

CITY OF AUSTIN STANDARD PRODUCTS LIST

for

COMPACT DUCTILE IRON FITTINGS AND FITTING WEIGHT SCHEDULE

USING DEPARTMENT: Austin Water PREPARED BY: Bill Flynn, P.E. ISSUED: 10/01/87

REVISED BY: Jeff A. Kyle, P.E. **REVISED:** 07/01/23

DESCRIPTION: Compact Ductile Iron Fittings complying with AWWA C153.

1. All fittings shall have markings cast on the body as required by AWWA C153.

- 2. All fittings shall be asphalt or zinc/asphalt coated, and cement-mortar lined with either an asphaltic seal coat complying with AWWA C104 or fusion-bonded epoxy coated and lined (inside and outside) complying with AWWA C116. Fusion-bonded epoxy must be red and shall comply with the requirements of ANSI/NSF 61. (See SPL WW-27A for Joint Restraint Devices, SPL WW-27C for Ductile Iron Fittings complying with AWWA C110, or SPL WW-27F for Restrained Joint Ductile Iron Pipe and Fittings.)
- 3. Wastewater fittings shall be lined with approved corrosion resistant material (see SPL WW-534). The lining to be used shall be shown on product submittal, with type, brand, and lot number marked on each fitting. No more than one type or brand of lining shall be used for any project. These fittings are <u>not</u> to be used for gravity flow wastewater applications except when in the opinion of the Engineer the strength of DI makes its use appropriate; it may be used only if specifically shown on approved engineering drawings.

LISTING DATE	MANUFACTURER	PRODUCT IDENTIFICATION/COMMENT	APPROVAL
01/02/98	U.S. PIPE & FOUNDRY CO. P.O. Box 10406 Birmingham, AL 35202	All series	W. Flynn
10/01/97	SIGMA CORP. (A-1 Foundry, China) 5000 Askins Lane Houston, TX 77346	All Fittings	W. Flynn
01/02/98	TYLER UNION/DIVISION OF McWANE P.O. Box 309 Anniston, AL 36202	All Series	W. Flynn
04/01/97	SOMEP (SMP/BRAZIL)/STAR PIPE PRODUCTS 4018 Westhollow Pkwy. Houston, TX 77082	All Fittings Includes Series 100 MJ x MJ Adaptor (bolt-through MJ restraint)	W. Flynn
07/01/96	INFACT CORP. 1283 Gateway Drive Gallatin, TN 37066	Foster MJ x MJ Adaptor (bolt- through MJ restraint) (Use accessory paks recommended by manufacturer)	W. Flynn
04/01/09	ASSURED FLOW SALES, INC. P.O. Box 49633 Sarasota, FL 34230	Gradelok® Offset Fitting R. L	
04/01/10	SHANXI YUANSHENG (China) ACCUCAST 415 S. 21 st Ave. Waco, TX 76706	4" to 12" Logo on Casting	R. Lamb



CITY OF AUSTIN STANDARD PRODUCTS LIST

for

COMPACT DUCTILE IRON FITTINGS AND FITTING WEIGHT SCHEDULE

LISTING DATE	MANUFACTURER	PRODUCT IDENTIFICATION/COMMENT	APPROVAL
04/01/13	GAOMI ZHONGYIDE (China) ACCUCAST	4" to 12" MJ x MJ Accu Adaptor (bolt-through MJ restraint)	R. Lamb
01/01/12	US PIPE/METALFIT (Mexico) METALFIT 5583 Snowflake Way Parker, CO 80134	All Fittings	R. Lamb
10/01/12	XIAN XIAN EAST FOUNDRY CO., LTD. (China) SERAMPORE (SIP) INDUSTRIES 2900 Patio Drive Houston, TX 77017	All Fittings	R. Lamb
01/01/23	ELECTROSTEEL USA 1101 Louisville Rd. Savannah, GA 31415	4" to 24" Logo on Casting	J. Kyle

NOTES:

