

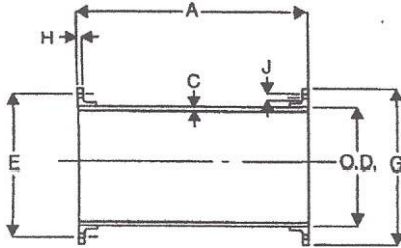


Fabrication Submittal Package AIS / USA

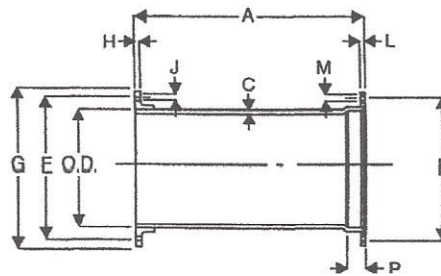
Kenneth J. Kempf

1/10/2019

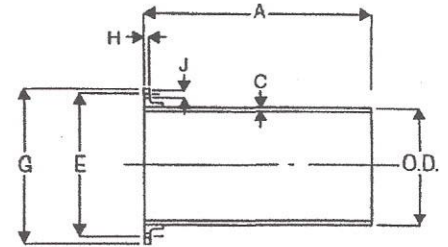
FABRICATED FLANGE PIPES



FLG. x FLG.



FLG. x M.J.



FLG. x P.E.

SIZE	A	B	C	O.D.		E	G	H		NO. OF FLG'D BOLT HOLES	J	K		L		NO. OF M.J. BOLT HOLES	M		P
				MIN.	MAX.			MIN.	MAX.			MIN.	MAX.	MIN.	MAX.				
3	•	•	0.31	3.90	4.02	6.00	7.50	0.63	0.87	4	0.75	6.13	6.25	0.88	0.94	4	0.75	0.81	2.50
4	A	A	0.32	4.74	4.86	7.50	9.00	0.82	1.06	8	0.75	7.44	7.56	0.94	1.00	4	0.875	0.935	2.50
6	S	S	0.34	6.84	6.96	9.50	11.00	0.88	1.12	8	0.875	9.44	9.56	1.00	1.06	6	0.875	0.935	2.50
8	•	•	0.36	8.99	9.11	11.75	13.50	1.00	1.24	8	0.875	11.69	11.81	1.04	1.12	6	0.875	0.935	2.50
10	•	•	0.38	11.04	11.16	14.25	16.00	1.07	1.31	12	1.00	13.94	14.06	1.11	1.19	8	0.875	0.935	2.50
12	R	R	0.40	13.14	13.26	17.00	19.00	1.13	1.37	12	1.00	16.19	16.31	1.17	1.25	8	0.875	0.935	2.50
14	E	E	0.42	15.22	15.35	18.75	21.00	1.19	1.57	12	1.125	18.69	18.81	1.19	1.31	10	0.875	0.935	3.50
16	Q	Q	0.43	17.32	17.45	21.25	23.50	1.25	1.63	16	1.125	20.94	21.06	1.26	1.38	12	0.875	0.935	3.50
18	U	U	0.44	19.42	19.55	22.75	25.00	1.37	1.75	16	1.25	23.19	23.31	1.32	1.44	12	0.875	0.935	3.50
20	I	I	0.45	21.52	21.65	25.00	27.50	1.50	1.88	20	1.25	25.44	25.56	1.38	1.50	14	0.875	0.935	3.50
24	R	R	0.47	25.72	25.85	29.50	32.00	1.69	2.07	20	1.375	29.94	30.06	1.50	1.62	16	0.875	0.935	3.50
30	E	E	0.51	31.94	32.08	36.00	38.75	1.87	2.37	28	1.375	36.82	36.94	1.69	1.81	20	1.125	1.185	4.00
36	D	D	0.58	38.24	38.38	42.75	46.00	2.13	2.63	32	1.625	43.69	43.81	1.88	2.00	24	1.125	1.185	4.00
42	•	•	0.65	44.44	44.58	49.50	53.00	2.37	2.87	36	1.625	50.56	50.68	1.88	2.00	28	1.375	1.435	4.00
48	•	•	0.72	50.74	50.88	56.00	59.50	2.50	3.00	44	1.625	57.44	57.56	1.88	2.00	32	1.375	1.435	4.00
54	•	•	0.81	57.40	57.64	62.75	62.75	2.75	3.25	44	1.875	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

