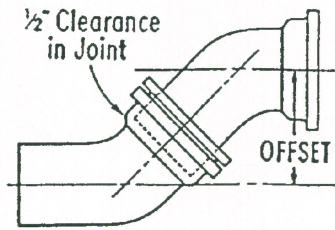


Using Two Bends—Offset in Inches

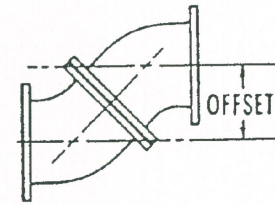
Nominal Diameter Inches	C153 -A21.53 Mechanical Joint			
	90°	45°	22½°	11¼°
3	14.00	6.36	3.06	1.46
4	15.00	7.07	3.31	1.58
6	18.00	8.48	3.89	1.68
8	20.00	9.19	4.09	1.77
10	24.00	10.61	4.48	1.88
12	26.00	12.02	4.87	1.97
14	31.50	13.08	5.88	2.47
16	33.50	13.79	5.92	2.48
18	38.00	14.14	8.92	2.54
24	41.50	16.40	9.76	4.97
30	N/A	N/A	N/A	N/A

Nominal Diameter Inches	C110 -A21.10 Mechanical Joint			
	90°	45°	22½°	11¼°
3	19.60	10.25	5.56	2.63
4	21.50	11.69	6.31	3.02
6	24.50	13.06	7.08	3.41
8	26.60	13.76	7.50	3.61
10	30.50	15.19	8.25	4.00
12	32.50	16.62	9.00	4.39
14	36.50	16.62	8.99	4.39
16	38.50	17.32	9.38	4.58
18	41.50	18.03	9.76	4.78
20	44.50	19.45	10.52	5.17
24	52.50	21.57	11.67	5.75
30	58.50	27.23	14.73	7.32

Nominal Diameter Inches	C110 -A21.10 Standard Flange				Long Radius 90°
	90°	45°	22½°	11¼°	
3	11.00	4.24	2.30	1.17	15.50
4	13.00	5.66	3.06	1.56	18.00
6	16.00	7.07	3.83	1.95	23.00
8	18.00	7.78	4.21	2.15	28.00
10	22.00	9.19	4.98	2.54	33.00
12	24.00	10.61	5.74	2.93	38.00
14	28.00	10.61	6.74	2.93	43.00
16	30.00	11.31	6.12	3.12	48.00
18	33.00	12.02	6.51	3.32	53.00
20	36.00	13.44	7.27	3.71	58.00
24	44.00	15.56	8.42	4.29	68.00
30	50.00	21.22	11.48	5.85	N/A



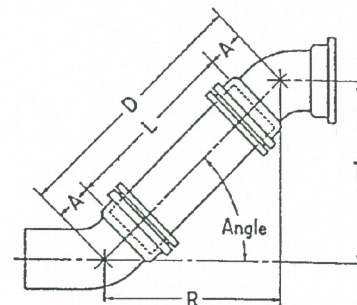
Mechanical Joint



Flanged Joint*

No allowance is made in offset figures for gasket thickness.

DETERMINING LENGTH OF PIPE IN OFFSETS



Mechanical Joint

Angle	D Equals	R Equals	L† Equals
45°	T x 1.414	T x 1.000	D-2A
22½°	T x 2.613	T x 2.414	D-2A
11¼°	T x 5.126	T x 5.027	D-2A

†Cut the Pipe somewhat shorter to allow for clearance in the joints.

Tyler Union Waterworks Contact Information

Anniston: (800) 226-7601

Corona: (866) 527-8471

Tyler: (800) 527-8478

www.tylerunion.com