



## Malleable Iron Fittings PF-MI

Effective Date: 07/19/2021

| Replaces Prior Date: 01/04/2021

| Sheet # PF.MI-7.21

### FREIGHT ALLOWANCE:

Freight terms are F.O.B. point of shipment.

Product Line	Standard Terms	General Service Product Combined Terms	Sharpe High-Performance Combined Terms
Pipe Fittings	\$ 2,500		
Pipe Nipples, Pipe & Tubing	\$ 2,500		
Grooved	\$ 2,500		
High-Pressure Fittings	\$ 2,500		
Press Products	\$ 2,500		
O-Lets	\$ 2,500		
FPPI	\$ 2,500	\$ 2,500	
Flexhead	\$ 2,500		
Pipe Hangers	\$ 2,500		
Strut & Strut Fittings	\$ 2,500		
Seismic (Afcon)	\$ 2,500		
SCI Valves	\$ 2,500		
Sharpe General Service Valves	\$ 2,500		
Sharpe High-preformance Valves	\$ 5,000		\$ 5,000
Sharpe Engineered Valves	\$ 5,000		
Sharpe Actuation Products	\$ 5,000		

If multiple products are combined on one order, the combined prepaid freight level will default to the highest product line value. For example, when pipe fittings are combined with Sharpe High-preformance Valves, the order's combined prepaid freight terms will be \$5,000.

### NOTE:

All orders are accepted on the basis of prices in effect at the time of shipment.

### NOTICE:

To the prices and terms quoted, there will be added any manufacturers or sales tax payable on the transaction under any effective statute.

### GENERAL

- UPC numbers are available upon request.
- To obtain current ISO certifications, listings, and other approvals, visit ASC's website at [www.asc-es.com](http://www.asc-es.com)
- Pricing is subject to change without notice.

### LOSS OR DAMAGE CLAIMS:

All goods are shipped at buyer's risk. Shipments should be carefully examined upon delivery and before the carrier's delivery receipt is signed. If any loss or damage is evident, the buyer should make an appropriate notation on the delivery receipt and insist that the carrier's driver initial such exception. The contents of all packages should be carefully examined for concealed damage as soon as possible after delivery, so that the carrier can be requested, within 48 hours after delivery, to arrange for prompt inspection of the damaged goods.

**Effective Date: 07/19/2021**

| Replaces Prior Date: 01/04/2021

| Sheet # PF.MI-7.21

## 1. CONTROLLING PROVISIONS:

These terms and conditions shall control with respect to any purchase order or sale of Seller's products. No waiver, alteration or modification of these terms and conditions whether on Buyer's purchase order or otherwise shall be valid unless the waiver, alteration or modification is specifically accepted in writing and signed by an authorized representative of Seller.

## 2. DELIVERY:

Seller will make every effort to complete delivery of products as indicated on Seller's acceptance of an order, but Seller assumes no responsibility or liability, and will accept no backcharge, for loss or damage due to delay or inability to deliver caused by acts of God, war, labor difficulties, accident, delays of carriers, by contractors or suppliers, inability to obtain materials, shortages of fuel and energy, or any other causes of any kind whatever beyond the control of Seller. Seller may terminate any contract of sale of its products without liability of any nature, by written notice to Buyer, in the event that the delay in delivery or performance resulting from any of the aforesaid causes shall continue for a period of sixty (60) days. Under no circumstances shall Seller be liable for any special or consequential damages or for loss, damage, or expense (whether or not based on negligence) directly or indirectly arising from delays or failure to give notice of delay.

## 3. WARRANTY:

Seller warrants for one year from the date of shipment Seller's manufactured products to the extent that Seller will replace those having defects in material or workmanship when used for the purpose and in the manner which Seller recommends. If Seller examination shall disclose to its satisfaction that the products are defective, and an adjustment is required, the amount of such adjustment shall not exceed the net sales price of the defective products only and no allowance will be made for labor or expense of repairing or replacing defective products or workmanship of damage resulting from the same. Seller warrants the products which it sells of other manufacturers to the extent of the warranties of their respective makers. Where engineering design or fabrication work is supplied. Buyer's acceptance of Seller's design or of delivery of work shall relieve Seller of all further obligation, other than expressed in Seller's product warranty. THIS IS SELLER'S SOLE WARRANTY. SELLER MAKES NO OTHER WARRANTY OF ANY KIND, EXPRESSED OR IMPLIED AND ALL IMPLIED WARRANTIES OF MERCHANTABILITY AND FOR A PARTICULAR PURPOSE WHICH EXCEED SELLER'S AFORESTATED OBLIGATION ARE HEREBY DISCLAIMED BY SELLER AND EXCLUDED FROM THIS WARRANTY. Seller neither assumes, nor authorizes any person to assume for it, any other obligation in connection with the sale of its engineering designs or products. This warranty shall not apply to any products or parts of products which (a) have been repaired or altered outside of Seller's factory, in any manner; (b) have been subjected to misuse, negligence or accidents; (c) have been used in a manner contrary to Seller's instructions or recommendations. Seller shall not be responsible for design errors due to inaccurate or incomplete information supplied by Buyer or its representatives.

## 4. SELLER'S LIABILITY:

Seller will not be liable for any loss, damage, cost of repairs, incidental or consequential damages of any kind, whether based upon warranty (except for the obligation accepted by Seller under "Warranty" above), contract or negligence, arising in connection with the design, manufacture, sale, use or repair of the products or of the engineering designs supplied to Buyer.

## 5. RETURNS:

Seller cannot accept return of any products unless its written permission has been first obtained, in which case same will be credited subject to the following (a) All material returned must, on its arrival at Seller's Plant, be found to be in first-class condition; if not, cost of putting in saleable condition will be deducted from credit memoranda; (b) A handling charge deduction of twenty percent (20%) will be made from all credit memoranda issued for material returned; (c) Transportation charges, if not prepaid will be deducted from credit memoranda.

## 6. SHIPMENTS:

All products sent out will be carefully examined, counted and packed. The cost of any special packing or special handling caused by Buyer's requirements or requests shall be added to the amount of the order. No claim for shortages will be allowed unless made in writing within ten (10) days of receipt of a shipment.

Claims for products damaged or lost in transit should be made on the carrier, as Seller's responsibility ceases, and title passes, on delivery to the carrier.

## 7. SPECIAL PRODUCTS:

Orders covering special or nonstandard products are not subject to cancellation except on such terms as Seller may specify on application.

## 8. PRICES AND DESIGNS:

Prices and designs are subject to change without notice. All prices are F.O.B. Point of shipment, unless otherwise stated.

## 9. TAXES:

The amount of any sales, excise or other taxes, if any, applicable to the products covered by this order, shall be paid by Buyer unless Buyer provides Seller with an exemption certificate acceptance of the taxing authorities.

## 10. NUCLEAR PLANTS:

Where the products, engineering design or fabrication is for nuclear plant applications. Buyer agrees (a) to take all necessary steps to add Seller as an insured under the American Nuclear Insurers' (ANI) pool and under the Mutual Atomic Energy Reinsurance Pool (MAERP) for property damage and liability insurance and if necessary steps could have been taken, but are not taken, Buyer shall hold Seller harmless against all such losses which could have been thus covered (b) Buyer agrees to hold Seller harmless with respect to any personal injury (or death), property damage or other loss in a nuclear incident which is caused directly or indirectly by defective design, material, workmanship furnished by Buyer (or which could be so covered but with respect to which Buyer has elected to self-insure), and further agrees to waive subrogation by its carriers of such insurance against Seller, and (c) as to nuclear hazards for which Buyer cannot obtain insurance coverage, the liability of Seller for any personal injury (or death), property damage or other loss directly caused by defective design, material, or workmanship furnished by Seller shall not exceed the value at the time of the loss occurrence.

## 11. MINIMUM INVOICE:

Domestic: \$100 plus transportation.  
International: \$500 plus transportation.

## 12. TERMS:

Cash, net 30 days unless otherwise specified.

NOTE: All orders are accepted on the basis of prices in effect at the time of shipment.

NOTICE: The prices and terms quoted, there will be added any manufacturers or sales tax payable on the transaction under any effective statute.

FREIGHT ALLOWANCE: Freight terms are F.O.B. point of shipment.

Product Line	Standard Terms	General Service Product Combined Terms	Sharpe High-Performance Combined Terms
Pipe Fittings	\$ 2,500		
Pipe Nipples, Pipe & Tubing	\$ 2,500		
Grooved	\$ 2,500		
High-Pressure Fittings	\$ 2,500		
Press Products	\$ 2,500		
O-Lets	\$ 2,500		
FPPI	\$ 2,500	\$ 2,500	
Flexhead	\$ 2,500		
Pipe Hangers	\$ 2,500		
Strut & Strut Fittings	\$ 2,500		
Seismic (Afcon)	\$ 2,500		
SCI Valves	\$ 2,500		
Sharpe General Service Valves	\$ 2,500		
Sharpe High-performance Valves	\$ 5,000		
Sharpe Engineered Valves	\$ 5,000		
Sharpe Actuation Products	\$ 5,000		

If multiple products are combined on one order, the combined prepaid freight level will default to the highest product line value. For example, when pipe fittings are combined with Sharpe High-Performance Valves, the order's combined prepaid freight terms will be \$5,000.

# Table of Contents

90° Elbow Fig. 1101 .....	4
90° Elbow, Reducing Fig. 1101R .....	5
45° Elbow Fig. 1102 .....	5
90° Street Elbow Fig. 1103 .....	6
90° Street Elbow, Reducing Fig. 1103R .....	6
45° Street Elbow Fig. 1104 .....	7
Tee Fig. 1105 .....	8
Tee, Reducing Fig. 1105R .....	10
Street Tee Fig. 1106 .....	11
Street Tee, Reducing Fig. 1106R .....	11
Cross Fig. 1107 .....	12
Y-Branch Fig. 1108 .....	12
Open-Pattern Return Bend Fig. 1119 .....	13
Coupling Fig. 1121 .....	13
Cap Fig. 1124 .....	14
Reducer Fig. 1125 .....	15
Hex Locknut Fig. 1134 .....	16
Floor Flange Fig. 1190 (Ductile Iron) .....	16
Oval Waste Nut Fig. 1133 .....	16
Extension Piece Fig. 1138 .....	17
XH 90° Elbow Fig. 1161 .....	17
XH 90° Elbow, Reducing Fig. 1161R .....	18
XH 45° Street Elbow Fig. 1160 .....	18
XH 45° Elbow Fig. 1162 .....	19
XH 90° Street Elbow Fig. 1170 .....	19
XH Tee Fig. 1164 .....	20
XH Tee, Reducing Fig. 1164R .....	21
XH Cross Fig. 1165 .....	21
XH Coupling Fig. 1166 .....	21
XH Reducer Fig. 1167 .....	22
XH Cap Fig. 1163 .....	23
SQ C/S Plug Fig. 390 .....	23
300 All Iron Union Fig. J-3300 (Not Columbia Plant Product) .....	24
150 Union Fig. 463 .....	24
250 Union Fig. 554 .....	25
300 Union Fig. 459 .....	25
300 Male/Female Union Fig. 551 .....	26
300 90° Elbow Female Union Fig. 552 .....	26
300 BR/BR Dart Union Fig. 832 .....	26
Hex Bushing Fig. 383 .....	27
Face Bushing Fig. 385 .....	27

## STANDARD MALLEABLE IRON FITTINGS

**90° Elbow Fig. 1101**


Size (in)	Approx Weight EACH (lbs)	90° Elbow Fig. 1101				Box Quantity	
		Black		Galvanized			
		ITEM#	Price Ea	ITEM#	Price Ea		
1/8*	0.06	031000203 □	\$10.340	031100202	\$16.030	35	
1/4*	0.11	031000401 □	\$10.100	031100400 □	\$14.630	25	
3/8*	0.17	031000609 □	\$10.100	031100608	\$14.630	20	
1/2	0.31	031000807 □	\$7.000	031100806 □	\$9.420	50	
5/8	0.45	031001003 □	\$8.430	0311001002 □	\$11.560	35	
1	0.65	031001201 □	\$14.680	0311001200 □	\$21.410	20	
1 1/4	0.97	031001409 □	\$24.180	0311001408 □	\$33.840	12	
1 1/2	1.34	031001607 □	\$31.810	0311001606 □	\$44.170	8	
2	2.06	0310001805 □	\$54.840	0311001804 □	\$72.360	10	
2 1/2	3.65	0310002001	\$122.160	0311002000	\$189.350	5	
3	5.46	0310002209 □	\$178.780	0311002208	\$312.170	4	
3 1/2	7.19	0310002407	\$514.860	0311002406	\$1,069.330	3	
4	8.96	0310002605	\$384.020	0311002604	\$550.580	5	
5	13.90	0310002803	\$1,237.630	0311002802	\$2,622.510	1	
6	23.82	0310003009	\$1,296.190	0311003008	\$2,192.020	1	

