MALLEABLE IRON FITTINGS



Class 150 (Standard)

FIGURE 1104		Cine		0		V		Unit Weight			
45° Street Elbow		Size		C		K		Black		Galv.	
	NPS	DN	in	тт	in	тт	lbs	kg	lbs	kg	
	¹ /8	6	¹¹ /16	17	⁷ /8	22	0.06	0.03	0.06	0.03	
	1/4	8	3/4	19	¹⁵ /16	24	0.10	0.05	0.10	0.05	
	3/8	10	¹³ /16	22	1	25	0.14	0.06	0.14	0.06	
	1/2	15	7/8	22	1 ¹ /8	29	0.20	0.09	0.20	0.09	
	3/4	20	1	25	1 ⁵ /16	33	0.33	0.15	0.33	0.15	
) <u> </u>	25	1 ¹ /8	29	1 ⁷ /16	37	0.52	0.24	0.52	0.24	
	<	32	1 ⁵ /16	33	1 ¹¹ /16	43	0.85	0.39	0.85	0.39	
	1 ¹ /2	40	1 ⁷ /16	37	1 ⁷ /8	48	1.22	0.55	1.22	0.55	
	2	50	1 ¹¹ /16	43	2 ¹ /4	57	1.92	0.87	1.92	0.87	

FIGURE 1105	Size		Α		Unit Weight				
Straight Tee					Black		Galv.		
	NPS	DN	in	тт	lbs	kg	lbs	kg	
	1/8	6	¹¹ /16	17	0.09	0.04	0.09	0.04	
	1/4	8	¹³ /16	22	0.15	0.07	0.15	0.07	
im	³ /8	10	¹⁵ /16	24	0.23	0.10	0.23	0.10	
	1/2	15	1 ¹ /8	29	0.41	0.19	0.41	0.19	
	3/4	20	1 ⁵ /16	33	0.60	0.27	0.60	0.27	
	1	25	1 ¹ / ₂	38	0.90	0.41	0.90	0.41	
	1 ¹ /4	32	1 ³ /4	44	1.31	0.59	1.31	0.59	
	1 ¹ / ₂	40	1 ¹⁵ /16	49	1.73	0.78	1.73	0.78	
← A →i	2	50	2 ¹ /4	57	2.52	1.14	2.52	1.14	
	2 ¹ /2	65	2 ¹¹ /16	68	4.90	2.22	4.90	2.22	
	3	80	3 ¹ / ₁₆	78	7.13	3.23	7.13	3.23	
│	3 ¹ /2	90	3 ⁷ /16	87	9.00	4.08	9.00	4.08	
	4	100	3 ¹³ / ₁₆	<i>98</i>	11.32	5.13	11.32	5.13	
	5	125	4 ¹ / ₂	114	19.42	8.81	19.42	8.81	
	6	150	5 ¹ /8	130	25.50	11.56	25.50	11.56	

Note: See following page for pressure-temperature ratings. Galvanized weights may vary. Please contact your Anvil Representative if you need verification. All Elbows & Tees ³/₈" (*10 DN*) and Larger are 100% Gas Tested at a Minimum of 100 PSI. (*6.9 bar*)

PROJECT INFORMATION	APPROVAL STAMP
Project:	Approved
Address:	Approved as noted
Contractor:	Not approved
Engineer:	Remarks:
Submittal Date:	
Notes 1:	
Notes 2:	
PF-11.13	

MALLEABLE IRON FITTINGS





Malleable Iron Threaded Pipe Unions Pressure - Temperature Ratings								
Temperature Pressure								
Tempe	alure	Class	s 150	Class 250 Class			s 300	
(°F)	(°C)	psi	bar	psi	bar	psi	bar	
-20° to 150°	-28.9° to 65.6°	300	20.7	500	34.5	600	41.4	
200°	93.3°	265	18.3	455	31.4	550	37.9	
250°	121.1°	225	15.5	405	27.9	505	34.8	
300°	148.9°	185	12.8	360	24.8	460	31.7	
350°	176.7°	150	10.3	315	21.7	415	28.6	
400°	204.4°	110	7.6	270	18.6	370	25.5	
450°	232.2°	75	5.2	225	15.5	325	22.4	
500°	260.0°	_	_	180	12.4	280	19.3	
550°	287.8°	-	-	130	9.0	230	15.9	

Note: Unions with Copper or Copper Alloy seats are not intended for use where temperature exceeds $450\,^{\circ}\text{F}$



For Listings/Approval Details and Limitations, visit our website at www.anvilintl.com or contact an Anvil Sales Representative.

