7 27/32	13 3/32	15 1 1/16
22	3/8	1 29/32	3 27/32	5 3/4	8 5/8	14 3/8	17 9/32
24	13/32	23/32	4 3/16	6 9/32	9 7/16	15 1 1/16	18 27/32
26	15/32	29/32	4 17/32	6 13/16	10 7/32	17 1/32	20 13/32
30	17/32	2 5/8	5 1/4	7 7/8	11 25/32	19 5/8	23 9/16
34	19/32	2 31/32	5 29/32	8 29/32	13 3/8	22 9/32	26 1 1/16
36	5/8	2 13/16	6 1/4	9 7/16	14 1/8	23 5/8	28 1/4
42	23/32	3 2 1/32	7 5/16	10 19/32	16 1/2	26 3/8	32 3 1/32