□ - Sold in box only, blk/galv

**90° Elbow, Reducing Fig. 1101R**


Size 1 (in)	Size 2 (in)	Approx Weight EACH (lbs)	Black		Galvanized		Box Quantity
			ITEM#	Price Ea	ITEM#	Price Ea	
1/4	1/8*	0.10	0310006804	\$20.110	-	-	50
3/8	1/4*	0.14	0310007000	\$14.200	0311007009	\$23.380	25
5/8	1/8*	0.12	0310007208	\$29.300	0311007207	\$44.570	25
1/2	3/8	0.22	0310007406	\$13.320	0311007405	\$17.310	75
1/2	1/4	0.19	0310007604	\$13.710	0311007603	\$20.270	15
5/8	1/2	0.38	0310007802 □	\$13.710	0311007801 □	\$20.110	45
3/4	3/8	0.29	0310008008	\$19.160	0311008007	\$27.720	20
3/4	1/4	0.26	0310008206	\$23.550	0311008205	\$40.500	12
1	3/4	0.56	0310008404 □	\$17.630	0311008403 □	\$25.790	20
1	1/2	0.46	0310008602 □	\$19.010	0311008601 □	\$27.390	25

**90° Elbow, Reducing Fig. 1101R**

Size 1 (in)	Size 2 (in)	Approx Weight EACH (lbs)	Black		Galvanized		Box Quantity
			ITEM#	Price Ea	ITEM#	Price Ea	
1	3/8	0.41	0310008800	\$37.410	0311008809	\$48.590	15
1 1/4	1	0.87	0310009006 □	\$29.600	0311009005	\$43.260	15
1 1/4	3/4	0.71	0310009204	\$33.020	0311009203	\$51.970	15
1 1/4	1/2	0.61	0310009402	\$38.590	0311009401	\$55.080	20
1 1/2	1 1/4	1.17	0310009600	\$41.770	0311009609	\$69.160	8
1 1/2	1	1.02	0310009808	\$41.770	0311009807	\$69.160	12
1 1/2	3/4	0.83	0310010004	\$47.800	0311010003	\$69.160	12
2	1 1/2	1.75	0310010202	\$60.510	0311010201	\$80.790	12
2	1 1/4	1.53	0310010400	\$68.760	0311010409	\$92.600	12
2	1	1.35	0310010608	\$68.760	0311010607	\$96.110	15
2	3/4	1.30	0310010806	\$72.900	0311010805	\$98.030	6
2 1/2	2	2.98	0310011002	\$166.070	0311011001	\$273.890	5
2 1/2	1 1/2	2.54	0310011200	\$175.860	0311011209	\$305.130	6
3	2 1/2	4.30	0310011408	\$310.790	0311011407	\$497.760	4
3	2	3.78	0310011606	\$268.490	0311011605	\$432.320	4
4	3	7.80	0310012000	\$531.150	0311012009	\$1,126.410	2

□ - Sold in box only, blk/galv

**45° Elbow Fig. 1102**


Size (in)	Approx Weight EACH (lbs)	45° Elbow Fig. 1102				Box Quantity
		Black		Galvanized		
ITEM#	Price Ea	ITEM#	Price Ea			
1/8*	0.07	0310022801	\$15.220	0311022800	\$23.570	50
1/4*	0.11	0310023007	\$15.220	0311023006	\$19.950	35
3/8*	0.16	0310023205	\$15.220	0311023204	\$22.280	20
1/2	0.22	0310023403 □	\$11.550	0311023402	\$14.900	75
3/4	0.37	0310023601 □	\$14.280	0311023600	\$21.410	40
1	0.54	0310023809 □	\$17.990	0311023808 □	\$24.180	25
1 1/4	0.86	0310024005 □	\$31.820	0311024004	\$45.180	15
1 1/2	1.13	0310024203	\$39.380	0311024202	\$53.070	8
2	1.79	0310024401 □	\$59.550	0311024400 □	\$78.510	6
2 1/2	3.55	0310024609	\$172.290	0311024608	\$273.200	5
3	4.48	0310024807	\$223.770	0311024806	\$397.320	4
4	7.40	0310025200	\$438.790	0311025209	\$666.110	4
5	11.46	0310025408	\$1,911.730	0311025407	\$2,691.650	1
6	18.34	0310025606	\$1,955.910	0311025605	\$3,245.500	1

□ - Sold in box only, blk/galv

**90° Street Elbow Fig. 1103**


Size (in)	Approx Weight EACH (lbs)	90° Street Elbow Fig. 1103				Box Quantity	
		Black		Galvanized			
		ITEM#	Price Ea	ITEM#	Price Ea		
1/8*	0.06	0310015607 □	\$14.910	0311015606	\$20.920	40	
1/4*	0.10	0310015805 □	\$14.910	0311015804 □	\$20.260	30	
3/8*	0.17	0310016001 □	\$14.910	0311016000	\$20.260	20	
1/2	0.28	0310016209 □	\$14.460	0311016208 □	\$20.690	75	
5/8	0.41	0310016407 □	\$14.460	0311016406 □	\$20.690	40	
1	0.62	0310016605 □	\$20.490	0311016604 □	\$27.680	15	
1 1/4	1.09	0310016803 □	\$31.820	0311016802	\$46.460	10	
1 1/2	1.44	0310017009 □	\$42.600	0311017008	\$58.330	8	
2	2.85	0310017207 □	\$69.200	0311017206	\$98.340	10	
2 1/2	4.02	0310017405	\$175.420	0311017404	\$284.480	4	
3	6.06	0310017603	\$267.760	0311017602	\$414.020	4	
4	10.53	0310017801	\$554.570	0311017800	\$848.200	4	

□ - Sold in box only, blk/galv

**90° Street Elbow, Reducing Fig. 1103R**


Size 1 (in)	Size 2 (in)	Approx Weight EACH (lbs)	Black		Galvanized		Box Quantity
			ITEM#	Price Ea	ITEM#	Price Ea	
1/2	3/8	0.23	0310018809	\$23.600	0311018808	\$35.150	35
5/8	1/2	0.32	0310019005 □	\$31.960	0311019004	\$43.500	25
1	5/8	0.54	0310019203	\$30.020	0311019202	\$53.070	25
1 1/4	1	0.86	0310019401	\$43.220	0311019400	\$75.900	15
1 1/4	5/8	0.75	0310019609	\$82.520	0311019608	\$105.690	15
1 1/2	1 1/4	1.18	0310019807	\$77.340	0311019806	\$94.920	20
1 1/2	1	1.08	0310020003	\$63.480	0311020002	\$90.710	10
2	1 1/2	1.85	0310020409	\$122.170	0311020408	\$161.270	12

□ - Sold in box only, blk/galv

**45° Street Elbow Fig. 1104**


Size (in)	Approx Weight EACH (lbs)	45° Street Elbow Fig. 1104				Box Quantity	
		Black		Galvanized			
		ITEM#	Price Ea	ITEM#	Price Ea		
1/8*	0.06	0310026604	\$23.470	0311026603	\$30.460	50	
1/4*	0.10	0310026802	\$19.490	0311026801	\$28.140	50	
3/8*	0.14	0310027008	\$19.770	0311027007	\$30.020	25	
1/2	0.20	0310027206	\$16.150	0311027205	\$22.740	75	
5/8	0.33	0310027404	\$24.380	0311027403	\$36.100	40	
1	0.52	0310027602	\$28.400	0311027601	\$46.280	25	
1 1/4	0.85	0310027800	\$49.110	0311027809	\$69.430	15	
1 1/2	1.22	0310028006	\$63.310	0311028005	\$84.090	10	
2	1.92	0310028204	\$106.480	0311028203	\$138.470	12	

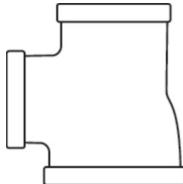
**Tee Fig. 1105**


Size (in)	Approx Weight EACH (lbs)	Tee Fig. 1105				Box Quantity	
		Black		Galvanized			
		ITEM#	Price Ea	ITEM#	Price Ea		
1/8*	0.09	0310029202 □	\$15.580	0311029201	\$22.660	25	
1/4*	0.15	0310029400 □	\$14.680	0311029409 □	\$19.070	20	
3/8*	0.23	0310029608 □	\$14.680	0311029607	\$19.070	15	
1/2	0.41	0310029806 □	\$9.360	0311029805 □	\$12.210	40	
5/8	0.67	0310030002 □	\$13.440	0311030001 □	\$20.110	20	
1	0.90	0310030200 □	\$22.980	0311030209 □	\$32.510	12	
1 1/4	1.31	0310030408 □	\$37.230	0311030407	\$51.610	8	
1 1/2	1.73	0310030606 □	\$46.290	0311030605 □	\$64.140	5	
2	2.52	0310030804 □	\$78.890	0311030803 □	\$104.240	10	
2 1/2	4.90	0310031000	\$170.120	0311031009	\$293.470	4	
3	7.07	0310031208	\$250.600	0311031207	\$360.560	3	
3 1/2	9.00	0310031406	\$607.870	0311031405	\$865.570	4	
4	11.32	0310031604	\$605.660	0311031603	\$814.150	4	
5	19.42	0310031802	\$1,922.800	0311031801	\$2,681.100	1	

**Tee Fig. 1105**

Size (in)	Approx Weight EACH (lbs)	Tee Fig. 1105				Box Quantity
		Black		Galvanized		
ITEM#	Price Ea	ITEM#	Price Ea	ITEM#	Price Ea	Box Quantity
6	29.90	0310032008	\$2,172.480	0311032007	\$3,201.550	1

 - Sold in box only, blk/galv

**Tee, Reducing Fig. 1105R**


Size 1 (in)	Size 2 (in)	Size 3 (in)	Approx Weight EACH (lbs)	Tee, Reducing Fig. 1105R				Box Quantity
				Galvanized		Black		
ITEM#	Price Ea	ITEM#	Price Ea	ITEM#	Price Ea	ITEM#	Price Ea	Box Quantity
1 1/4	1 1/4	3/4	1.07	0311042600	\$60.890	0310042601 □	\$41.880	8
1 1/4	1 1/4	1/2	0.98	0311042808	\$64.370	0310042809 □	\$47.760	10
1 1/4	1 1/4	5/8	0.86	0311043004	\$107.330	0310043005	\$68.010	10
1 1/4	1	1 1/4	1.13	0311043202	\$78.130	0310043203	\$58.710	6
1 1/4	1	1	1.11	0311043400	\$73.870	0310043401	\$48.900	10
1 1/4	1	3/4	0.87	0311043608	\$77.180	0310043609	\$48.900	10
1 1/4	1	1/2	0.76	0311043806	\$82.000	0310043807	\$60.540	15
1 1/4	3/4	1 1/4	1.04	0311044002	\$72.380	0310044003	\$50.400	6
1 1/4	3/4	1	0.91	0311044200	\$79.820	0310044201	\$51.480	10
1 1/4	3/4	3/4	0.86	0311044408	\$83.950	0310044409	\$55.600	10
1 1/4	1/2	1 1/4	1.04	0311044606	\$77.180	0310044607	\$55.600	6
1 1/4	1/2	1	0.87	0311044804	\$96.150	0310044805	\$64.920	10
1	1	1 1/4	0.92	0311045009	\$79.350	0310045000	\$58.000	10
3/4	3/4	1 1/4	0.90	0311045207	\$88.390	0310045208	\$70.230	10
1 1/2	1 1/2	1 1/4	1.45	0311045405	\$94.180	0310045406	\$65.360	6
1 1/2	1 1/2	1	1.45	0311045603	\$75.230	0310045604	\$52.860	6
1 1/2	1 1/2	3/4	1.61	0311045801	\$75.230	0310045802 □	\$52.860	6
1 1/2	1 1/2	1/2	1.19	0311046007	\$79.510	0310046008	\$55.950	8
1 1/2	1 1/4	1 1/2	1.50	0311046205	\$134.140	0310046206	\$100.210	12
1 1/2	1 1/4	1 1/4	1.52	0311046403	\$134.140	0310046404	\$89.150	12
1 1/2	1 1/4	1	1.26	0311046601	\$91.430	0310046602	\$57.070	8
1 1/2	1 1/4	3/4	1.08	0311046809	\$96.780	0310046800	\$66.450	8
1 1/2	1 1/4	1/2	1.05	0311047005	\$111.620	0310047006	\$73.150	10
1 1/2	1	1 1/2	1.50	0311047203	\$96.780	0310047204	\$66.450	15
1 1/2	1	1 1/4	1.30	0311047401	\$124.720	0310047402	\$90.210	15
1 1/2	1	1	1.14	0311047609	\$96.780	0310047600	\$66.450	8
1 1/2	3/4	1 1/2	1.41	0311047807	\$96.780	0310047808	\$66.450	15
1 1/2	3/4	3/4	1.00	0311048003	\$141.240	0310048004	\$111.410	10
1 1/2	1/2	1 1/2	1.33	0311048201	\$106.130	0310048202	\$66.450	15
1 1/4	1 1/4	1 1/2	1.45	0311048409	\$108.430	0310048400	\$73.150	15
1	1	1 1/2	1.19	0311048607	\$147.660	0310048608	\$95.080	8

