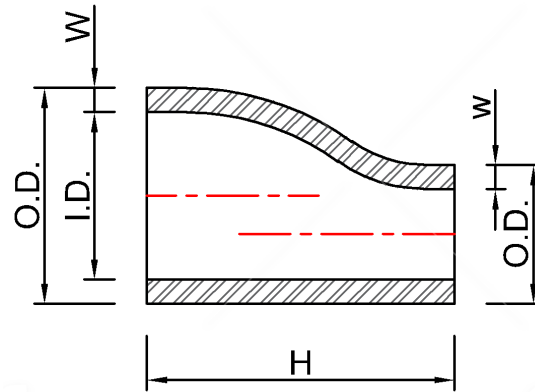


Project Name: _____
Job #: _____

FITTINGS
A403
(ER)

ASTM A403, B16.9

ECCENTRIC REDUCERS



Grade: ☐ 304L ☐ 316L ☐ _____
Seam: ☐ Welded ☐ Seamless ☐ WPWX
Source: ☐ Import ☐ Domestic ☐ BAA ☐ AIS ☐ _____

DIMENSIONS

UOM: Inches/LBS

SELECT	NOMINAL PIPE SIZE Large End x Small End	OUTSIDE DIAMETER LARGE END (O.D.)	OUTSIDE DIAMETER SMALL END (O.D.)	LENGTH (L)	SCHEDULE 5S ☐ < SELECT				
					Inside Diameter Large End (I.D.)	Inside Diameter Small End (I.D.)	Wall Thickness Large End (W)	Wall Thickness Small End (w)	Approx Weight
☐	3/4 x 3/8	1.050	0.675	1 1/2	0.920	0.545	0.065	0.065	0.15
☐	3/4 x 1/2	1.050	0.840	1 1/2	0.920	0.710	0.065	0.065	0.17
☐	1 x 3/8	1.315	0.675	2	1.185	0.545	0.065	0.065	0.16
☐	1 x 1/2	1.315	0.840	2	1.185	0.710	0.065	0.065	0.16
☐	1 x 3/4	1.315	1.050	2	1.185	0.920	0.065	0.065	0.17
☐	1 1/4 x 1/2	1.660	0.840	2	1.530	0.710	0.065	0.065	0.21
☐	1 1/4 x 3/4	1.660	1.050	2	1.530	0.920	0.065	0.065	0.22
☐	1 1/4 x 1	1.660	1.315	2	1.530	1.185	0.065	0.065	0.22
☐	1 1/2 x 1/2	1.900	0.840	2 1/2	1.770	0.710	0.065	0.065	0.23
☐	1 1/2 x 3/4	1.900	1.050	2 1/2	1.770	0.920	0.065	0.065	0.24
☐	1 1/2 x 1	1.900	1.315	2 1/2	1.770	1.185	0.065	0.065	0.25
☐	1 1/2 x 1 1/4	1.900	1.660	2 1/2	1.770	1.530	0.065	0.065	0.27
☐	2 x 3/4	2.375	1.050	3	2.245	0.920	0.065	0.065	0.33
☐	2 x 1	2.375	1.315	3	2.245	1.185	0.065	0.065	0.37
☐	2 x 1 1/4	2.375	1.660	3	2.245	1.530	0.065	0.065	0.40
☐	2 x 1 1/2	2.375	1.900	3	2.245	1.770	0.065	0.065	0.41
☐	2 1/2 x 1	2.875	1.315	3 1/2	2.709	1.185	0.083	0.065	0.56
☐	2 1/2 x 1 1/4	2.875	1.660	3 1/2	2.709	1.530	0.083	0.065	0.64
☐	2 1/2 x 1 1/2	2.875	1.900	3 1/2	2.709	1.770	0.083	0.065	0.67
☐	2 1/2 x 2	2.875	2.375	3 1/2	2.709	2.245	0.083	0.065	0.70
☐	3 x 1	3.500	1.315	3 1/2	3.334	1.185	0.083	0.065	0.70
☐	3 x 1 1/4	3.500	1.660	3 1/2	3.334	1.530	0.083	0.065	0.70
☐	3 x 1 1/2	3.500	1.900	3 1/2	3.334	1.770	0.083	0.065	0.78
☐	3 x 2	3.500	2.375	3 1/2	3.334	2.245	0.083	0.065	0.83
☐	3 x 2 1/2	3.500	2.875	3 1/2	3.334	2.709	0.083	0.083	0.90
☐	3 1/2 x 1 1/4	4.000	1.660	4	3.834	1.530	0.083	0.065	0.93
☐	3 1/2 x 1 1/2	4.000	1.900	4	3.834	1.770	0.083	0.065	0.99

