

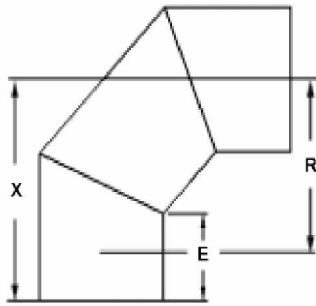
Molded Butt 90

Produced to ASTM D2513 and D3261
 2" and larger PE 3408 are also produced to AWWA C906-99

Butt 90 Degree Ells	DR/Wall	Dimensions A x B (in)	Package Weight (lbs.)	CSA	IAPMO	FM	
						150	200
1/2" CTS	DR 0.090	1.69 x 1.79	0.4	x			
3/4" CTS	DR 0.090	1.72 x 2.94	0.8				
1" CTS	DR 0.102	1.69 x 2.94	0.9				
	DR 0.125						
3/4" IPS	DR 11	1.72 x 2.94	0.9	x			
1" IPS	DR 9	1.72 x 3.06	1.3		x		
	DR 11			x			
1 1/4" IPS	DR 9	2.50 x 3.88	3.2				
	DR 10	3.13 x 4.50		x			
	DR 11			x			
1 1/2" IPS	DR 11	3.00 x 4.50	5.0	x			
	DR 9						
2" IPS	DR 7	2.88 x 5.06	10.8				
	DR 9		9.3				x
	DR 11		7.6	x	x	x	
	DR 17		7.6				
3" IPS	DR 7	3.00 x 6.00	11.7				
	DR 9						x
	DR 11 / 11.5	3.00 x 5.63	7.3	x	x	x	
	DR 13.5			x			
DR 17							
4" IPS	DR 7	3.00 x 6.00	16.2				
	DR 9						x
	DR 11 / 11.5	3.00 x 6.75	16.3	x	x	x	
	DR 13.5			x			
	DR 17						
6" IPS	DR 7	4.25 x 8.63	27.2				
	DR 9		26.8				x
	DR 11 / 11.5	4.00 x 8.25	17.3	x	x	x	
	DR 13.5			x			
	DR 17						
8" IPS	DR 7	6.00 x 11.81	26.5				
	DR 9						x
	DR 11		20.2	x		x	
	DR 13.5			x			
	DR 17						



**INDEPENDENT
PIPE PRODUCTS**



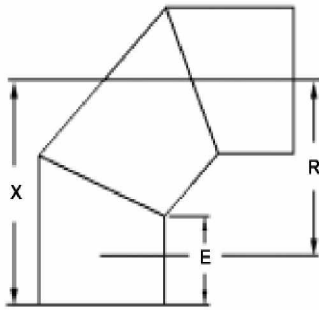
**IPS 90°
3 Segment Elbow
Fabricated (1/4 Bend)**

(Dimensions in Inches)

IPS Size	R/D Ratio	R	X	E	SDR	WPR (psi)	Weight (lbs)
4"	1.5	6.8	10.9	6.0	7	200	7
					9	160	6
					11&17	128/80	5
6"	1.5	10.0	13.2	6.0	7	200	16
					9	160	13
					11&17	128/80	11
8"	1.25	10.7	14.6	6.5	7	200	29
					9	160	23
					11	128	20
					17	80	14
10"	1.25	13.5	16.6	6.5	7	200	51
					9	160	42
					11	128	34
					17	80	24
12"	1.25	16.0	20.0	8.0	7	200	84
					9	160	68
					11	128	57
					17	80	39
14"	1.05	14.5	19.4	8.0	7	200	99
					9	160	80
					11	128	66
					17	80	45
16"	1.05	16.8	21.2	8.0	7	200	138
					9	160	112
					11	128	93
					17	80	63
18"	1.02	18.4	22.5	8.0	7	200	184
					9	160	150
					11	128	126
					17	80	85
20"	1.02	20.4	24.1	8.0	7	200	241
					9	160	196
					11	128	162
					17	80	111



**INDEPENDENT
PIPE PRODUCTS**



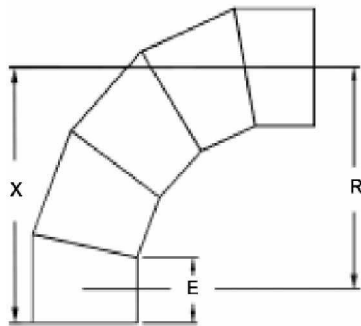
**IPS 90°
3 Segment Elbow
Fabricated (1/4 Bend)**