**Tee, Reducing Fig. 1105R**

Size 1 (in)	Size 2 (in)	Size 3 (in)	Approx Weight EACH (lbs)	Tee, Reducing Fig. 1105R				Box Quantity	
				Galvanized		Black			
				ITEM#	Price Ea	ITEM#	Price Ea		
2	2	1 ½	2.55	0311048805	\$129.300	0310048806	\$89.150	10	
2	2	1 ¼	2.35	0311049001	\$129.300	0310049002	\$89.150	10	
2	2	1	1.76	0311049209	\$107.770	0310049200	\$82.830	12	
2	2	¾	1.87	0311049407	\$109.810	0310049408	\$82.830	12	
2	2	½	1.65	0311049605	\$122.360	0310049606	\$84.400	15	
2	1 ½	2	2.24	0311049803	\$136.790	0310049804	\$112.160	8	
2	1 ½	1 ½	1.95	0311050009	\$134.180	0310050000	\$106.680	10	
2	1 ½	1 ¼	1.76	0311050207	\$136.790	0310050208	\$103.810	10	
2	1 ½	1	1.57	0311050405	\$129.210	0310050406	\$101.830	12	
2	1 ¼	2	2.20	0311050603	\$157.980	0310050604	\$111.290	10	
2	1 ¼	1 ½	1.85	0311050801	\$212.240	0310050802	\$145.780	10	
2	1 ¼	1 ¼	1.72	0311051007	\$136.790	0310051008	\$103.620	10	
2	1	2	2.14	0311051205	\$136.790	0310051206	\$103.620	10	
2	¾	2	2.00	0311051403	\$134.180	0310051404	\$101.830	10	
2	½	2	2.15	0311051601	\$136.790	0310051602	\$103.620	10	
1 ½	1 ½	2	1.86	0311051809	\$147.960	0310051800	\$117.820	12	
1 ¼	1 ¼	2	1.70	0311052005	\$153.350	0310052006	\$122.290	12	
1	1	2	1.63	0311052203	\$160.640	0310052204	\$134.880	12	
2 ½	2 ½	2	3.65	0311052401	\$363.530	0310052402	\$221.300	6	
2 ½	2 ½	1 ½	3.46	0311052609	\$404.770	0310052600	\$258.070	6	
2 ½	2 ½	1 ¼	3.33	0311052807	\$402.420	0310052808	\$258.070	6	
2 ½	2 ½	1	2.85	0311053003	\$387.890	0310053004	\$258.070	6	
2 ½	2 ½	¾	2.72	0311053201	\$402.420	0310053202	\$248.540	6	
2 ½	2	2 ½	4.05	0311053409	\$479.910	0310053400	\$293.170	4	
2 ½	2	2	3.28	0311053607	\$433.500	0310053608	\$267.590	6	
2 ½	1 ½	2 ½	3.80	0311053805	\$593.110	0310053806	\$292.330	6	
2 ½	1 ½	2	3.43	0311054001	\$537.760	0310054002	\$366.000	6	
2	2	2 ½	3.50	0311054209	\$479.910	0310054200	\$292.330	6	
3	3	2 ½	6.09	0311054407	\$554.030	0310054408	\$351.140	4	
3	3	2	5.70	0311054605	\$475.690	0310054606	\$295.600	4	
3	3	1 ½	5.19	0311054803	\$493.460	0310054804	\$307.300	4	
3	3	1 ¼	4.50	0311055008	\$503.070	0310055009	\$312.940	4	
3	3	1	4.13	0311055206	\$475.690	0310055207	\$297.020	4	
3	3	¾	4.03	0311055404	\$663.640	0310055405	\$301.350	4	
3	2 ½	2 ½	5.80	0311055602	\$765.160	0310055603	\$515.490	4	
3	2 ½	2	4.80	0311055800	\$765.160	0310055801	\$515.490	4	
3	2	3	5.78	0311056006	\$622.190	0310056007	\$354.990	4	
3	2	2	4.47	0311056204	\$503.070	0310056205	\$312.710	4	
2 ½	2 ½	3	5.82	0311056402	\$768.940	0310056403	\$489.640	4	
4	4	3	11.02	0311056600	\$1,323.780	0310056601	\$716.860	4	
4	4	2 ½	9.57	0311056808	\$1,611.120	0310056809	\$886.460	4	
4	4	2	8.39	0311057004	\$1,058.750	0310057005	\$697.110	4	
4	4	1 ½	7.47	0311057103	\$1,127.680	0310057104	\$716.860	4	
4	3	4	10.40	0311057400	\$1,527.760	0310057401	\$987.950	4	
¾	¾	¾	0.36	-	-	0310039201	\$84.750	35	
¼	¼	¼*	0.13	0311035802	\$42.630	0310035803	\$33.480	25	
¼	¼	¼*	0.12	0311036008	\$57.910	0310036009	\$30.380	25	

**Tee, Reducing Fig. 1105R**

Size 1 (in)	Size 2 (in)	Size 3 (in)	Approx Weight EACH (lbs)	Tee, Reducing Fig. 1105R				Box Quantity	
				Galvanized		Black			
				ITEM#	Price Ea	ITEM#	Price Ea		
3/8	3/8	1/4	0.21	0311036206	\$36.760	0310036207	\$24.170	15	
3/8	1/4	3/8	0.21	0311036404	\$56.040	0310036405	\$45.380	15	
3/8	1/4	1/4	0.19	0311036602	\$53.450	0310036603	\$39.190	15	
1/4	1/4	3/8	0.20	0311036800	\$58.420	-	-	15	
1/2	1/2	3/8	0.30	0311037006	\$28.360	0310037007	\$20.440	25	
1/2	1/2	1/4	0.27	0311037204	\$23.380	0310037205	\$15.910	10	
1/2	3/8	1/2	0.33	0311037402	\$36.860	0310037403	\$24.900	10	
1/2	3/8	3/8	0.28	0311037600	\$33.310	0310037601	\$24.900	10	
1/2	1/4	1/2	0.29	0311037808	\$27.730	0310037809	\$16.730	10	
3/8	3/8	1/2	0.27	0311038004	\$28.900	0310038005	\$21.770	10	
3/4	3/4	1/2	0.47	0311038202	\$27.950	0310038203 □	\$20.760	20	
3/4	3/4	3/8	0.42	0311038400	\$30.070	0310038401	\$25.500	30	
3/4	3/4	1/4	0.38	0311038608	\$29.860	0310038609	\$23.080	35	
3/4	1/2	3/4	0.52	0311038707	\$31.910	0310038708	\$23.970	20	
3/4	1/2	1/2	0.43	0311038806	\$33.430	0310038807 □	\$21.320	35	
3/4	3/8	3/4	0.46	0311039002	\$88.030	0310039003	\$64.130	25	
3/4	1/4	3/4	0.45	0311039408	\$43.600	0310039409	\$31.820	30	
1/2	1/2	3/4	0.45	0311039606	\$33.430	0310039607	\$23.970	30	
1	1	3/4	0.82	0311039804	\$39.260	0310039805 □	\$26.210	15	
1	1	1/2	0.70	0311040000	\$39.260	0310040001 □	\$26.210	15	
1	1	3/8	0.60	0311040208	\$50.080	0310040209	\$36.840	20	
1	1	1/4	0.53	0311040406	\$54.620	0310040407	\$33.180	20	
1	3/4	1	0.78	0311040604	\$49.030	0310040605	\$30.420	15	
1	3/4	3/4	0.74	0311040802	\$47.310	0310040803	\$27.720	15	
1	3/4	1/2	0.59	0311041008	\$49.030	0310041009	\$30.000	20	
1	1/2	1	0.76	0311041206	\$49.030	0310041207	\$29.850	15	
1	1/2	3/4	0.56	0311041404	\$50.080	0310041405	\$35.610	20	
1	1/2	1/2	0.70	0311041602	\$49.030	0310041603 □	\$29.850	25	
1	1/4	1	0.69	0311041800	\$50.810	0310041801	\$30.420	15	
3/4	3/4	1	0.62	0311042006	\$48.110	0310042007	\$31.630	15	
1/2	1/2	1	0.55	0311042204	\$56.160	0310042205	\$39.190	25	
1 1/4	1 1/4	1	1.18	0311042402	\$60.890	0310042403 □	\$45.380	20	

□ - Sold in box only, blk/galv

**Effective Date: 07/19/2021**

Replaces Prior Date: 01/04/2021

**Sheet # PF.MI-7.21**
**Street Tee Fig. 1106**


Size (in)	Approx Weight EACH (lbs)	Street Tee Fig. 1106				Box Quantity	
		Black		Galvanized			
		ITEM#	Price Ea	ITEM#	Price Ea		
1/4*	0.15	0310061601	\$31.460	0311061600	\$45.140	25	
3/8	0.24	0310061809	\$36.930	0311061808	\$50.520	12	
1/2	0.34	0310062005	\$30.500	0311062004	\$47.820	15	
3/4	0.61	0310062203	\$34.200	0311062202	\$43.740	15	
1	0.96	0310062401	\$45.200	0311062400	\$69.180	10	
1 1/4	1.39	0310062609	\$74.640	0311062608	\$115.390	6	
1 1/2	1.93	0310062807	\$116.380	0311062806	\$175.890	12	
2	3.16	0310063003	\$214.280	0311063002	\$336.740	8	

**Street Tee, Reducing Fig. 1106R**


Size 1 (in)	Size 2 (in)	Size 3 (in)	Approx Weight EACH (lbs)	Street Tee, Reducing Fig. 1106R				Box Quantity	
				Black		Galvanized			
				ITEM#	Price Ea	ITEM#	Price Ea		
1 1/4	1	1 1/4	1.34	0310064209	\$109.290	0311064208	\$165.240	8	

**Cross Fig. 1107**


Size (in)	Approx Weight EACH (lbs)	Cross Fig. 1107				Box Quantity	
		Black		Galvanized			
		ITEM#	Price Ea	ITEM#	Price Ea		
1/8*	0.12	0310069208	\$44.810	0311069207	\$73.180	25	
1/4*	0.18	0310069406	\$34.050	0311069405	\$55.750	15	

**Cross Fig. 1107**

Size (in)	Approx Weight EACH (lbs)	Cross Fig. 1107				Box Quantity	
		Black		Galvanized			
		ITEM#	Price Ea	ITEM#	Price Ea		
3/8*	0.28	0310069604	\$38.900	0311069603	\$60.640	20	
1/2	0.42	0310069802	\$35.380	0311069801	\$50.200	30	
5/8	0.69	0310070008	\$42.800	0311070007	\$61.150	15	
1	1.12	0310070206	\$52.740	0311070205	\$84.380	10	
1 1/4	1.44	0310070404	\$85.570	0311070403	\$126.880	15	
1 1/2	1.98	0310070602	\$106.060	0311070601	\$148.440	10	
2	3.30	0310070800	\$174.390	0311070809	\$281.130	8	
2 1/2	5.17	0310071006	\$409.510	0311071005	\$787.490	4	
3	7.94	0310071204	\$515.110	0311071203	\$830.670	4	
4	13.50	0310071600	\$1,182.010	0311071609	\$2,142.910	1	

