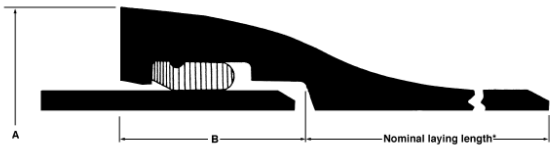
PUSH-ON JOINT DUCTILE IRON PIPE
Standard Dimensions and Weights (Pressure Classes)



Pipe Size in.	Pressure Class	Thickness	OD† in.	Weight of Barrel Per Foot lb	Weight of Bell lb	18-ft. Laying Length		20-ft. Laying Length	
						Weight Per Length lb	Average Weight Per Foot** lb	Weight Per Length §lb	Average Weight Per Foot** lb
3	350	0.25	3.96	8.9	7.0			185	9.2
4	350	0.25	4.80	10.9	9.0			225	11.3
6	350	0.25	6.90	16.0	11.0	300	16.6	330	16.6
8	350	0.25	9.05	21.1	17.0	395	22.0	440	22.0
10	350	0.26	11.10	27.1	24.0	510	28.4	575	28.7
12	350	0.28	13.20	34.8	29.0	655	36.4	735	36.7
14	250	0.28	15.30	40.4	45.0	770	42.9		
	300	0.30	15.30	43.3	45.0	825	45.8		
	350	0.31	15.30	44.7	45.0	850	47.2		
16	250	0.30	17.40	49.3	54.0	940	52.3		
	300	0.32	17.40	52.5	54.0	1000	55.5		
	350	0.34	17.40	55.8	54.0	1060	58.8		
18	250	0.31	19.50	57.2	59.0	1090	60.5		
	300	0.34	19.50	62.6	59.0	1185	65.9		
	350	0.36	19.50	66.2	59.0	1250	69.5		
20	250	0.33	21.60	67.5	74.0	1290	71.6		
	300	0.36	21.60	73.5	74.0	1395	77.6		
	350	0.38	21.60	77.5	74.0	1470	81.6		
24	200	0.33	25.80	80.8	95.0	1550	86.1		
	250	0.37	25.80	90.5	95.0	1725	95.8		
	300	0.40	25.80	97.7	95.0	1855	103.0		
	350	0.43	25.80	104.9	95.0	1985	110.2		
30	150	0.34	32.00	103.5	139.0	2000	111.2		
	200	0.38	32.00	115.5	139.0	2220	123.2		
	250	0.42	32.00	127.5	139.0	2435	135.2		
	300	0.45	32.00	136.5	139.0	2595	144.2		
	350	0.49	32.00	148.4	139.0	2810	156.1		
36	150	0.38	38.30	138.5	184.0	2675	148.7		
	200	0.42	38.30	152.9	184.0	2935	163.1		
	250	0.47	38.30	170.9	184.0	3260	181.1		
	300	0.51	38.30	185.3	184.0	3520	195.5		
	350	0.56	38.30	203.2	184.0	3840	213.4		

*To convert inches to millimeters, multiply by 25.4; to convert feet to meters, multiply by 0.3048; to convert pounds to kilograms, multiply by 0.4536; to convert pounds per foot to kilograms per metre, multiply by 1.488.

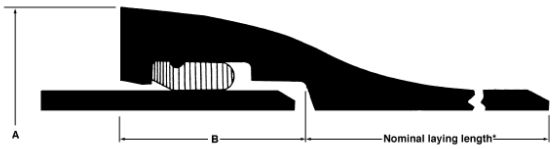
†Tolerance of OD of spigot end: 3-12 in., ±0.06 in.; 14-24 in., +0.05 in., -0.08 in.; 30-36 in., +0.08 in., -0.06 in.

The bell weights shown above are adequate for 350-psi (2413-kPa) operating pressure. Bell weights vary due to differences in push-on-joint design. The manufacturer shall calculate pipe weights using standard barrel weights and weights of bells being produced.

§ Including bell; calculated weight of pipe rounded off to nearest 5 lb.