(Dimensions in Inches)

IPS Size	R/D Ratio	R	X	E	SDR	WPR (psi)	Weight (lbs)
22"	1.02	22.4	25.7	8.0	7	200	308
					9	160	251
					11	128	209
					17	80	141
24"	1.02	24.5	27.3	8.0	7	200	394
					9	160	320
					11	128	267
					17	80	181
26"	1.02	26.5	30.9	10.0	9	160	421
					11	128	354
					17	80	239
28"	1.02	28.5	32.5	10.0	9	160	509
					11	128	427
					17	80	283
30"	1.02	30.5	34.1	10.0	11	128	510
					17	80	345
32"	1.55	49.6	45.7	10.0	11	128	738
					17	80	496
34"	1.55	52.7	47.9	10.0	11	128	871
					17	80	585
36"	1.55	55.8	50.1	10.0	11	128	1019
					17	80	686
42"	1.55	65.1	56.8	10.0	17	80	1050
					21	65	856
48"	1.55	74.4	63.5	10.0	21	65	1208
					26	50	984
54"	1.53	82.6	75.6	16.0	26	50	1401
					32.5	40	1126



**INDEPENDENT
PIPE PRODUCTS**



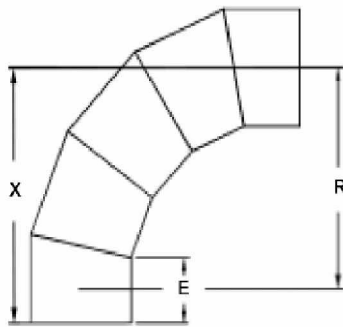
**IPS 90°
5 Segment Elbow
Fabricated (1/4 Bend)**

(Dimensions in Inches)

IPS Size	R/D Ratio	R	X	E	SDR	WPR (psi)	Weight (lbs)
2"	5.4	12.7	14.4	4.0	7	200	2
					9	160	2
					11&17	128/80	1.5
3"	3.8	13.2	15.0	4.0	7	200	5
					9	160	4
					11&17	128/80	4
4"	3.0	13.7	15.5	4.0	7	200	9
					9	160	8
					11&17	128/80	7
6"	2.2	14.7	18.5	6.0	7	200	22
					9	160	18
					11&17	128/80	15
8"	1.8	16.0	20.2	6.5	7	200	40
					9	160	32
					11	128	27
					17	80	19
10"	1.6	17.0	21.2	6.5	7	200	64
					9	160	53
					11	128	43
					17	80	30
12"	1.5	19.1	24.6	8.0	7	200	103
					9	160	84
					11	128	72
					17	80	46
14"	1.5	21.0	26.2	8.0	7	200	132
					9	160	106
					11	128	88
					17	80	60
16"	1.5	24.0	28.8	8.0	7	200	185
					9	160	106
					11	128	125
					17	80	84
18"	1.5	27.0	31.4	8.0	7	200	254
					9	160	207
					11	128	174
					17	80	118



**INDEPENDENT
PIPE PRODUCTS**



**IPS 90°
5 Segment Elbow
Fabricated (1/4 Bend)**

(Dimensions in Inches)

IPS Size	R/D Ratio	R	X	E	SDR	WPR (psi)	Weight (lbs)
20"	1.5	30.0	34.0	8.0	7	200	335
					9	160	270
					11	128	225
					17	80	153
22"	1.5	33.0	36.6	8.0	7	200	430
					9	160	347
					11	128	292
					17	80	196
24"	1.5	36.0	39.2	8.0	7	200	538
					9	160	437
					11	128	364
					17	80	247
26"	1.5	39.0	43.8	10.0	9	160	517
					11	128	485
					17	80	328
28"	1.5	42.0	46.4	10.0	9	160	699
					11	128	587
					17	80	390
30"	1.5	45.0	49.0	10.0	11	128	714
					17	80	483
32"	1.5	48.0	51.6	10.0	11	128	847
					17	80	570
34"	1.5	51.0	54.3	10.0	11	128	996
					17	80	668
36"	1.5	54.0	56.8	10.0	11	128	1176
					17	80	792
42"	1.5	60.0	62.2	10.0	17	80	1215
					21	65	990
48"	1.5	72.0	72.5	10.0	21	65	1402
					26	50	1140
54"	1.5	81.0	86.3	16.0	26	50	1788
					32.5	40	1436