**Y-Branch Fig. 1108**


Size (in)	Approx Weight EACH (lbs)	Y-Branch Fig. 1108				Box Quantity	
		Black		Galvanized			
		ITEM#	Price Ea	ITEM#	Price Ea		
3/8*	0.27	0310066402	\$39.530	0311066401	\$48.050	12	
1/2	0.37	0310066600	\$39.190	0311066609	\$43.150	35	
5/8	0.62	0310066808	\$51.970	0311066807	\$71.060	20	
1	0.86	0310067004	\$64.550	0311067003	\$92.110	10	
1 1/4	1.63	0310067202	\$106.480	0311067201	\$147.560	6	
1 1/2	2.06	0310067400	\$155.810	0311067409	\$217.290	10	
2	3.05	0310067608	\$242.490	0311067607	\$349.530	6	
2 1/2	5.86	0310067806	\$650.290	0311067805	\$941.660	4	
3	9.18	0310068002	\$899.080	0311068001	\$1,707.740	1	
4	15.70	0310068200	\$1,808.560	0311068209	\$2,690.130	1	

**Open-Pattern Return Bend Fig. 1119**


Size (in)	Approx Weight EACH (lbs)	Open-Pattern Return Bend Fig. 1119				Box Quantity	
		Black		Galvanized			
		ITEM#	Price Ea	ITEM#	Price Ea		
½	0.36	0310077003	\$125.900	-	-	20	
¾	0.64	0310077201	\$76.030	-	-	20	
1	1.15	0310077409	\$70.680	0311077408	\$107.040	10	
1 ¼	1.77	0310077607	\$154.470	-	-	12	
1 ½	2.55	0310077805	\$261.510	0311077804	\$339.310	10	
2	4.25	0310078001	\$271.440	0311078000	\$352.190	6	

**Coupling Fig. 1121**


Size (in)	Approx Weight EACH (lbs)	Coupling Fig. 1121				Box Quantity	
		Black		Galvanized			
		ITEM#	Price Ea	ITEM#	Price Ea		
⅛*▲	0.06	0310079603	\$14.550	0311079602	\$20.890	40	
¼*	0.09	0310079801 □	\$12.540	0311079800	\$17.460	35	
⅜*	0.13	0310080007	\$12.540	0311080006	\$18.060	30	
½*	0.21	0310080205 □	\$9.680	0311080204 □	\$13.790	20	
¾	0.32	0310080403 □	\$11.330	0311080402 □	\$15.890	60	
1	0.48	0310080601 □	\$16.970	0311080600 □	\$26.040	25	
1 ¼	0.76	0310080809 □	\$21.970	0311080808	\$36.740	15	
1 ½	1.01	0310081005 □	\$29.700	0311081004	\$41.750	10	
2	1.83	0310081203 □	\$43.980	0311081202	\$61.020	5	
2 ½	2.45	0310081401	\$121.380	0311081400	\$186.820	12	
3	3.40	0310081609	\$164.120	0311081608	\$249.690	4	
4	5.84	0310081807	\$330.510	0311081806	\$530.300	4	

▲ Supplied in Steel only.

□ - Sold in box only, blk/galv

**Cap Fig. 1124**


Size (in)	Approx Weight EACH (lbs)	Cap Fig. 1124				Box Quantity	
		Black		Galvanized			
		ITEM#	Price Ea	ITEM#	Price Ea		
½	0.12	0318900529 □	\$7.050	0319900528 □	\$10.430	75	
¾	0.22	0318900560 □	\$9.580	0319900569 □	\$14.440	60	
1	0.38	0318900602 □	\$11.580	0319900601 □	\$17.880	35	
1 ¼	0.58	0318900644 □	\$15.270	0319900643	\$23.570	25	
1 ½	0.73	0318900685 □	\$20.980	0319900684	\$30.200	20	
2	1.13	0318900727 □	\$30.610	0319900726	\$42.290	12	
2 ½	1.75	0318900768	\$69.740	0319900767	\$122.840	15	
3	2.62	0318900842	\$103.620	0319900841	\$148.870	12	
3 ½	3.19	0318900925	\$259.080	0319900924	\$450.650	8	
4	4.54	0318901006	\$177.660	0319901005	\$328.900	4	
5	6.45	0318901089	\$467.070	0319901088	\$924.470	4	
6	9.98	0318901162	\$776.260	0319901161	\$1,115.220	1	

□ - Sold in box only, blk/galv

**Reducer Fig. 1125**


Size 1 (in)	Size 2 (in)	Approx Weight EACH (lbs)	Black		Galvanized		Box Quantity
			ITEM#	Price Ea	ITEM#	Price Ea	
¼	⅛	0.07	0310084801 □	\$13.220	0311084800	\$17.880	25
⅜	¼	0.11	0310085006 □	\$13.220	0311085005	\$17.880	25
⅜	⅛	0.11	0310085204	\$16.910	0311085203	\$29.380	30
½	⅜	0.17	0310085402 □	\$11.350	0311085401	\$16.730	25
½	⅛	0.15	0310085600 □	\$12.020	0311085609	\$16.080	25
½	⅛	0.14	0310085808	\$13.360	0311085807	\$21.210	20
¾	½	0.27	0310086004 □	\$12.710	0311086003 □	\$17.870	60
¾	⅜	0.25	0310086202	\$15.160	0311086201	\$20.330	50
¾	⅛	0.22	0310086400	\$15.160	0311086409	\$20.330	12
¾	⅛	0.24	0310086608	\$15.820	0311086607	\$23.300	20
1	⅜	0.43	0310086806 □	\$19.770	0311086805 □	\$27.680	35
1	½	0.48	0310087002 □	\$20.260	0311087001 □	\$29.810	45
1	⅜	0.35	0310087200	\$24.920	0311087209	\$38.710	20

**Reducer Fig. 1125**

Size 1 (in)	Size 2 (in)	Approx Weight EACH (lbs)	Black		Galvanized		Box Quantity
			ITEM#	Price Ea	ITEM#	Price Ea	
1	1/4	0.35	0310087408	\$26.690	0311087407	\$42.310	20
1 1/4	1	0.68	0310087606 □	\$25.460	0311087605	\$37.810	20
1 1/4	3/4	0.64	0310087804 □	\$25.460	0311087803	\$38.550	20
1 1/4	1/2	0.61	0310088000	\$29.850	0311088009	\$49.470	15
1 1/2	1 1/4	0.90	0310088208 □	\$32.170	0311088207	\$46.940	10
1 1/2	1	0.88	0310088406 □	\$37.300	0311088405	\$49.700	15
1 1/2	3/4	0.88	0310088604	\$42.800	0311088603	\$49.700	15
1 1/2	1/2	0.78	0310088802	\$37.960	0311088801	\$58.330	15
2	1 1/2	1.55	0310089008 □	\$46.610	0311089007	\$67.800	5
2	1 1/4	1.53	0310089206	\$53.360	0311089205	\$71.680	5
2	1	1.40	0310089404 □	\$50.440	0311089403	\$67.800	5
2	3/4	1.34	0310089602	\$53.360	0311089601	\$81.220	5
2	1/2	1.30	0310089800	\$61.810	0311089809	\$84.210	10
2 1/2	2	2.51	0310090006	\$107.150	0311090005	\$189.170	8
2 1/2	1 1/2	2.09	0310090204	\$127.130	0311090203	\$199.990	7
2 1/2	1 1/4	2.09	0310090402	\$137.780	0311090401	\$256.860	10
2 1/2	1	2.12	0310090600	\$137.780	0311090609	\$218.800	10
3	2 1/2	3.31	0310090808	\$161.950	0311090807	\$242.630	5
3	2	3.41	0310091004	\$138.680	0311091003	\$237.610	5
3	1 1/2	3.02	0310091202	\$167.480	0311091201	\$251.410	4
3	1 1/4	2.99	0310091400	\$173.740	0311091409	\$265.740	4
3	1	3.16	0310091608	\$170.580	0311091607	\$265.740	5
3 1/2	3	4.99	0310091806	\$554.560	0311091805	\$874.620	4
3 1/2	2 1/2	4.72	0310092002	\$570.320	0311092001	\$899.540	1
3 1/2	2	4.32	0310092200	\$557.300	0311092209	\$834.860	4
4	3 1/2	6.30	0310092408	\$529.350	0311092407	\$834.860	4
4	3	6.55	0310092606	\$335.700	0311092605	\$543.960	4
4	2 1/2	5.93	0310092804	\$376.500	0311092803	\$636.800	4
4	2	5.10	0310093000	\$335.700	0311093009	\$543.960	4
4	1 1/2	4.90	0310093208	\$443.690	0311093207	\$910.570	4
5	4	9.57	0310093406	\$832.200	0311093405	\$1,733.630	1
6	4	11.13	0310093604	\$1,015.240	0311093603	\$1,875.980	1

□ - Sold in box only, blk/galv

**Hex Locknut Fig. 1134**


Size (in)	Approx Weight EACH (lbs)	Hex Locknut Fig. 1134				Box Quantity	
		Black		Electroplated			
		ITEM#	Price Ea	ITEM#	Price Ea		
1/4*▲	0.02	0318913365	\$10.020	0319913364	\$11.470	50	

**Effective Date: 07/19/2021**
**Replaces Prior Date: 01/04/2021**
**Sheet # PF.MI-7.21**
**Hex Locknut Fig. 1134**

Size (in)	Approx Weight EACH (lbs)	Hex Locknut Fig. 1134				Box Quantity	
		Black		Electroplated			
		ITEM#	Price Ea	ITEM#	Price Ea		
5/8*	0.04	0318913407	\$11.660	0319913406	\$14.630	50	
1/2*	0.06	0318913449	\$10.020	0319913448	\$11.830	50	
3/4*	0.08	0318913480	\$10.900	0319913489	\$13.860	50	
1*	0.14	0318913522	\$20.910	0319913521	\$25.200	25	
1 1/4	0.21	0318913563	\$17.160	0319913562	\$24.180	25	
1 1/2	0.24	0318913605	\$24.130	0319913604	\$31.380	15	
2	0.41	0318913647	\$40.060	0319913646	\$55.270	25	

\* Supplied in Steel only.

**Floor Flange Fig. 1190 (Ductile Iron)**


Size (in)	Approx Weight EACH (lbs)	Floor Flange Fig. 1190 (Ductile Iron)				Box Quantity	
		Black		Galvanized			
		ITEM#	Price Ea	ITEM#	Price Ea		
1/4	0.30	0300194602	\$32.630	0301194601	\$63.480	1	
5/8	0.36	0300194800	\$32.630	0301194809	\$63.480	1	
1/2	0.55	0310105002	\$32.630	0311105001	\$81.530	30	
3/4	0.54	0310105200	\$32.630	0311105209	\$81.530	20	
1	0.76	0310105408	\$41.010	0311105407	\$74.410	15	
1 1/4	0.90	0310105606	\$41.010	0311105605	\$98.920	25	
1 1/2	1.25	0310105804	\$52.740	0311105803	\$126.720	10	
2	2.05	0310106000	\$63.430	0311106009	\$160.940	15	

**PLAIN FITTINGS**
**Oval Waste Nut Fig. 1133**

Size (in)	Approx Weight EACH (lbs)	Oval Waste Nut Fig. 1133				Box Quantity	
		Black		Galvanized			
		ITEM#	Price Ea	ITEM#	Price Ea		
1/2*	0.12	0310103007	\$20.680	-	-	50	
3/4*	0.15	0310103205	\$24.950	0311103204	\$33.840	25	

**Extension Piece Fig. 1138**

Size (in)	Approx Weight EACH (lbs)	Extension Piece Fig. 1138				Box Quantity	
		Black		Galvanized			
		ITEM#	Price Ea	ITEM#	Price Ea		
1/2	0.19	0310095419	\$21.580	0311095418	\$34.750	20	
3/4	0.33	0310095427	\$31.810	0311095426	\$51.970	60	

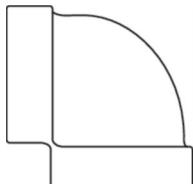
**Extension Piece Fig. 1138**

Size (in)	Approx Weight EACH (lbs)	Extension Piece Fig. 1138				Box Quantity
		Black		Galvanized		
ITEM#	Price Ea	ITEM#	Price Ea	ITEM#	Price Ea	Box Quantity
1	0.48	0310095435	\$45.890	0311095434	\$65.190	30