1. Tolerance on length of FLG. X FLG. X MJ. Pipe shall be $\pm 0.125''$.
2. Tolerance on length of FLG. X P.E. shall be $\pm 0.25''$
3. Above material shall meet all applicable sections of ANSI A21.10, A21.15, A21.51, 82. 1.816.11 AWWA, C110, C115, C150, C151, and all revisions.
4. Flanged pipe shall be ductile iron pipe with ductile iron flanges threaded on.
5. Linings, if required, shall be in accordance with ANSI A21.4.
6. The mechanical joint bell for 30" & 36" sizes of ductile iron pipe have thicknesses different from those shown in ANSI A21.11, which are based on gray iron pipe. These reduced thicknesses provide a lighter-weight bell which is compatible with the wall thickness of ductile iron pipe
7. Submitted material only. Consult engineer for application.
8. 250 lb. faced and drilled flanges available upon request.



4309 N. 26th Street, Omaha NE. 68111
PH: (402) 451-0674 * FAX: (402) 457-6710

Material Certification

Distributor:

Address:

Job Name:

Contractor:

Dear Valued Customer,

This letter is intended as certification that the above spools supplied by BLUE PATRIOT fab are manufactured in accordance with ANSI/AWWA A21.15-94 in the CITY of OMAHA, NEBRASKA.

The Ductile Iron Pipe flanged by BLUE PATRIOT FAB is AMERICAN DUCTILE IRON PIPE, Class 53 or greater, is manufactured in Birmingham, AL. in accordance with and meets or exceeds all applicable requirements of AWWA C151/A21.51-96. The cement lining is in accordance with ANSI/AWWA C104/A21.4-95.

The flanges are TYLER / UNION and manufactured in accordance with AWWA C115. These casting s are manufactured in Anniston, AL. and comply with the applicable provisions of the Code of Federal Regulations 23 CFR 635.410 BUY AMERICAN Requirements.

We also certify that the above listed products supplied to the subject project are in full compliance with the American Iron and Steel (AIS) requirement as mandated in EPA's State Revolving Fund Program.

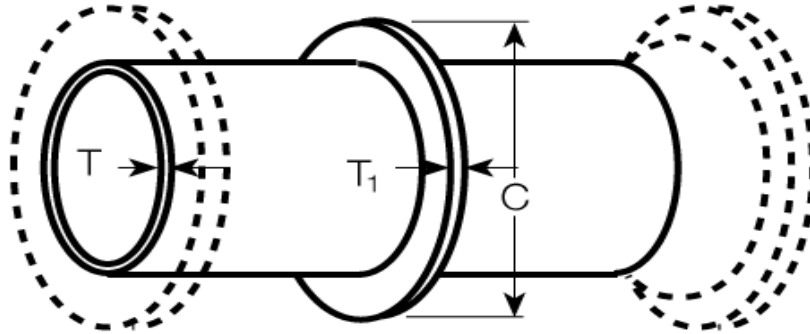
Sincerely,

Kenneth J. Kempf

Kenneth J. Kempf
President
Foundry Services Co.
kkempf@foundryservicesco.com



Wall Pipe:



Plain End Pipe

Size (in.)	ANSI / AWWA 1 <u>Minimum Class</u>		ANSI / AWWA <u>Wall Collars</u>		
	T Thickness (in.)	Weight (lb/ft)	T 1 Thickness (in.)	Weight (lb)	C (in.)
4	0.25	10.9	0.50	4	7.40
6	0.25	16.0	0.50	5	9.50
8	0.25	21.1	0.50	7	12.00
10	0.26	27.1	0.50	8	14.10
12	0.28	34.8	0.50	10	16.25
14	0.28	40.4	0.50	12	18.40
16	0.3	49.3	0.50	15	21.00
18	0.31	57.2	0.50	17	23.10
20	0.33	67.5	0.50	21	25.70
24	0.33	80.8	0.50	25	30.00
30	0.34	103.5	0.63	47	37.00
36	0.38	138.5	0.63	53	43.40
42	0.41	173.8	1.00	104	50.00
48	0.46	222.6	1.00	122	56.50
54	0.51	279.7	1.25	149	62.50
60	0.54	317.0	1.25	174	64.38

1. AWWA C151 – minimum thickness classes in this standard are class 350 for 4” – 12” sizes, class 250 for 14” – 20” sizes, class 200 for 24” and class 150 for 30” – 64” sizes. Wall pipe is normally fabricated of special thickness class 53 ductile iron pipe but may be furnished with minimum classes unless threaded flanges or threaded mechanical joint bells are included or unless specified otherwise