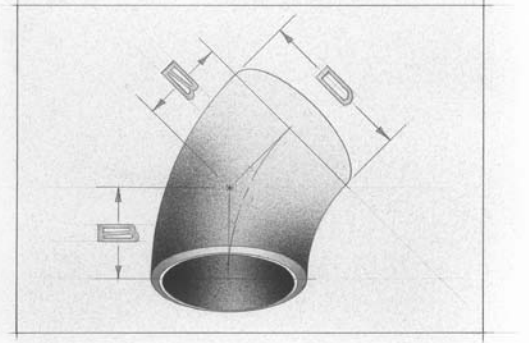


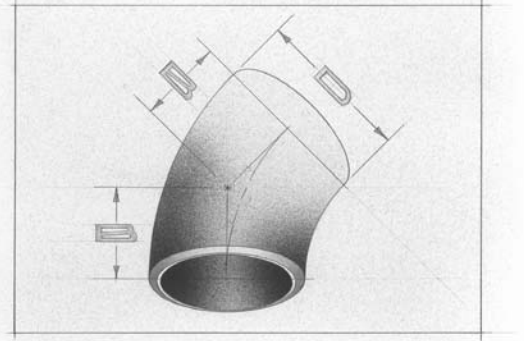
# Long Radius 45° ELBOWS



Key			Nominal Wall Thickness: inches mm Inside Diameter: inches mm Approximate Weight: Pounds (see page 3 for Kg)													
			Schedule													
Nominal Pipe Size	"D" Outside Diameter at Bevel	"B" Center-to-End	L.W.G.	10	20	30	40	STD WT	60	XS	80	100	120	140	160	XXS
inches mm	inches mm	inches mm														
½"	.84	.63	-	-	-	-	.109	.109	-	.147	.147	-	-	-	.188	.294
			-	-	-	-	2.769	2.769	-	3.734	3.734	-	-	-	4.775	7.468
			-	-	-	-	.622	.622	-	.546	.546	-	-	-	.464	.252
			-	-	-	-	15.799	15.799	-	13.868	13.868	-	-	-	11.786	6.401
			-	-	-	-	0.1	0.1	-	0.2	-	-	-	-	-	0.2
¾"	1.05	.75	-	-	-	-	.113	.113	-	.154	.154	-	-	-	.219	.308
			-	-	-	-	2.870	2.870	-	3.912	3.912	-	-	-	5.563	7.823
			-	-	-	-	.824	.824	-	.742	.742	-	-	-	.612	.434
			-	-	-	-	20.930	20.930	-	18.847	18.847	-	-	-	15.545	11.024
			-	-	-	-	0.1	0.1	-	0.2	-	-	-	-	-	0.3
1"	1.32	.88	-	-	-	-	.133	.133	-	.179	.179	-	-	-	.250	.358
			-	-	-	-	3.378	3.378	-	4.547	4.547	-	-	-	6.350	9.093
			-	-	-	-	1.049	1.049	-	.957	.957	-	-	-	.815	.599
			-	-	-	-	26.645	26.645	-	24.308	24.308	-	-	-	20.701	15.215
			-	-	-	-	0.3	0.3	-	0.3	-	-	-	-	-	0.4
1¼"	1.66	1.00	-	-	-	-	.140	.140	-	.191	.191	-	-	-	.250	.382
			-	-	-	-	3.556	3.556	-	4.851	4.851	-	-	-	6.350	9.703
			-	-	-	-	1.380	1.380	-	1.278	1.278	-	-	-	1.160	.896
			-	-	-	-	35.052	35.052	-	32.461	32.461	-	-	-	29.464	22.758
			-	-	-	-	0.3	0.3	-	0.4	-	-	-	-	-	0.5
1½"	1.90	1.12	-	-	-	-	.145	.145	-	.200	.200	-	-	-	.281	.400
			-	-	-	-	3.683	3.683	-	5.080	5.080	-	-	-	7.137	10.160
			-	-	-	-	1.610	1.610	-	1.500	1.500	-	-	-	1.338	1.100
			-	-	-	-	40.894	40.894	-	38.100	38.100	-	-	-	33.985	27.940
			-	-	-	-	0.5	0.5	-	0.6	-	-	-	-	-	1.0
2"	2.38	1.38	-	-	-	-	.154	.154	-	.218	.218	-	-	-	.344	.436
			-	-	-	-	3.912	3.912	-	5.537	5.537	-	-	-	7.738	11.074
			-	-	-	-	2.067	2.067	-	1.939	1.939	-	-	-	1.687	1.503
			-	-	-	-	52.502	52.502	-	49.251	49.251	-	-	-	42.850	38.176
			-	-	-	-	0.8	0.8	-	1.0	-	-	-	-	-	1.8
2½"	2.88	1.75	-	-	-	-	.203	.203	-	.276	.276	-	-	-	.375	.552
			-	-	-	-	5.156	5.156	-	7.010	7.010	-	-	-	9.525	14.021
			-	-	-	-	2.469	2.469	-	2.323	2.323	-	-	-	2.125	1.771
			-	-	-	-	62.713	62.713	-	59.004	59.004	-	-	-	53.975	44.983
			-	-	-	-	1.7	1.6	-	1.9	-	-	-	-	-	3.0
3"	3.50	2.00	-	-	-	-	.216	.216	-	.300	.300	-	-	-	.438	.600
			-	-	-	-	5.486	5.486	-	7.620	7.620	-	-	-	11.125	15.240
			-	-	-	-	3.068	3.068	-	2.900	2.900	-	-	-	2.624	2.300
			-	-	-	-	77.927	77.927	-	73.660	73.660	-	-	-	66.650	58.420
			-	-	-	-	2.3	2.4	-	3.1	-	-	-	-	-	5.0
3½"	4.00	2.25	-	-	-	-	.226	.226	-	.318	.318	-	-	-	-	.636*
			-	-	-	-	5.740	5.740	-	8.077	8.077	-	-	-	-	16.154
			-	-	-	-	3.548	3.548	-	3.364	3.364	-	-	-	-	2.728
			-	-	-	-	90.119	90.119	-	85.446	85.446	-	-	-	-	69.291
			-	-	-	-	3.2	3.2	-	4.8	-	-	-	-	-	-
4"	4.50	2.50	.188	-	-	-	.237	.237	-	.337	.337	-	.438	-	.531	.674
			4.775	-	-	-	6.020	6.020	-	8.560	8.560	-	11.125	-	13.487	17.120
			4.124	-	-	-	4.026	4.026	-	3.826	3.826	-	3.624	-	3.438	3.152
			104.749	-	-	-	102.260	102.260	-	97.180	97.180	-	92.050	-	87.325	80.061
			3.9	-	-	-	4.3	4.3	-	6.2	-	-	-	7.3	-	10.8
5"	5.56	3.13	-	-	-	-	.258	.258	-	.375	.375	-	.500	-	.625	.750
			-	-	-	-	6.553	6.553	-	9.525	9.525	-	12.700	-	15.875	19.050
			-	-	-	-	5.047	5.047	-	4.813	4.813	-	4.563	-	4.313	4.063
			-	-	-	-	128.194	128.194	-	122.250	122.250	-	115.900	-	109.550	103.200
			-	-	-	-	7.3	7.4	-	11.8	-	-	-	13.8	-	17.0