**EXTRA HEAVY MALLEABLE IRON FITTINGS**
**XH 90° Elbow Fig. 1161**


Size (in)	Approx Weight EACH (lbs)	XH 90° Elbow Fig. 1161				Box Quantity
		Black		Galvanized		
ITEM#	Price Ea	ITEM#	Price Ea	ITEM#	Price Ea	Box Quantity
1/4*	0.20	0310500202	\$35.420	0311500201	\$63.430	20
5/8*	0.29	0310500400	\$31.460	0311500409	\$64.690	15
1/2	0.47	0310500608 □	\$42.720	0311500607	\$77.060	40
3/4	0.66	0310500806 □	\$46.120	0311500805	\$86.520	20
1	1.15	0310501002 □	\$58.900	0311501001	\$110.930	15
1 1/4	1.89	0310501200	\$85.960	0311501209	\$174.260	13
1 1/2	2.47	0310501408 □	\$101.360	0311501407	\$188.870	10
2	3.79	0310501606 □	\$145.810	0311501605	\$317.400	6
2 1/2	6.51	0310501804	\$377.890	0311501803	\$706.400	3
3	9.95	0310502000	\$433.970	0311502009	\$833.170	2
4	16.00	0310502406	\$1,124.500	0311502405	\$2,608.550	1

□ - Sold in box only, blk/galv

**XH 90° Elbow, Reducing Fig. 1161R**


Size 1 (in)	Size 2 (in)	Approx Weight EACH (lbs)	Black		Galvanized		Box Quantity
			ITEM#	Price Ea	ITEM#	Price Ea	
5/8	1/4	0.26	0310503800	\$76.110	-	-	20
1/2	5/8	0.41	0310504006	\$75.430	-	-	25
3/4	1/2	0.62	0310504204	\$55.560	0311504203	\$98.600	20
1	3/4	1.00	0310504600	\$111.220	-	-	20
1	1/2	0.87	0310504808	\$114.370	0311504807	\$139.910	20
1 1/4	1	1.60	0310505003	\$146.360	-	-	15
1 1/4	3/4	1.41	0310505201	\$221.260	-	-	15
1 1/2	1 1/4	2.15	0310505409	\$243.310	-	-	10

**XH 90° Elbow, Reducing Fig. 1161R**

Size 1 (in)	Size 2 (in)	Approx Weight EACH (lbs)	Black		Galvanized		Box Quantity
			ITEM#	Price Ea	ITEM#	Price Ea	
1 ½	1	1.89	0310505607	\$243.310	-	-	10
2	1 ½	3.30	0310505805	\$304.830	0311505804	\$601.270	5
2	1 ¼	3.12	0310506001	\$341.840	-	-	5

**XH 45° Street Elbow Fig. 1160**


Size (in)	Approx Weight EACH (lbs)	Black		Box Quantity
		ITEM#	Price Ea	
½	0.36	0310513601	\$96.430	12
¾	0.54	0310513809	\$105.330	30
1	0.85	0310514005	\$123.510	15
1 ¼	1.50	0310514203	\$151.030	10
1 ½	2.06	0310514401	\$244.870	6
2	3.34	0310514609	\$377.780	8

**XH 45° Elbow Fig. 1162**


Size (in)	Approx Weight EACH (lbs)	XH 45° Elbow Fig. 1162				Box Quantity
		Black		Galvanized		
ITEM#	Price Ea	ITEM#	Price Ea			
¼*	0.19	0310510201	\$52.740	0311510200	\$75.140	25
⅜*	0.28	0310510409	\$52.740	0311510408	\$75.140	15
½	0.43	0310510607	\$58.690	0311510606	\$114.470	10
¾	0.66	0310510805	\$65.310	0311510804	\$132.350	12
1	1.00	0310511001	\$72.180	0311511000	\$144.580	15
1 ¼	1.67	0310511209	\$115.750	0311511208	\$224.410	15
1 ½	2.15	0310511407	\$150.870	0311511406	\$290.340	11
2	3.40	0310511605	\$227.990	0311511604	\$402.170	6
2 ½	5.51	0310511803	\$533.460	0311511802	\$1,074.610	4
3	8.10	0310512009	\$701.500	0311512008	\$1,479.680	3

**XH 45° Elbow Fig. 1162**

Size (in)	Approx Weight EACH (lbs)	XH 45° Elbow Fig. 1162				Box Quantity
		Black		Galvanized		
ITEM#	Price Ea	ITEM#	Price Ea	ITEM#	Price Ea	Box Quantity
4	13.41	0310512207	\$1,593.320	0311512206	\$2,040.620	3

**XH 90° Street Elbow Fig. 1170**


Size (in)	Approx Weight EACH (lbs)	XH 90° Street Elbow Fig. 1170				Box Quantity
		Black		Galvanized		
ITEM#	Price Ea	ITEM#	Price Ea	ITEM#	Price Ea	Box Quantity
1/4*	0.17	0310507405	\$41.960	0311507404	\$66.750	30
5/8*	0.26	0310507603	\$47.060	0311507602	\$66.750	15
1/2	0.47	0310507801	\$54.830	0311507800	\$130.800	20
3/4	0.68	0310508007	\$77.870	0311508006	\$138.930	25
1	1.04	0310508205	\$91.300	0311508204	\$181.660	15
1 1/4	1.60	0310508403	\$125.600	0311508402	\$237.300	15
1 1/2	2.20	0310508601	\$155.170	0311508600	\$305.040	10
2	3.59	0310508809	\$241.520	0311508808	\$476.780	4
3	9.55	0310509203	\$620.040	-	-	2

**XH Tee Fig. 1164**


Size (in)	Approx Weight EACH (lbs)	XH Tee Fig. 1164				Box Quantity
		Black		Galvanized		
ITEM#	Price Ea	ITEM#	Price Ea	ITEM#	Price Ea	Box Quantity
1/4*	0.27	0310515606	\$44.640	0311515605	\$90.290	15
5/8*	0.42	0310515804	\$47.240	0311515803	\$91.960	10
1/2	0.65	0310516000	\$60.170	0311516009	\$115.130	25
3/4	1.07	0310516208	\$64.940	0311516207	\$126.790	15
1	1.62	0310516406	\$78.130	0311516405	\$156.310	10
1 1/4	2.49	0310516604	\$111.990	0311516603	\$223.120	10
1 1/2	3.40	0310516802	\$130.570	0311516801	\$231.990	7
2	5.20	0310517008	\$192.750	0311517007	\$370.880	5
2 1/2	8.42	0310517206	\$490.730	0311517205	\$1,172.500	4
3	12.47	0310517404	\$667.860	0311517403	\$1,329.200	4

**XH Tee Fig. 1164**

Size (in)	Approx Weight EACH (lbs)	XH Tee Fig. 1164				Box Quantity
		Black		Galvanized		
ITEM#	Price Ea	ITEM#	Price Ea	ITEM#	Price Ea	Box Quantity
4	24.02	0310517800	\$1,993.520	0311517809	\$3,575.650	1

**XH Tee, Reducing Fig. 1164R**


Size 1 (in)	Size 2 (in)	Size 3 (in)	Approx Weight EACH (lbs)	XH Tee, Reducing Fig. 1164R				Box Quantity
				Black		Galvanized		
ITEM#	Price Ea	ITEM#	Price Ea	ITEM#	Price Ea	ITEM#	Price Ea	Box Quantity
5/8	5/8	1/4	0.37	0310519202	\$57.450	-	-	30
1/2	1/2	5/8	0.61	0310519400	\$101.940	-	-	1
1/2	1/2	1/4	0.48	0310519608	\$64.250	-	-	52
3/4	3/4	1/2	0.88	0310520002	\$95.940	0311520001	\$168.400	13
3/4	3/4	5/8	0.80	0310520200	\$190.740	-	-	13
3/4	3/4	1/4	0.76	0310520408	\$170.990	-	-	15
3/4	1/2	3/4	0.93	0310520606	\$121.480	-	-	13
3/4	1/2	1/2	0.78	0310520804	\$170.990	-	-	1
1/2	1/2	3/4	0.80	0310521000	\$187.230	-	-	13
1	1	3/4	1.33	0310521208	\$117.260	0311521207	\$221.190	10
1	1	1/2	1.26	0310521406	\$117.260	0311521405	\$201.020	10
1	1	1/4	1.09	0310521802	\$143.870	-	-	9
1	3/4	1	1.38	0310522008	\$169.990	-	-	9
1	3/4	3/4	1.27	0310522206	\$151.470	-	-	10
1	1/2	1	1.36	0310522404	\$201.200	-	-	18
1 1/4	1 1/4	1	2.13	0310522800	\$169.730	0311522809	\$293.470	6
1 1/4	1 1/4	3/4	1.90	0310523006	\$156.110	0311523005	\$293.470	12
1 1/4	1 1/4	1/2	1.88	0310523204	\$187.790	0311523203	\$340.370	15
1 1/4	1	1	1.92	0310523808	\$187.790	-	-	14
1 1/2	1 1/2	1 1/4	3.05	0310524202	\$236.030	0311524201	\$485.220	9
1 1/2	1 1/2	1	2.70	0310524400	\$189.940	0311524409	\$360.210	9
1 1/2	1 1/2	3/4	2.46	0310524608	\$189.940	0311524607	\$360.210	10
1 1/2	1 1/2	1/2	2.27	0310524806	\$212.540	0311524805	\$365.610	10
2	2	1 1/2	4.60	0310525209	\$284.800	0311525208	\$533.670	5
2	2	1 1/4	4.22	0310525407	\$329.910	0311525406	\$693.580	6
2	2	1	3.69	0310525605	\$306.230	0311525604	\$485.540	6
2	2	3/4	3.57	0310525803	\$306.230	0311525802	\$574.540	8
2	2	1/2	3.38	0310526009	\$306.230	0311526008	\$574.540	5
2	1 1/2	2	4.50	0310526207	\$387.290	-	-	5
2 1/2	2 1/2	2	7.59	0310526405	POA	-	-	1
2 1/2	2 1/2	1 1/2	6.35	0310526603	\$549.870	-	-	4

**XH Tee, Reducing Fig. 1164R**

Size 1 (in)	Size 2 (in)	Size 3 (in)	Approx Weight EACH (lbs)	XH Tee, Reducing Fig. 1164R				Box Quantity			
				Black		Galvanized					
ITEM#	Price Ea	ITEM#	Price Ea								
3	3	2	10.10	0310527205	\$1,332.760	0311527204	\$2,391.770	4			

**XH Cross Fig. 1165**


Size (in)	Approx Weight EACH (lbs)	XH Cross Fig. 1165				Box Quantity	
		Black		Galvanized			
ITEM#	Price Ea	ITEM#	Price Ea				
1/4	0.35	0310529201	\$126.130	-	-	30	
3/4	1.25	0310529805	\$197.610	0311529804	\$436.330	25	
1	1.90	0310530001	\$215.560	-	-	13	
1 1/4	3.23	0310530209	\$218.660	-	-	8	
1 1/2	4.20	0310530407	\$377.130	-	-	6	
2	6.49	0310530605	\$410.660	-	-	3	

**XH Coupling Fig. 1166**


Size (in)	Approx Weight EACH (lbs)	XH Coupling Fig. 1166				Box Quantity	
		Black		Galvanized			
ITEM#	Price Ea	ITEM#	Price Ea				
1/4*	0.17	0310538004	\$31.960	0311538003	\$41.620	30	
3/8*	0.26	0310538202	\$31.960	0311538201	\$59.900	10	
1/2*	0.40	0310538400	\$35.650	0311538409	\$61.440	10	
5/8	0.65	0310538608	\$41.030	0311538607	\$69.410	12	
1	0.99	0310538806	\$46.920	0311538805	\$91.820	8	
1 1/4	1.64	0310539002	\$55.780	0311539001	\$119.670	15	
1 1/2	2.03	0310539200	\$83.550	0311539209	\$168.880	12	
2	3.24	0310539606	\$120.340	0311539605	\$204.520	8	
2 1/2	5.45	0310539804	\$232.170	0311539803	\$563.370	5	
3	7.30	0310540000	\$334.430	0311540009	\$670.690	3	