	Malleable Iron Threaded Fittings											
	Pressure - Temperature Ratings											
				Pressure								
Tempe	erature	Class	150	60 Sizes 1/4"-1" Sizes 11/4"-2" (6-25 mm) (32-51 mm)				Sizes 2½"–3" (64–76 mm)				
(°F)	(°C)	psi	bar	psi	bar	psi	bar	psi	bar			
-20° to 150°	-28.9° to 65.6°	300	20.7	2,000	137.9	1,500	103.4	1,000	68.9			
200°	93.3	265	18.3	1,785	123.1	1,350	93.1	910	62.7			
250°	121.1	225	15.5	1,575	108.6	1,200	82.7	825	56.9			
300°	148.9	185	12.8	1,360	93.8	1,050	72.4	735	50.7			
350°	176.7	150	10.3	1,150	79.3	900	62.1	650	44.8			
400°	204.4	_	_	935	64.5	750	51.7	560	38.6			
450°	232.2	-	_	725	50.0	600	41.4	475	32.8			
500°	260.0	_	-	510	35.2	450	31.0	385	26.5			
550°	287.8	_	_	300	20.7	300	20.7	300	20.7			

Anvil Class 150/300 Malleable Iron Fittings conform to ASME B16.3 and Unions conform to ASME B16.39.

ALL ELBOWS & TEES %" (10 DN) and LARGER ARE 100% GAS TESTED AT A MINIMUM OF 100 PSI. (6.9 bar)

Standards and Specifications										
	Dimensions	Material	Galvanizing****	Thread	Pressure Rating	Federal/Other				
MALLEABLE IRON FITTINGS										
Class 150/PN 20	ASME B16.3•	ASTM A-197	ASTM A-153	ASME B1 20.1+	ASME B16.3•	ASME B16.3**				
Class 300/PN 50	ASME B16.3•	ASTM A-197	ASTM A-153	ASME B1 20.1+	ASME B16.3•					
		MALLEAB	LE IRON UNIC	ONS						
Class 150/PN 20	ASME B16.39•	ASTM A-197	ASTM A-153	ASME B1 20.1+	ASME B16.39•	ASME B16.39***				
Class 250	ASME B16.39•	ASTM A-197	ASTM A-153	ASME B1 20.1+	ASME B16.39•					
Class 300/PN 50	ASME B16.39•	ASTM A-197	ASTM A-153	ASME B1 20.1+	ASME B16.39•					

• an American National standard (ANSI), + ASME B1.20.1 was ANSI B2.1, ** Formerly WW-P-521, *** Formerly WW-U-531

**** ASTM B 633. Type I, SC 4, may be supplied as alternate zinc coating per applicable ASME B16 product standard.

MALLEABLE IRON FITTINGS



General Assembly of Threaded Fittings

1) Inspect both male and female components prior to assembly.

- Threads should be free from mechanical damage, dirt, chips and excess cutting oil.
- Clean or replace components as necessary.
- 2) Application of thread sealant
 - Use a thread sealant that is fast drying, sets-up to a semi hard condition and is vibration resistant. Alternately, an anaerobic sealant may be utilized.
 - Thoroughly mix the thread sealant prior to application.
 - Apply a thick even coat to the male threads only. Best application is achieved with a brush stiff enough to force sealant down to the root of the threads.
- 3) Joint Makeup
 - For sizes up to and including 2" pipe, wrench tight makeup is considered three full turns past handtight. Handtight engagement for 1/2" through 2" thread varies from 41/2 turns to 5 turns.
 - For $2^{1/2}$ " through 4" sizes, wrench tight makeup is considered two full turns past handtight. Handtight engagement for $2^{1/2}$ " through 4" thread varies from $5^{1/2}$ turns to $6^{3/4}$ turns.