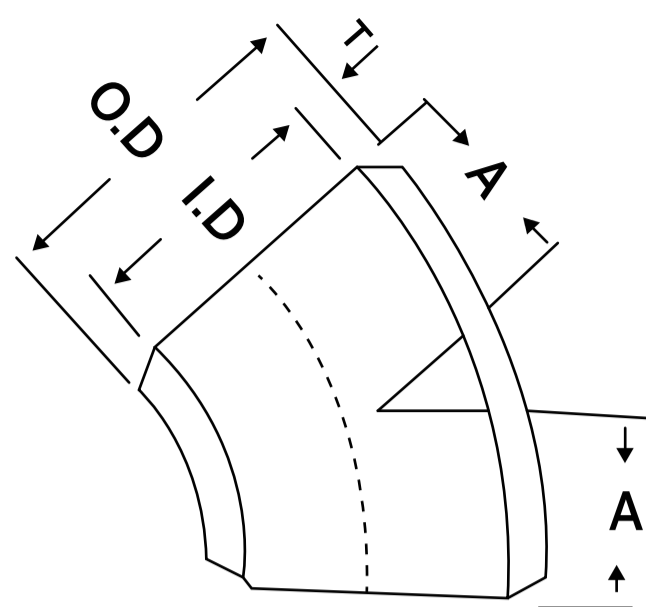


**ASTM A234 ANSI B16.9**

**45° ELBOWS LONG RADIUS**

**STANDARD WEIGHT, EXTRA STRONG,  
CARBON AND FERRITIC ALLOY STEEL**



NPS	DN	OUTSIDE DIAMETER AT BEVEL O.D.	CENTRE TO END NOMINAL A	STANDARD WEIGHT			EXTRA STRONG		
				INSIDE DIAMETER I.D.	WALL THICKNESS T	APPROX. WEIGHT	INSIDE DIAMETER I.D.	WALL THICKNESS T	APPROX. WEIGHT
1/2"	15	0.840 21	0.62 16	0.622 15.80	0.109 2.77	0.08 0.04			
3/4"	20	1.050 27	0.44 11	0.824 20.93	0.113 2.87	0.08 0.04	0.742 18.85	0.154 3.91	0.16 0.07
1"	25	1.315 33	0.88 22	1.049 26.64	0.133 3.38	0.25 0.11	0.957 24.31	0.179 4.55	0.28 0.13
1 1/4"	32	1.660 42	1.00 25	1.380 35.05	0.140 3.56	0.33 0.15	1.278 32.46	0.191 4.85	0.44 0.20
1 1/2"	40	1.900 48	1.12 29	1.610 40.89	0.145 3.68	0.47 0.21	1.500 38.10	0.200 5.08	0.60 0.27
2"	50	2.375 60	1.38 35	2.067 52.50	0.154 3.91	0.78 0.35	1.939 49.25	0.218 5.54	1.05 0.47
2 1/2"	65	2.875 73	1.75 44	2.469 62.71	0.203 5.16	1.66 0.75	2.323 59.00	0.276 7.62	1.91 0.86
3"	80	3.500 89	2.00 51	3.068 77.93	0.216 5.49	2.25 1.01	2.900 73.66	0.300 7.62	3.08 1.39
3 1/2"	90	4.000 102	2.25 57	3.548 90.12	0.226 5.74	3.16 1.42	3.364 97.18	0.318 8.08	4.75 2.14
4"	100	4.500 114	2.50 64	4.026 102.26	0.237 6.02	4.25 1.91	3.826 97.18	0.337 8.56	5.88 2.65
5"	125	5.563 141	3.12 79	5.047 128.19	0.258 6.55	7.25 3.26	4.813 122.25	0.375 9.53	10.0 4.65
6"	150	6.625 168	3.75 95	6.065 154.05	0.280 7.11	11.5 5.18	5.761 146.33	0.432 10.97	16.7 7.5
8"	200	8.625 219	5.00 127	7.981 202.72	0.322 8.18	22.5 10	7.625 193.68	0.500 12.70	34 15
10"	250	10.750 273	6.25 159	10.02 254.5	0.365 9.27	39 18	9.750 247.65	0.500 12.70	53 24
12"	300	12.750 324	7.50 190	12.00 304.8	0.375 9.53	59 27	11.750 298.45	0.500 12.70	74 33
14"	350	14.000 356	8.75 222	13.25 336.6	0.375 9.53	74 33	13.00 330.2	0.500 12.70	95 43
16"	400	16.000 406	10.00 254	15.25 387.4	0.375 9.53	101 46	15.00 381.0	0.500 12.70	131 59
18"	450	18.000 457	11.25 286	17.25 438.2	0.375 9.53	128 58	17.00 431.8	0.500 12.70	170 77
20"	500	20.000 508	12.50 318	19.25 489.0	0.375 9.53	155 70	19.00 482.6	0.500 12.70	205 92
22"	550	22.000 559	13.50 343	21.25 539.8	0.375 9.53	197 89	21.00 533.4	0.500 12.70	260 117
24"	600	24.000 610	15.00 381	23.25 590.6	0.375 9.53	223 100	23.00 584.2	0.500 12.70	295 133
26"	650	26.000 660	16.00 406	25.25 641.4	0.375 9.53	275 124	25.00 635.00	0.500 12.70	365 164
30"	750	30.000 762	18.50 470	29.25 743.0	0.375 9.53	367 165	29.00 736.6	0.500 12.70	475 214
36"	900	36.000 914	22.25 565	35.25 895.4	0.375 9.53	531 239	35.00 889.0	0.500 12.70	706 318
42"	1100	42.000 1067	26.00 660	41.25 1047.8	0.375 9.53	710 320	41.00 1041.1	0.500 12.70	950 428