- 1. Materials shall meet applicable specification requirements. Acceptable sizes for potable and reclaimed waterline fittings are 4", 6", 8", 12", 16", 24", 30" and multiples of 6" in larger sizes. 14", 18" and 20" are acceptable for repairs only. Sizes for wastewater force mains shall be determined based on specific project requirements.
- 2. Submittal shall include results of independent laboratory testing showing that the seal coating on fittings meets test requirements of Section 5.2 of AWWA Standard C104, and is in compliance with Section 4.12 of that Standard
- 3. Fitting manufacturers shall certify that the lining will withstand, without damage, high pressure jet washing that is used to flush lines prior to CCTV inspection and as required for normal maintenance purposes.
- 4. For fittings larger than 24" diameter, the manufacturer must provide one of the following with project submittal: a) Evidence of current ISO registration; b) Evidence of current Austin Water-approved quality control program; or c) Evidence of current Austin Water-approved independent, third party firm that will test and inspect fittings produced for the City of Austin in accordance with Standard Specification Item 510.
- 5. Zinc coating for DI fittings will be considered on a case by case basis and only as approved by Austin Water. When used, fittings shall be identified as "Zinc Coated" (or similar), and zinc coating shall be applied as a base layer under an asphaltic seal coat that complies with AWWA C104. The use of polywrap is required with zinc coated fittings.
- 6. 5-5/8 degree bends are allowed when the product submittal includes documentation showing that the bends are manufactured in compliance with AWWA C153.

LATEST REVISIONS (since 01/01/23):

1. Updated address for Sigma Corp.



CITY OF AUSTIN STANDARD PRODUCTS LIST

for

COMPACT DUCTILE IRON FITTINGS AND FITTING WEIGHT SCHEDULE

DESCRIPTION:

Fitting weights for payment purposes: The listed weights shall govern for payment purposes irrespective of approved fittings used. The listed weights are based on AWWA C153 (compact ductile iron fittings) and manufacturer-tabulated weights for fittings meeting AWWA C153. Bolts, gaskets and glands are subsidiary to the City weights.

TEES AND CROSSES				
SIZE (IN.)		WEIGHT (LB.)		
Run	BRANCH	TEE	CROSS	
4	4	32	40	
6	4	46	65	
	6	56	75	
8	4	60	85	
	6	72	100	
	8	86	105	
12	4	94	115	
	6	110	135	
	8	125	175	
40	12	160	210	
16	6	228	250	
	8 12	248	270	
	16	280 322	335 385	
20	6	315	350	
20	8	345	380	
	12	395	415	
	16	465	550	
	20	535	600	
24	6	415	650	
	8	445	575	
	12	500	625	
	16	580	675	
	20	660	925	
	24	720	950	
30	8	739	650	
	12	830	800	
	16	959	900	
	20	995	1220	
	24 30	1,060	1500	
36	30 8	1,323 1,420	1,775	
30	12	1,420		
	16	1,440		
	24	1,498	1,865	
	30	1,555	2,580	
	36	1,900	2,735	

	TEES AND CROSSES				
SIZE (IN.)		WEIGHT (LB.)			
Run	BRANCH	TEE	Cross		
42	12	2,200			
	16	2,220			
	24	2,270	2,350		
	30	2,425	2,920		
	36	3,000	3,675		
	42	3,175	4,090		
48	12	2,800			
	16	2,820			
	24	2,870	3,200		
	30	3,050	3,785		
	36	3,900	5,045		
	42	4,100	5,465		
	48	4,250	6,220		

REDUCERS			
SIZE (IN.)	WEIGHT (LB.)		
6 x 4	24		
8 x 4	32		
8 x 6	36		
12 x 4	58		
12 x 6	60		
12 x 8	60		
16 x 6	124		
16 x 8	124		
16 x 12	124		
20 x 12	205		
20 x 16	200		
24 x 12	305		
24 x 16	320		
24 x 20	300		
30 x 16	633		
30 x 20	628		
30 x 24	478		
36 x 20	975		
36 x 24	770		
36 x 30	650		
42 x 24	1,356		
42 x 30	1,083		
42 x 36	1,114		
48 x 30	1,779		
48 x 36	1,641		
48 x 42	1,426		

BENDS					
	1/4	1/8	1/16	1/32	1/64
	90°	45°	22 1/2°	11 1/4°	5 5/8°
SIZE (IN.)	WEIGHT (LB.)				
4	27	23	18	16	18
6	39	32	32	30	29
8	57	46	46	42	45
12	108	86	84	74	82
16		202	178	158	157
20		305	310	245	374
24		405	412	315	487
30		780	665	600	600
36		1,135	960	820	820
42		1,610	1,350	1,180	1,180
48		2,090	1,760	1,475	1,475

	CAPS	PLUGS	
SIZE (IN.)	WEIGHT (LB.)		
4	9	10	
6	15	16	
8	22	26	
12	42	46	
16	92	95	
20	125	135	
24	166	175	
30	345	355	
36	628	688	
42	900	1,200	
48	1,075	1,550	

SLEEVES			
SIZE (IN.)	WEIGHT (LB.)		
4	17		
6	28		
8	38		
12	56		
16	130		
20	195		
24	255		
30	500		
36	725		
42	875		
48	1,400		
L	DEV 07/01/22		

REV. 07/01/23