\*Not given in ASME B36.10

# Long Radius 45° ELBOWS



Key			Nominal Wall Thickness: inches mm Inside Diameter: inches mm Approximate Weight: Pounds (see page 3 for Kg)														
			Schedule														
Nominal Pipe Size	"D" Outside Diameter at Bevel	"B" Center-to-End	L.W.G.	10	20	30	40	STD WT	60	XS	80	100	120	140	160	XXS	
inches mm	inches mm	inches mm															
6"	6.63	3.75	.219	-	-	-	.280	.280	-	.432	.432	-	.562	-	.719	.864	
			5.563	-	-	-	7.112	7.112	-	10.973	10.973	-	14.275	-	18.263	21.946	
			6.187	-	-	-	6.065	6.065	-	5.761	5.761	-	5.501	-	5.187	4.897	
			157.150	-	-	-	154.051	154.051	-	146.329	146.329	-	139.725	-	131.750	124.384	
			12.0	-	-	-	11.5	12.7	-	16.3	16.7	-	21.6	-	30.0	32.0	
8"	8.63	5.00	.219	-	.250	.277	.322	.322	.406	.500	.500	.594	.719	.812	.906	.875	
			5.563	-	6.350	7.036	8.179	8.179	10.312	12.700	12.700	15.088	18.263	20.625	23.012	22.225	
			8.187	-	8.125	8.071	7.981	7.981	7.813	7.625	7.437	7.187	7.001	6.813	6.875		
			203.20	-	206.375	205.003	202.717	202.717	198.450	193.675	193.675	188.900	182.550	177.825	173.050	174.625	
			19.8	-	19.8	20.5	22.5	23.3	30.6	34.0	34.0	43.5	52.7	58.5	75.0	60.0	
10"	10.75	6.25	.219	-	.250	.307	.365	.365	.500	.500	.594	.719	.844	1.000	1.125	1.000	
			5.563	-	6.350	7.798	9.271	9.271	12.700	12.700	15.088	18.263	21.438	25.400	28.575	25.400	
			10.312	-	10.250	10.136	10.020	10.020	9.750	9.750	9.562	9.312	9.062	8.750	8.500	8.750	
			254.00	-	260.350	257.454	254.508	254.508	247.650	247.650	242.875	236.525	230.175	222.250	215.900	222.250	
			20.5	-	21.6	28.5	39.0	53.0	53.0	68.0	78.0	97.0	122.0	135.0	-		
12"	12.75	7.50	.250	-	.250	.330	.406	.375	.562	.500	.688	.844	1.000	1.125	1.312	1.000	
			6.350	-	6.350	8.382	10.312	9.525	14.275	12.700	17.475	21.438	25.400	28.575	33.325	25.400	
			12.250	-	12.250	12.090	11.938	12.000	11.626	11.750	11.374	11.062	10.750	10.500	10.126	10.750	
			304.80	-	311.150	307.086	303.225	304.800	295.300	298.450	288.900	280.975	273.050	266.700	257.200	273.050	
			39.7	-	39.7	52.1	64.5	60.0	89.0	78.0	106.0	134.0	167.0	189.0	230.0	-	
14"	14.00	8.75	.250	.250	.312	.375	.438	.375	.594	.500	.750	.938	1.094	1.250	1.406	-	
			6.350	6.350	7.925	9.525	11.125	9.525	15.088	12.700	19.050	23.825	27.788	31.750	35.712	-	
			13.500	13.500	13.376	13.250	13.124	13.250	12.812	13.000	12.500	12.124	11.812	11.500	11.188	-	
			355.60	355.60	342.900	342.900	339.750	336.550	333.350	336.550	325.425	330.200	317.500	307.950	300.025	292.100	284.175
			49.5	49.5	64.2	74.0	87.0	78.0	113.0	95.0	159.0	186.0	209.0	241.0	278.0	-	
16"	16.00	10.00	.250	.250	.312	.375	.500	.375	.656	.500	.844	1.031	1.219	1.438	1.594	-	