**Including bell; average weight per foot based on calculated weight of pipe before rounding.

PUSH-ON JOINT DUCTILE IRON PIPE
*Dimensions and Weights for Special Classes***



Nominal Inside Diameter Inches	Wall Thickness		Dimensions-Inches		Approximate Weight-Pounds					
	ANSI Thick. Class	T In Inches	A Bell O.D.	B Pipe O.D.	Bell Metal Only	Pipe Barrel Per Ft.	18 Ft Laying Length		20 Ft Laying Length	
							Per* Length	Per* Foot	Per* Length	Per* Foot
3	51	.25	5.80	3.96	7	8.9	165	9.3	185	9.2
	52	.28	5.80	3.96	7	9.9	185	10.3	205	10.2
	53	.31	5.80	3.96	7	10.9	205	11.3	225	11.2
	54	.34	5.80	3.96	7	11.8	220	12.2	245	12.2
	55	.37	5.80	3.96	7	12.8	235	13.2	265	13.2
	56	.40	5.80	3.96	7	13.7	255	14.1	280	14.0
4	51	.26	6.86	4.80	9	11.3	210	11.8	235	11.8
	52	.29	6.86	4.80	9	12.6	235	13.1	260	13.0
	53	.32	6.86	4.80	9	13.8	255	14.3	285	14.2
	54	.35	6.86	4.80	9	15.0	280	15.5	310	15.4
	55	.38	6.86	4.80	9	16.1	300	16.6	330	16.6
	56	.41	6.86	4.80	9	17.3	320	17.8	355	17.8
6	50	.25	8.75	6.90	11	16.0	300	16.6	330	16.6
	51	.28	8.75	6.90	11	17.8	330	18.4	365	18.3
	52	.31	8.75	6.90	11	19.6	365	20.2	405	20.2
	53	.34	8.75	6.90	11	21.4	395	22.0	440	22.0
	54	.37	8.75	6.90	11	23.2	430	23.8	475	23.8
	55	.40	8.75	6.90	11	25.0	460	25.6	510	25.6
	56	.43	8.75	6.90	11	26.7	490	27.3	545	27.2
8	50	.27	11.05	9.05	17	22.8	425	23.7	475	23.7
	51	.30	11.05	9.05	17	25.2	470	26.1	520	26.0
	52	.33	11.05	9.05	17	27.7	515	28.6	570	28.6
	53	.36	11.05	9.05	17	30.1	560	31.0	620	31.0
	54	.39	11.05	9.05	17	32.5	600	33.4	665	33.3
	55	.42	11.05	9.05	17	34.8	645	35.7	715	35.7
	56	.45	11.05	9.05	17	37.2	685	38.1	760	38.0
10	50	.29	13.15	11.10	24	30.1	565	31.4	625	31.3
	51	.32	13.15	11.10	24	33.2	620	34.5	690	34.4
	52	.35	13.15	11.10	24	36.2	675	37.5	750	37.4
	53	.38	13.15	11.10	24	39.2	730	40.5	810	40.4
	54	.41	13.15	11.10	24	42.1	780	43.4	865	43.3
	55	.44	13.15	11.10	24	45.1	835	46.4	925	46.3
	56	.47	13.15	11.10	24	48.0	890	49.3	985	49.2
12	50	.31	15.30	13.20	29	38.4	720	40.0	795	39.8
	51	.34	15.30	13.20	29	42.0	785	43.6	870	43.4
	52	.37	15.30	13.20	29	45.6	850	47.2	940	47.0
	53	.40	15.30	13.20	29	49.2	915	50.8	1015	50.7
	54	.43	15.30	13.20	29	52.8	980	54.4	1085	54.2
	55	.46	15.30	13.20	29	56.3	1040	57.9	1155	57.8
	56	.49	15.30	13.20	29	59.9	1105	61.5	1225	61.4

Depth of Bells: 3" - 3.00"; 4" - 3.15"; 6" - 3.38"; 8" - 3.69"; 10" & 12" - 3.75"
Nominal laying lengths: 3" & 4" -20' -0"; 6" thru 12"-18' or 20'-0"; 14" thru 36"-18'-0".
*Including bell. Calculated weight rounded off to nearest 5 pounds.
** "Special Classes" shown above were designated "Standard Thickness Classes" in the previous editions of ANSI/AWWA C151/A21.51.

Dimensions and Weights for Special Classes (continued)