**XH Reducer Fig. 1167**


Size 1 (in)	Size 2 (in)	Approx Weight EACH (lbs)	Black		Galvanized		Box Quantity
			ITEM#	Price Ea	ITEM#	Price Ea	
3/8	1/4	0.22	0310541206	\$42.250	0311541205	\$59.920	24
1/2	3/8	0.34	0310541404	\$50.880	0311541403	\$86.810	12
1/2	1/4	0.31	0310541602	\$50.880	0311541601	\$86.810	12
5/8	1/2	0.50	0310541800	\$52.010	0311541809	\$105.360	45
5/8	3/8	0.47	0310542006	\$76.020	0311542005	\$139.360	45
5/8	1/4	0.46	0310542204	\$76.020	-	-	45
1	3/4	0.77	0310542402	\$62.140	0311542401	\$125.860	30
1	1/2	0.71	0310542600	\$63.390	0311542609	\$128.390	20
1	5/8	0.71	0310542808	\$95.940	0311542807	\$169.720	20
1	1/4	0.66	0310543004	\$95.940	0311543003	\$187.200	15
1 1/4	1	1.25	0310543202	\$81.820	0311543201	\$143.020	12
1 1/4	3/4	1.16	0310543400	\$84.860	0311543409	\$157.310	12
1 1/4	1/2	1.12	0310543608	\$143.110	0311543607	\$217.780	22
1 1/2	1 1/4	1.78	0310543806	\$127.440	0311543805	\$215.060	8
1 1/2	1	1.62	0310544002	\$112.030	0311544001	\$194.930	8
1 1/2	3/4	1.57	0310544200	\$116.350	0311544209	\$194.930	10
1 1/2	1/2	1.51	0310544408	\$148.640	0311544407	\$271.340	16
2	1 1/2	2.72	0310544606	\$161.100	0311544605	\$278.940	10
2	1 1/4	2.54	0310544804	\$198.670	0311544803	\$416.240	6
2	1	2.54	0310545009	\$162.490	0311545008	\$312.510	9
2	5/8	2.44	0310545207	\$203.750	0311545206	\$412.370	10
2	1/2	2.39	0310545405	\$214.510	-	-	12
2 1/2	2	4.32	0310545603	\$328.570	0311545602	\$761.030	5
2 1/2	1 1/2	4.09	0310545801	\$345.920	0311545800	\$761.030	4
3	2 1/2	6.45	0310546007	\$526.350	0311546006	\$1,211.540	4
3	2	5.83	0310546205	\$481.490	0311546204	\$1,150.780	4
3	1 1/2	5.79	0310546403	\$617.900	-	-	4
4	3	10.00	0310546601	\$1,069.730	-	-	4
4	2	9.50	0310547005	\$1,069.730	-	-	4

**XH Cap Fig. 1163**


Size (in)	Approx Weight EACH (lbs)	XH Cap Fig. 1163				Box Quantity	
		Black		Galvanized			
		ITEM#	Price Ea	ITEM#	Price Ea		
1/4*	0.11	0318901261	\$32.780	0319901260	\$42.450	40	
5/8*	0.15	0318901287	\$32.780	0319901286	\$42.450	25	
1/2*	0.24	0318901303	\$32.510	0319901302	\$62.280	15	
3/4	0.36	0318901329	\$41.030	0319901328	\$74.460	12	
1	0.58	0318901345	\$53.820	0319901344	\$102.160	15	
1 1/4	0.95	0318901360	\$59.620	0319901369	\$120.860	10	
1 1/2	1.32	0318901386	\$87.090	0319901385	\$169.420	5	
2	1.96	0318901402	\$121.060	0319901401	\$234.490	8	
2 1/2	3.35	0318901410	\$257.340	0319901419	\$581.440	10	
3	4.71	0318901428	\$337.340	0319901427	\$835.870	8	

**SQ C/S Plug Fig. 390**

Size (in)	Approx Weight EACH (lbs)	SQ C/S Plug Fig. 390				Box Quantity	
		Black		Galvanized			
		ITEM#	Price Ea	ITEM#	Price Ea		
1/2	0.05	0318904562	\$11.840	0319904561	\$17.830	100	
3/4	0.11	0318904646	\$16.090	0319904645	\$27.720	50	

**ALL IRON UNIONS**
**300 All Iron Union Fig. J-3300 (Not Columbia Plant Product)**


Size (in)	Approx Weight EACH (lbs)	Black		Box Quantity
		ITEM#	Price Ea	
1/4	0.27	0312703408	\$118.490	100
5/8	0.37	0312703606	\$118.490	100
1/2	0.51	0312703804	\$124.840	60
3/4	0.76	0312704000	\$133.960	50
1	1.20	0312704208	\$164.300	25
1 1/4	1.87	0312704406	\$252.070	20

**300 All Iron Union Fig. J-3300 (Not Columbia Plant Product)**

Size (in)	Approx Weight EACH (lbs)	Black		Box Quantity
		ITEM#	Price Ea	
1 1/2	2.51	0312704604	\$307.800	15
2	4.30	0312704802	\$389.510	10
2 1/2	6.02	0312705007	\$690.250	8
3	7.96	0312705205	\$1,311.920	4

**MALLEABLE IRON UNIONS COPPER OR COPPER ALLOY TO IRON**
**150 Union Fig. 463**


Size 1 (in)	Size 2 (in)	Approx Weight EACH (lbs)	Black		Galvanized		Box Quantity
			ITEM#	Price Ea	ITEM#	Price Ea	
1/8		0.15	0312822000	\$56.580	0313822009	\$80.670	25
1/4		0.48	0312822026	\$52.370	0313822025	\$71.030	40
3/8		0.43	0312822042 □	\$36.070	0313822041	\$47.540	40
1/2		0.45	0312822067 □	\$32.660	0313822066 □	\$43.360	40
5/8		0.63	0312822083 □	\$37.560	0313822082 □	\$49.840	30
3/4	1/2	0.59	0312822109	\$66.630	0313822108	\$82.920	30
1		0.94	0312822125 □	\$48.950	0313822124 □	\$65.280	15
1 1/4		1.45	0312822141 □	\$70.200	0313822140	\$94.360	8
1 1/2		1.69	0312822166 □	\$87.520	0313822165 □	\$114.320	15
2		2.56	0312822182 □	\$101.760	0313822181 □	\$131.440	12
2 1/2		3.60	0312822208	\$303.220	0313822207	\$456.560	1
3		4.95	0312822224	\$365.020	0313822223	\$638.990	1

□ - Sold in box only, blk/galv

**250 Union Fig. 554**


Size (in)	Approx Weight EACH (lbs)	250 Union Fig. 554				Box Quantity
		Black		Galvanized		
ITEM#	Price Ea	ITEM#	Price Ea			
1/8	0.14	0312822307	\$142.480	-	-	1
1/2	0.64	0312822349	\$61.300	0313822363	\$98.780	30
3/4	0.82	0312822364	\$60.300	0313822389	\$89.740	20
1	1.56	0312822380	\$73.990	0313822405	\$111.270	20

## 250 Union Fig. 554

Size (in)	Approx Weight EACH (lbs)	250 Union Fig. 554				Box Quantity
		Black		Galvanized		
	ITEM#	Price Ea	ITEM#	Price Ea		
1 ¼	1.63	0312822406	\$124.080	0313822421	\$168.500	15
1 ½	2.06	0312822422	\$142.890	0313822447	\$193.990	15
2	3.48	0312822448	\$183.310	0313822462	\$273.970	9
2 ½	6.05	0312822463	\$574.550	0313822488	\$720.690	1
3	7.76	0312822489	\$672.450	0313822504	\$1,105.710	1
4	17.86	0312822505	\$1,191.890	0313822520	\$1,734.460	1

## 300 Union Fig. 459



Size (in)	Approx Weight EACH (lbs)	300 Union Fig. 459				Box Quantity
		Black		Galvanized		
	ITEM#	Price Ea	ITEM#	Price Ea		
⅛	0.14	0312822604	\$83.860	0313822603	\$93.590	25
¼	0.45	0312822620	\$76.490	0313822629	\$103.910	40
⅜	0.43	0312822646	\$77.400	0313822645	\$105.970	25
½	0.53	0312822661	\$62.630	0313822660	\$100.490	15
¾	0.82	0312822687 □	\$69.350	0313822686	\$108.960	20
1	1.28	0312822703 □	\$90.540	0313822702	\$144.550	10
1 ¼	1.63	0312822729	\$147.640	0313822728	\$201.570	18
1 ½	2.05	0312822745	\$154.620	0313822744	\$242.700	12
2	4.08	0312822760	\$191.530	0313822769	\$291.310	9
2 ½	6.05	0312822786	\$617.500	0313822785	\$812.590	1
3	8.26	0312822802	\$798.870	0313822801	\$1,374.330	1
4	17.70	0312822828	\$2,796.480	0313822827	\$3,611.010	1

□ - Sold in box only, blk/galv

## 300 Male/Female Union Fig. 551



Size (in)	Approx Weight EACH (lbs)	Black		Box Quantity
		ITEM#	Price Ea	
½	0.69	0312717002	\$180.580	1
¾	1.16	0312717200	\$272.840	1

**300 Male/Female Union Fig. 551**

Size (in)	Approx Weight EACH (lbs)	Black		Box Quantity
		ITEM#	Price Ea	
1	1.75	0312717408	\$305.960	1
1 ½	3.25	0312717804	\$661.330	1
2	4.87	0312718000	\$882.390	1

**300 90° Elbow Female Union Fig. 552**


Size (in)	Approx Weight EACH (lbs)	Black		Box Quantity
		ITEM#	Price Ea	
5/8	0.57	0312104128	\$264.730	1
1/2	0.79	0312104169	\$224.610	1
3/4	1.37	0312104201	\$238.460	1
1	2.20	0312104243	\$271.330	1

**300 BR/BR Dart Union Fig. 832**


Size (in)	Approx Weight EACH (lbs)	300 BR/BR Dart Union Fig. 832				Box Quantity
		Black		Galvanized		
ITEM#	Price Ea	ITEM#	Price Ea			
5/8	0.41	0312819402	\$40.200	0313819401	\$64.300	20
1/2	0.64	0312819600	\$42.060	0313819609	\$58.630	15
3/4	0.78	0312819808	\$47.670	0313819807	\$66.740	30
1	1.30	0312820004	\$62.650	0313820003	\$87.400	10
1 1/4	1.89	0312820202	\$80.630	0313820201	\$150.620	12
1 1/2	2.37	0312820400	\$96.900	0313820409	\$158.570	12
2	3.91	0312820608	\$133.530	0313820607	\$186.250	7

## MALLEABLE HEX BUSHING

**Hex Bushing Fig. 383**

Size 1 (in)	Size 2 (in)	Approx Weight EACH (lbs)	Black		Galvanized		Box Quantity
			ITEM#	Price Ea	ITEM#	Price Ea	
¾	½*	0.09	0318906369 □	\$11.350	0319906368	\$18.950	25
¾	⅜*	0.11	0318906401	\$12.640	0319906400	\$24.740	25
¾	¼*	0.14	0318906484	\$12.290	0319906483	\$22.140	25
¾	⅛*	0.12	0318906567	\$12.960	0319906566	\$22.740	40
1	¾	0.16	0318906641 □	\$11.940	0319906640 □	\$21.770	50
1	½	0.19	0318906682 □	\$12.100	0319906681	\$23.380	50
1	⅜	0.18	0318906765	\$16.360	0319906764	\$25.980	25
1	¼	0.18	0318906849 □	\$15.910	0319906848	\$25.870	25
1	⅛*	0.24	0318906922	\$18.440	0319906921	\$30.430	25
1 ¼	1	0.30	0318907003 □	\$15.580	0319907002	\$29.330	50
1 ¼	¾	0.39	0318907045 □	\$15.580	0319907044	\$29.330	35
1 ¼	½	0.34	0318907128	\$17.710	0319907127	\$33.240	35
1 ¼	⅜	0.27	0318907201	\$19.160	0319907200	\$39.010	25
1 ¼	¼	0.33	0318907284	\$22.890	0319907283	\$39.010	20
1 ½	1 ¼	0.30	0318907409 □	\$19.770	0319907408	\$35.380	30
2	1 ½	0.64	0318907680 □	\$24.900	0319907689	\$41.040	20
2 ½	2	1.02	0318907961	\$38.370	0319907960	\$68.300	10