			6.350	6.350	7.925	9.525	12.700	9.525	16.662	12.700	21.438	26.187	30.963	36.525	40.488	-	
			15.500	15.500	15.376	15.250	15.000	15.250	14.688	15.000	14.312	13.938	13.562	13.124	12.812	-	
			406.40	406.40	393.700	393.700	390.550	387.350	381.000	387.350	373.075	381.000	363.525	354.025	344.475	333.350	325.425
			68.5	68.5	84.3	101.0	131.0	100.0	169.0	131.0	228.0	269.0	318.0	362.0	415.0	-	
18"	18.00	11.25	.250	.250	.312	.438	.562	.375	.750	.500	.938	1.156	1.375	1.562	1.781	-	
			6.350	6.350	7.925	11.125	14.275	9.525	19.050	12.700	23.825	29.362	34.925	39.675	45.237	-	
			17.500	17.500	17.376	17.124	16.876	17.250	16.500	17.000	16.124	15.688	15.250	14.876	14.438	-	
			457.20	457.20	444.500	444.500	441.350	434.950	428.650	438.150	419.100	431.800	409.550	398.475	387.350	377.850	366.725
			85.0	85.0	114.0	151.0	187.0	128.0	245.0	170.0	309.0	376.0	439.0	509.0	609.0	-	
20"	20.00	12.50	.250	.250	.375	.500	.594	.375	.812	.500	1.031	1.281	1.500	1.750	1.969	-	
			6.350	6.350	9.525	12.700	15.088	9.525	20.625	12.700	26.187	32.537	38.100	44.450	50.013	-	
			19.500	19.500	19.250	19.000	18.812	19.250	18.376	19.000	17.938	17.438	17.000	16.500	16.062	-	
			508.00	508.00	495.300	495.300	488.950	482.600	477.825	488.950	466.750	482.600	455.625	442.925	431.800	419.100	407.975
			105.0	105.0	155.0	205.0	245.0	155.0	330.0	205.0	424.0	502.0	597.0	684.0	-		
22"	22.00	13.50	-	.250	.375	.500	-	.375	.875	.500	1.125	1.375	1.625	1.875	2.125	-	
			-	6.350	9.525	12.700	-	9.525	22.225	12.700	28.575	34.925	41.275	47.625	53.975	-	
			-	21.500	21.250	21.000	-	21.250	20.250	21.000	19.750	19.250	18.750	18.250	17.750	-	
			558.80	558.80	546.100	539.750	533.400	-	539.750	514.350	533.400	501.650	488.950	476.250	463.550	450.850	-
			-	-	-	-	-	197.0	-	-	-	-	-	-	-		
24"	24.00	15.00	.250	.250	.375	.562	.688	.375	.969	.500	1.219	1.531	1.812	2.062	2.344	-	
			6.350	6.350	9.525	14.275	17.475	9.525	24.613	12.700	30.963	38.887	46.025	52.375	59.538	-	
			23.500	23.500	23.250	22.876	22.624	23.250	22.062	23.000	21.562	20.938	20.376	19.876	19.312	-	
			609.60	609.60	596.900	596.900	590.550	581.050	574.650	590.550	560.375	584.200	547.675	531.825	517.550	504.850	490.525
			146.0	146.0	223.0	342.0	418.0	223.0	575.0	295.0	726.0	875.0	1032.0	1179.0	-		
30"	30.00	18.50	-	.312	.500	.625	-	.375	-	.500	-	-	-	-	-	-	
			-	7.925	12.700	15.875	-	9.525	-	12.700	-	-	-	-	-	-	-
			-	29.376	29.000	28.750	-	29.250	-	29.000	-	-	-	-	-	-	-
			762.00	762.00	746.150	736.600	730.250	-	742.950	-	736.600	-	-	-	-	-	-
			365.0	475.0	680.0	-	367.0	-	475.0	-	-	-	-	-	-		