Nominal Inside Diameter Inches	Wall Thickness		Dimensions-Inches		Approximate Weight-Pounds			
	ANSI Thick. Class	T In Inches	A Bell O.D.	B Pipe O.D.	Bell Metal Only	Pipe Barrel Per Ft.	18 Ft Laying Length	
							Per* Length	Per* Foot
14	50	.33	17.85	15.30	60	47.5	900	50.0
	51	.36	17.85	15.30	60	51.7	975	54.2
	52	.39	17.85	15.30	60	55.9	1050	58.4
	53	.42	17.85	15.30	60	60.1	1125	62.6
	54	.45	17.85	15.30	60	64.2	1200	66.7
	55	.48	17.85	15.30	60	68.4	1275	70.9
	56	.51	17.85	15.30	60	72.5	1350	75.0
16	50	.34	20.00	17.40	68	55.8	1060	58.8
	51	.37	20.00	17.40	68	60.6	1145	63.6
	52	.40	20.00	17.40	68	65.4	1230	68.4
	53	.43	20.00	17.40	68	70.1	1315	73.1
	54	.46	20.00	17.40	68	74.9	1400	77.9
	55	.49	20.00	17.40	68	79.7	1490	82.7
	56	.52	20.00	17.40	68	84.4	1575	87.4
18	50	.35	22.10	19.50	78	64.4	1220	67.7
	51	.38	22.10	19.50	78	69.8	1315	73.1
	52	.41	22.10	19.50	78	75.2	1415	78.5
	53	.44	22.10	19.50	78	80.6	1510	83.9
	54	.47	22.10	19.50	78	86.0	1605	89.3
	55	.50	22.10	19.50	78	91.3	1700	94.5
	56	.53	22.10	19.50	78	96.7	1800	100.0
20	50	.36	24.25	21.60	87	73.5	1395	77.6
	51	.39	24.25	21.60	87	79.5	1505	83.6
	52	.42	24.25	21.60	87	85.5	1615	89.6
	53	.45	24.25	21.60	87	91.5	1720	95.6
	54	.48	24.25	21.60	87	97.5	1830	101.6
	55	.51	24.25	21.60	87	103.4	1935	107.5
	56	.54	24.25	21.60	87	109.3	2040	113.4
24	50	.38	28.50	25.80	105	92.9	1765	98.1
	51	.41	28.50	25.80	105	100.1	1895	105.4
	52	.44	28.50	25.80	105	107.3	2025	112.6
	53	.47	28.50	25.80	105	114.4	2155	119.7
	54	.50	28.50	25.80	105	121.6	2285	126.9
	55	.53	28.50	25.80	105	128.8	2415	134.1
	56	.56	28.50	25.80	105	135.9	2540	141.2
30	50	.39	34.95	32.00	170	118.5	2270	126.2
	51	.43	34.95	32.00	170	130.5	2490	138.2
	52	.47	34.95	32.00	170	142.5	2705	150.2
	53	.51	34.95	32.00	170	154.4	2920	162.1
	54	.55	34.95	32.00	170	166.3	3130	174.0
	55	.59	34.95	32.00	170	178.2	3345	185.9
	56	.63	34.95	32.00	170	190.0	3560	197.7
36	50	.43	41.37	38.30	239	156.5	3000	166.7
	51	.48	41.37	38.30	239	174.5	3325	184.7
	52	.53	41.37	38.30	239	192.4	3645	202.6
	53	.58	41.37	38.30	239	210.3	3970	220.5
	54	.63	41.37	38.30	239	228.1	4290	238.3
	55	.68	41.37	38.30	239	245.9	4610	256.1
	56	.73	41.37	38.20	239	263.7	4930	273.9

Depth of Bells: 14" thru 24" - 5.00";30" & 36" - 6.50"
Nominal laying lengths: 3" & 4" - 20'-0"; 6" thru 12"-18' or 20'-0"; 14" thru 36"-18'-0"
*Including bell. Calculated weight rounded off to the nearest 5 pounds.

LININGS FOR DUCTILE IRON PIPE AND FITTINGS

CEMENT-MORTAR LINING

The first recorded installation of cement-mortar lined cast iron pipe was in 1922 at Charleston, S.C. Since that time, millions of feet of cement-mortar lined cast iron pipe have been installed around the country, helping to maintain high flow characteristics in pipelines carrying aggressive water.

Over the years, improvements have been made in application techniques, the quality of the cement and the curing process. Today, virtually all ductile iron pipe is furnished with this low cost and very effective lining.

We offer a full line of cement-mortar lined pipe and fittings, all in accordance with the requirements of ANSI/AWWA C104/A21.4 Standard.

Generally, cement-mortar linings are not suitable for wastewater applications. Certain industrial wastes and septic sewage can quickly attack the cement causing it to fail. For those installations where these types of waste will be conveyed, we offer Protecto 401 Ceramic Epoxy lining that will provide trouble free service.

PROTECTO 401

Protecto 401 lined ductile iron pipe and fittings provide the maximum protection and the strength necessary to do the job in tough sewer pipe applications. Protecto 401 has successfully been used in hundreds of sanitary sewer applications and has been proven with both laboratory testing and years of actual sewer service on all sizes of ductile iron pipe and fittings. Protecto 401 Ceramic Epoxy Lining was designed and is used as a protection for sanitary sewer conduits.

POLYETHYLENE ENCASEMENT FOR DUCTILE IRON PIPE IN CORROSIVE SOILS

Meets all Requirements of ANSI/AWWA C105/A21.5 Standard

Polyethylene encasement is a proven method of protecting ductile iron pipe in areas of severely corrosive soil. The protection is provided by isolating the pipe from the corrosive environment. A completely air and water-tight enclosure is not necessary.

The dielectric capability of polyethylene also provides shielding against stray direct current at most levels encountered in the field.

Eight (8) mil thick polyethylene tube is furnished in the flat tube widths listed.

More detailed information on polyethylene encasement is available upon request. Both material and installation procedures are specified in ANSI/AWWA C105/A21.5.

RECOMMENDED POLYETHYLENE FLAT TUBE WIDTH BY PIPE SIZE

Nominal Pipe Size Inches	Flat Tube Width – Inches (Layflat Size)	
	Push-On & MJ	Restrained Joint
3	14	–
4	16	–
6	16	20
8	20	24
10	24	30
12	27	34
14	30	37
16	34	41
18	37	45
20	41	54
24	54	54
30	67	67
36	81	81