□ - Sold in box only, blk/galv

## MALLEABLE FACE BUSHING

**Face Bushing Fig. 385**

Size 1 (in)	Size 2 (in)	Approx Weight EACH (lbs)	Black		Galvanized		Box Quantity
			ITEM#	Price Ea	ITEM#	Price Ea	
¾	½	0.06	0318911161	\$26.790	0319911160	\$53.850	100
¾	⅜	0.08	0318911203	\$28.030	-	-	100
1	¾	0.10	0318911302	\$33.000	0319911301	\$55.630	50
1	½	0.16	0318911328	\$26.580	0319911327	\$55.630	50
1 ¼	1	0.19	0318911484	\$35.700	0319911483	\$68.880	35
1 ¼	¾	0.27	0318911526	\$27.400	-	-	30
1 ½	1 ¼	0.16	0318911682	\$44.560	0319911681	\$98.700	50
1 ½	1	0.33	0318911724	\$43.600	-	-	25
1 ½	¾	0.39	0318911765	\$50.350	-	-	20
2	1 ½	0.40	0318911849	\$59.990	0319911848	\$130.010	30
2	1 ¼	0.53	0318911880	\$58.730	0319911889	\$127.410	25
2	1	0.65	0318911922	\$58.730	0319911921	\$127.410	25
2 ½	2	0.40	0318912045	\$84.880	0319912044	\$173.450	15
2 ½	1 ¼	1.10	0318912128	\$63.700	-	-	15
3	2 ½	0.99	0318912169	\$124.890	-	-	20

# Numerical Index

## Group1 Items

0310001003 □.....4	0310000807 □.....4	0310000609 □.....4	0310000401 □.....4	0310000203 □.....4
0310002001 .....4	0310001805 □.....4	0310001607 □.....4	0310001409 □.....4	0310001201 □.....4
0310003009 .....4	0310002803 .....4	0310002605 .....4	0310002407 .....4	0310002209 □.....4
0310007604 .....4	0310007406 .....4	0310007208 .....4	0310007000 .....4	0310006804 .....4
0310008602 □.....4	0310008404 □.....4	0310008206 .....4	0310008008 .....4	0310007802 □.....4
0310009600 .....5	0310009402 .....5	0310009204 .....5	0310009006 □.....5	0310008800 .....5
0310010608 .....5	0310010400 .....5	0310010202 .....5	0310010004 .....5	0310009808 .....5
0310011606 .....5	0310011408 .....5	0310011200 .....5	0310011002 .....5	0310010806 .....5
0310023403 □.....5	0310023205 .....5	0310023007 .....5	0310022801 .....5	0310012000 .....5
0310024401 □.....5	0310024203 .....5	0310024005 □.....5	0310023809 □.....5	0310023601 □.....5
0310025606 .....5	0310025408 .....5	0310025200 .....5	0310024807 .....5	0310024609 .....5
0310016407 □.....6	0310016209 □.....6	0310016001 □.....6	0310015805 □.....6	0310015607 □.....6
0310017405 .....6	0310017207 □.....6	0310017009 □.....6	0310016803 □.....6	0310016605 □.....6
0310019203 .....6	0310019005 □.....6	0310018809 .....6	0310017801 .....6	0310017603 .....6
0310020409 .....6	0310020003 .....6	0310019807 .....6	0310019609 .....6	0310019401 .....6
0310027404.....7	0310027206.....7	0310027008.....7	0310026802.....7	0310026604.....7
0310029202 □.....7	0310028204.....7	0310028006.....7	0310027800.....7	0310027602.....7
0310030200 □.....7	0310030002 □.....7	0310029806 □.....7	0310029608 □.....7	0310029400 □.....7
0310031208 .....7	0310031000 .....7	0310030804 □.....7	0310030606 □.....7	0310030408 □.....7
0311042600 .....8	0310032008 .....7	0310031802 .....7	0310031604 .....7	0310031406 .....7
0311043608 .....8	0311043400 .....8	0311043202 .....8	0311043004 .....8	0311042808 .....8
0311044606 .....8	0311044408 .....8	0311044200 .....8	0311044002 .....8	0311043806 .....8
0311045603 .....8	0311045405 .....8	0311045207 .....8	0311045009 .....8	0311044804 .....8
0311046601 .....8	0311046403 .....8	0311046205 .....8	0311046007 .....8	0311045801 .....8
0311047609 .....8	0311047401 .....8	0311047203 .....8	0311047005 .....8	0311046809 .....8
0311048607 .....8	0311048409 .....8	0311048201 .....8	0311048003 .....8	0311047807 .....8
0311049605 .....9	0311049407 .....9	0311049209 .....9	0311049001 .....9	0311048805 .....9
0311050603 .....9	0311050405 .....9	0311050207 .....9	0311050009 .....9	0311049803 .....9
0311051601 .....9	0311051403 .....9	0311051205 .....9	0311051007 .....9	0311050801 .....9
0311052609 .....9	0311052401 .....9	0311052203 .....9	0311052005 .....9	0311051809 .....9
0311053607 .....9	0311053409 .....9	0311053201 .....9	0311053003 .....9	0311052807 .....9
0311054605 .....9	0311054407 .....9	0311054209 .....9	0311054001 .....9	0311053805 .....9
0311055602 .....9	0311055404 .....9	0311055206 .....9	0311055008 .....9	0311054803 .....9
0311056600 .....9	0311056402 .....9	0311056204 .....9	0311056006 .....9	0311055800 .....9
0311035802 .....9	0311057400 .....9	0311057103 .....9	0311057004 .....9	0311056808 .....9
0311036800 .....10	0311036602 .....10	0311036404 .....10	0311036206 .....10	0311036008 .....9
0311037808 .....10	0311037600 .....10	0311037402 .....10	0311037204 .....10	0311037006 .....10
0311038707 .....10	0311038608 .....10	0311038400 .....10	0311038202 .....10	0311038004 .....10
0311039804 .....10	0311039606 .....10	0311039408 .....10	0311039002 .....10	0311038806 .....10
0311040802 .....10	0311040604 .....10	0311040406 .....10	0311040208 .....10	0311040000 .....10
0311041800 .....10	0311041602 .....10	0311041404 .....10	0311041206 .....10	0311041008 .....10
0310061809 .....11	0310061601 .....11	0311042402 .....10	0311042204 .....10	0311042006 .....10
0310062807 .....11	0310062609 .....11	0310062401 .....11	0310062203 .....11	0310062005 .....11
0310069604 .....12	0310069406 .....11	0310069208 .....11	0310064209 .....11	0310063003 .....11
0310070602 .....12	0310070404 .....12	0310070206 .....12	0310070008 .....12	0310069802 .....12
0310066402 .....12	0310071600 .....12	0310071204 .....12	0310071006 .....12	0310070800 .....12
0310067400 .....12	0310067202 .....12	0310067004 .....12	0310066808 .....12	0310066600 .....12
0310077003 .....13	0310068200 .....12	0310068002 .....12	0310067806 .....12	0310067608 .....12
0310078001 .....13	0310077805 .....13	0310077607 .....13	0310077409 .....13	0310077201 .....13
0310080403 □.....13	0310080205 □.....13	0310080007 .....13	0310079801 □.....13	0310079603 .....13
0310081401 .....13	0310081203 □.....13	0310081005 □.....13	0310080809 □.....13	0310080601 □.....13
0318900602 □.....14	0318900560 □.....14	0318900529 □.....14	0310081807 .....13	0310081609 .....13
0318900842 .....14	0318900768 .....14	0318900727 □.....14	0318900685 □.....14	0318900644 □.....14
0310084801 □.....14	0318901162 .....14	0318901089 .....14	0318901006 .....14	0318900925 .....14
0310085808 .....14	0310085600 □.....14	0310085402 □.....14	0310085204 .....14	0310085006 □.....14
0310086806 □.....14	0310086608 .....14	0310086400 .....14	0310086202 .....14	0310086004 □.....14
0310087804 □.....15	0310087606 .....15	0310087408 .....15	0310087200 .....14	0310087002 □.....14
0310088802 .....15	0310088604 .....15	0310088406 □.....15	0310088208 □.....15	0310088000 .....15
0310089800 .....15	0310089602 .....15	0310089404 □.....15	0310089206 .....15	0310089008 □.....15
0310090808 .....15	0310090600 .....15	0310090402 .....15	0310090204 .....15	0310090006 .....15
0310091806 .....15	0310091608 .....15	0310091400 .....15	0310091202 .....15	0310091004 .....15
0310092804 .....15	0310092606 .....15	0310092408 .....15	0310092200 .....15	0310092002 .....15

# Numerical Index

## Group1 Items

0318913365.....15	0310093604 .....15	0310093406 .....15	0310093208 .....15	0310093000 .....15
0318913563.....16	0318913522.....16	0318913480.....16	0318913449.....16	0318913407.....16
0310105002.....16	0300194800.....16	0300194602.....16	0318913647.....16	0318913605.....16
0310106000.....16	0310105804.....16	0310105606.....16	0310105408.....16	0310105200.....16
0310095435.....17	0310095427.....16	0310095419.....16	0310103205.....16	0310103007.....16
0310501002 □.....17	0310500806 □.....17	0310500608 □.....17	0310500400 .....17	0310500202 .....17
0310502000 .....17	0310501804 .....17	0310501606 □.....17	0310501408 □.....17	0310501200 .....17
0310504600.....17	0310504204.....17	0310504006.....17	0310503800.....17	0310502406 .....17
0310505607.....18	0310505409.....17	0310505201.....17	0310505003.....17	0310504808.....17
0310514005.....18	0310513809.....18	0310513601.....18	0310506001.....18	0310505805.....18
0310510409.....18	0310510201.....18	0310514609.....18	0310514401.....18	0310514203.....18
0310511407.....18	0310511209.....18	0310511001.....18	0310510805.....18	0310510607.....18
0310507405.....19	0310512207.....18	0310512009.....18	0310511803.....18	0310511605.....18
0310508403.....19	0310508205.....19	0310508007.....19	0310507801.....19	0310507603.....19
0310515804.....19	0310515606.....19	0310509203.....19	0310508809.....19	0310508601.....19
0310516802.....19	0310516604.....19	0310516406.....19	0310516208.....19	0310516000.....19
0310519202.....20	0310517800.....20	0310517404.....19	0310517206.....19	0310517008.....19
0310520408.....20	0310520200.....20	0310520002.....20	0310519608.....20	0310519400.....20
0310521406.....20	0310521208.....20	0310521000.....20	0310520804.....20	0310520606.....20
0310522800.....20	0310522404.....20	0310522206.....20	0310522008.....20	0310521802.....20
0310524400.....20	0310524202.....20	0310523808.....20	0310523204.....20	0310523006.....20
0310525605.....20	0310525407.....20	0310525209.....20	0310524806.....20	0310524608.....20
0310526603.....20	0310526405.....20	0310526207.....20	0310526009.....20	0310525803.....20
0310530209.....21	0310530001.....21	0310529805.....21	0310529201.....21	0310527205.....20
0310538400.....21	0310538202.....21	0310538004.....21	0310530605.....21	0310530407.....21
0310539606.....21	0310539200.....21	0310539002.....21	0310538806.....21	0310538608.....21
0310541602.....22	0310541404.....22	0310541206.....22	0310540000.....21	0310539804.....21
0310542600.....22	0310542402.....22	0310542204.....22	0310542006.....22	0310541800.....22
0310543608.....22	0310543400.....22	0310543202.....22	0310543004.....22	0310542808.....22
0310544606.....22	0310544408.....22	0310544200.....22	0310544002.....22	0310543806.....22
0310545603.....22	0310545405.....22	0310545207.....22	0310545009.....22	0310544804.....22
0310546601.....22	0310546403.....22	0310546205.....22	0310546007.....22	0310545801.....22
0318901329.....23	0318901303.....23	0318901287.....23	0318901261.....23	0310547005.....22
0318901410.....23	0318901402.....23	0318901386.....23	0318901360.....23	0318901345.....23
0312703606.....23	0312703408.....23	0318904646.....23	0318904562.....23	0318901428.....23
0312704604.....24	0312704406.....23	0312704208.....23	0312704000.....23	0312703804.....23
0312822026.....24	0312822000.....24	0312705205.....24	0312705007.....24	0312704802.....24
0312822125 □.....24	0312822109.....24	0312822083 □.....24	0312822067 □.....24	0312822042 □.....24
0312822224.....24	0312822208.....24	0312822182 □.....24	0312822166 □.....24	0312822141 □.....24
0312822406.....25	0312822380.....24	0312822364.....24	0312822349.....24	0312822307.....24
0312822505.....25	0312822489.....25	0312822463.....25	0312822448.....25	0312822422.....25
0312822687 □.....25	0312822661.....25	0312822646.....25	0312822620.....25	0312822604.....25
0312822786.....25	0312822760.....25	0312822745.....25	0312822729.....25	0312822703 □.....25
0312717408.....26	0312717200.....25	0312717002.....25	0312822828.....25	0312822802.....25
0312104201.....26	0312104169.....26	0312104128.....26	0312718000.....26	0312717804.....26
0312820004.....26	0312819808.....26	0312819600.....26	0312819402.....26	0312104243.....26
0318906401.....27	0318906369 □.....27	0312820608.....26	0312820400.....26	0312820202.....26
0318906765.....27	0318906682 □.....27	0318906641 □.....27	0318906567 .....27	0318906484 .....27
0318907128.....27	0318907045 □.....27	0318907003 □.....27	0318906922 .....27	0318906849 □.....27
0318907961.....27	0318907680 □.....27	0318907409 □.....27	0318907284 .....27	0318907201 .....27
0318911484.....27	0318911328.....27	0318911302.....27	0318911203.....27	0318911161.....27
0318911849.....27	0318911765.....27	0318911724.....27	0318911682.....27	0318911526.....27
0318912169.....27	0318912128.....27	0318912045.....27	0318911922.....27	0318911880.....27

## Group2 Items

0311001002 □.....4	0311000806 □.....4	0311000608 .....4	0311000400 □.....4	0311000202 .....4
0311002000 .....4	0311001804 □.....4	0311001606 □.....4	0311001408 □.....4	0311001200 □.....4
0311003008 .....4	0311002802 .....4	0311002604 .....4	0311002406 .....4	0311002208 .....4
0311007801 □.....4	0311007603 .....4	0311007405 .....4	0311007207 .....4	0311007009 .....4
0311008809 .....5	0311008601 □.....4	0311008403 □.....4	0311008205 .....4	0311008007 .....4
0311009807 .....5	0311009609 .....5	0311009401 .....5	0311009203 .....5	0311009005 .....5
0311010805 .....5	0311010607 .....5	0311010409 .....5	0311010201 .....5	0311010003 .....5

# Numerical Index

## Group2 Items

0311012009 .....	5	0311011605 .....	5	0311011407 .....	5	0311011209 .....	5	0311011001 .....	5
0311023600 .....	5	0311023402 .....	5	0311023204 .....	5	0311023006 .....	5	0311022800 .....	5
0311024608 .....	5	0311024400 □.....	5	0311024202 .....	5	0311024004 .....	5	0311023808 □.....	5
0311015606 .....	6	0311025605 .....	5	0311025407 .....	5	0311025209 .....	5	0311024806 .....	5
0311016604 □.....	6	0311016406 □.....	6	0311016208 □.....	6	0311016000 .....	6	0311015804 □.....	6
0311017602 .....	6	0311017404 .....	6	0311017206 .....	6	0311017008 .....	6	0311016802 .....	6
0311019400 .....	6	0311019202 .....	6	0311019004 .....	6	0311018808 .....	6	0311017800 .....	6
0311026603.....	7	0311020408 .....	6	0311020002 .....	6	0311019806 .....	6	0311019608 .....	6
0311027601.....	7	0311027403.....	7	0311027205.....	7	0311027007.....	7	0311026801.....	7
0311029409 □.....	7	0311029201 .....	7	0311028203 .....	7	0311028005 .....	7	0311027809 .....	7
0311030407 .....	7	0311030209 □.....	7	0311030001 □.....	7	0311029805 □.....	7	0311029607 .....	7
0311031405 .....	7	0311031207 .....	7	0311031009 .....	7	0311030803 □.....	7	0311030605 □.....	7
0310042809 □.....	8	0310042601 □.....	8	0311032007 .....	7	0311031801 .....	7	0311031603 .....	7
0310043807 .....	8	0310043609 .....	8	0310043401 .....	8	0310043203 .....	8	0310043005 .....	8
0310044805 .....	8	0310044607 .....	8	0310044409 .....	8	0310044201 .....	8	0310044003 .....	8
0310045802 □.....	8	0310045604 .....	8	0310045406 .....	8	0310045208 .....	8	0310045000 .....	8
0310046800 .....	8	0310046602 .....	8	0310046404 .....	8	0310046206 .....	8	0310046008 .....	8
0310047808 .....	8	0310047600 .....	8	0310047402 .....	8	0310047204 .....	8	0310047006 .....	8
0310048806 .....	9	0310048608 .....	8	0310048400 .....	8	0310048202 .....	8	0310048004 .....	8
0310049804 .....	9	0310049606 .....	9	0310049408 .....	9	0310049200 .....	9	0310049002 .....	9
0310050802 .....	9	0310050604 .....	9	0310050406 .....	9	0310050208 .....	9	0310050000 .....	9
0310051800 .....	9	0310051602 .....	9	0310051404 .....	9	0310051206 .....	9	0310051008 .....	9
0310052808 .....	9	0310052600 .....	9	0310052402 .....	9	0310052204 .....	9	0310052006 .....	9
0310053806 .....	9	0310053608 .....	9	0310053400 .....	9	0310053202 .....	9	0310053004 .....	9
0310054804 .....	9	0310054606 .....	9	0310054408 .....	9	0310054200 .....	9	0310054002 .....	9
0310055801 .....	9	0310055603 .....	9	0310055405 .....	9	0310055207 .....	9	0310055009 .....	9
0310056809 .....	9	0310056601 .....	9	0310056403 .....	9	0310056205 .....	9	0310056007 .....	9
0310035803 .....	9	0310039201 .....	9	0310057401 .....	9	0310057104 .....	9	0310057005 .....	9
0310037007 .....	10	0310036603 .....	10	0310036405 .....	10	0310036207 .....	10	0310036009 .....	9
0310038005 .....	10	0310037809 .....	10	0310037601 .....	10	0310037403 .....	10	0310037205 .....	10
0310038807 □.....	10	0310038708 .....	10	0310038609 .....	10	0310038401 .....	10	0310038203 □.....	10
0310040001 □.....	10	0310039805 □.....	10	0310039607 .....	10	0310039409 .....	10	0310039003 .....	10
0310041009 .....	10	0310040803 .....	10	0310040605 .....	10	0310040407 .....	10	0310040209 .....	10
0310042007 .....	10	0310041801 .....	10	0310041603 □.....	10	0310041405 .....	10	0310041207 .....	10
0311062004 .....	11	0311061808 .....	11	0311061600 .....	11	0310042403 □.....	10	0310042205 .....	10
0311063002 .....	11	0311062806 .....	11	0311062608 .....	11	0311062400 .....	11	0311062202 .....	11
0311069801 .....	12	0311069603 .....	12	0311069405 .....	11	0311069207 .....	11	0311064208 .....	11
0311070809 .....	12	0311070601 .....	12	0311070403 .....	12	0311070205 .....	12	0311070007 .....	12
0311066609 .....	12	0311066401 .....	12	0311071609 .....	12	0311071203 .....	12	0311071005 .....	12
0311067607 .....	12	0311067409 .....	12	0311067201 .....	12	0311067003 .....	12	0311066807 .....	12
0311077804 .....	13	0311077408 .....	13	0311068209 .....	12	0311068001 .....	12	0311067805 .....	12
0311080204 □.....	13	0311080006 .....	13	0311079800 .....	13	0311079602 .....	13	0311078000 .....	13
0311081202 .....	13	0311081004 .....	13	0311080808 .....	13	0311080600 □.....	13	0311080402 □.....	13
0319900569 □.....	14	0319900528 □.....	14	0311081806 .....	13	0311081608 .....	13	0311081400 .....	13
0319900767 .....	14	0319900726 .....	14	0319900684 .....	14	0319900643 .....	14	0319900601 □.....	14
0319901161 .....	14	0319901088 .....	14	0319901005 .....	14	0319900924 .....	14	0319900841 .....	14
0311085609 .....	14	0311085401 .....	14	0311085203 .....	14	0311085005 .....	14	0311084800 .....	14
0311086607 .....	14	0311086409 .....	14	0311086201 .....	14	0311086003 □.....	14	0311085807 .....	14
0311087605 .....	15	0311087407 .....	15	0311087209 .....	14	0311087001 □.....	14	0311086805 □.....	14
0311088603 .....	15	0311088405 .....	15	0311088207 .....	15	0311088009 .....	15	0311087803 .....	15
0311089601 .....	15	0311089403 .....	15	0311089205 .....	15	0311089007 .....	15	0311088801 .....	15
0311090609 .....	15	0311090401 .....	15	0311090203 .....	15	0311090005 .....	15	0311089809 .....	15
0311091607 .....	15	0311091409 .....	15	0311091201 .....	15	0311091003 .....	15	0311090807 .....	15
0311092605 .....	15	0311092407 .....	15	0311092209 .....	15	0311092001 .....	15	0311091805 .....	15
0311093603 .....	15	0311093405 .....	15	0311093207 .....	15	0311093009 .....	15	0311092803 .....	15
0319913521 .....	16	0319913489 .....	16	0319913448 .....	16	0319913406 .....	16	0319913364 .....	15
0301194809 .....	16	0301194601 .....	16	0319913646 .....	16	0319913604 .....	16	0319913562 .....	16
0311105803 .....	16	0311105605 .....	16	0311105407 .....	16	0311105209 .....	16	0311105001 .....	16
0311095434 .....	17	0311095426 .....	16	0311095418 .....	16	0311103204 .....	16	0311106009 .....	16
03111501001 .....	17	0311500805 .....	17	0311500607 .....	17	0311500409 .....	17	0311500201 .....	17
03111502009 .....	17	0311501803 .....	17	0311501605 .....	17	0311501407 .....	17	0311501209 .....	17
03111510200 .....	18	0311505804 .....	18	0311504807 .....	17	0311504203 .....	17	0311502405 .....	17

# Numerical Index

## Group2 Items

0311511208.....18	0311511000.....18	0311510804.....18	0311510606.....18	0311510408.....18
0311512206.....18	0311512008.....18	0311511802.....18	0311511604.....18	0311511406.....18
0311508204.....19	0311508006.....19	0311507800.....19	0311507602.....19	0311507404.....19
0311515803.....19	0311515605.....19	0311508808.....19	0311508600.....19	0311508402.....19
0311516801.....19	0311516603.....19	0311516405.....19	0311516207.....19	0311516009.....19
0311520001.....20	0311517809.....20	0311517403.....19	0311517205.....19	0311517007.....19
0311523203.....20	0311523005.....20	0311522809.....20	0311521405.....20	0311521207.....20
0311525208.....20	0311524805.....20	0311524607.....20	0311524409.....20	0311524201.....20
0311527204.....20	0311526008.....20	0311525802.....20	0311525604.....20	0311525406.....20
0311538607.....21	0311538409.....21	0311538201.....21	0311538003.....21	0311529804.....21
0311539803.....21	0311539605.....21	0311539209.....21	0311539001.....21	0311538805.....21
0311541809.....22	0311541601.....22	0311541403.....22	0311541205.....22	0311540009.....21
0311543003.....22	0311542807.....22	0311542609.....22	0311542401.....22	0311542005.....22
0311544001.....22	0311543805.....22	0311543607.....22	0311543409.....22	0311543201.....22
0311545008.....22	0311544803.....22	0311544605.....22	0311544407.....22	0311544209.....22
0311546204.....22	0311546006.....22	0311545800.....22	0311545602.....22	0311545206.....22
0319901344.....23	0319901328.....23	0319901302.....23	0319901286.....23	0319901260.....23
0319901427.....23	0319901419.....23	0319901401.....23	0319901385.....23	0319901369.....23
0313822041.....24	0313822025.....24	0313822009.....24	0319904645.....23	0319904561.....23
0313822140.....24	0313822124 □.....24	0313822108.....24	0313822082 □.....24	0313822066 □.....24
0313822363.....24	0313822223.....24	0313822207.....24	0313822181 □.....24	0313822165 □.....24
0313822462.....25	0313822447.....25	0313822421.....25	0313822405.....24	0313822389.....24
0313822629.....25	0313822603.....25	0313822520.....25	0313822504.....25	0313822488.....25
0313822728.....25	0313822702.....25	0313822686.....25	0313822660.....25	0313822645.....25
0313822827.....25	0313822801.....25	0313822785.....25	0313822769.....25	0313822744.....25
0313820201.....26	0313820003.....26	0313819807.....26	0313819609.....26	0313819401.....26
0319906483.....27	0319906400.....27	0319906368.....27	0313820607.....26	0313820409.....26
0319906848.....27	0319906764.....27	0319906681.....27	0319906640 □.....27	0319906566.....27
0319907200.....27	0319907127.....27	0319907044.....27	0319907002.....27	0319906921.....27
0319911160.....27	0319907960.....27	0319907689.....27	0319907408.....27	0319907283.....27
0319911848.....27	0319911681.....27	0319911483.....27	0319911327.....27	0319911301.....27
		0319912044.....27	0319911921.....27	0319911889.....27