ss wld ftg and pipe conform to ASTM A403 & MSS SP-43; dimensionally, all ftg conform to ASME B16.9
(≠ Wall) & MSS SP-43

FITTINGS

A403

(ER)

Project Name: _____

Job #: _____

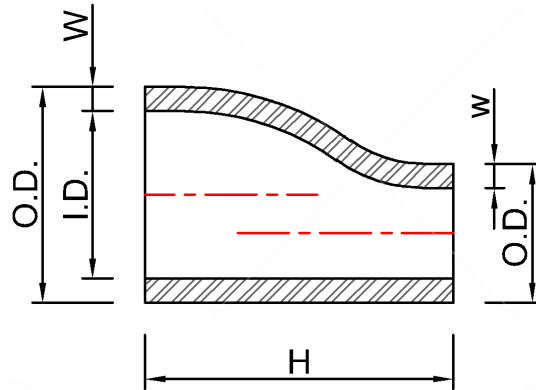
SELECT	NOMINAL PIPE SIZE Large End x Small End	OUTSIDE DIAMETER LARGE END (O.D.)	OUTSIDE DIAMETER SMALL END (O.D.)	LENGTH (L)	SCHEDULE 5S ☐ < SELECT				
					Inside Diameter Large End (I.D.)	Inside Diameter Small End (I.D.)	Wall Thickness Large End (W)	Wall Thickness Small End (w)	Approx Weight
☐	3 ½ x 2	4.000	2.375	4	3.834	2.245	0.083	0.065	1.06
☐	3 ½ x 2 ½	4.000	2.875	4	3.834	2.709	0.083	0.083	1.17
☐	3 ½ x 3	4.000	3.500	4	3.834	3.334	0.083	0.083	1.20
☐	4 x 1 ½	4.500	1.900	4	4.334	1.770	0.083	0.083	1.05
☐	4 x 2	4.500	2.375	4	4.334	2.245	0.083	0.083	1.21
☐	4 x 2 ½	4.500	2.875	4	4.334	2.709	0.083	0.083	1.28
☐	4 x 3	4.500	3.500	4	4.334	3.334	0.083	0.083	1.34
☐	4 x 3 ½	4.500	4.000	4	4.334	3.834	0.083	0.083	1.38
☐	5 x 2	5.563	2.375	5	5.345	2.245	0.109	0.065	2.33
☐	5 x 2 ½	5.563	2.875	5	5.345	2.709	0.109	0.083	2.55
☐	5 x 3	5.563	3.500	5	5.345	3.334	0.109	0.083	2.64
☐	5 x 3 ½	5.563	4.000	5	5.345	3.834	0.109	0.083	2.71
☐	5 x 4	5.563	4.500	5	5.345	4.334	0.109	0.083	2.76
☐	6 x 2 ½	6.625	2.875	5 ½	6.407	2.709	0.109	0.083	3.18
☐	6 x 3	6.625	3.500	5 ½	6.407	3.334	0.109	0.083	3.33
☐	6 x 3 ½	6.625	4.000	5 ½	6.407	3.834	0.109	0.083	3.39
☐	6 x 4	6.625	4.500	5 ½	6.407	4.334	0.109	0.083	3.41
☐	6 x 5	6.625	5.563	5 ½	6.407	5.345	0.109	0.109	3.60
☐	8 x 3 ½	8.625	4.000	6	8.407	3.834	0.109	0.083	4.65
☐	8 x 4	8.625	4.500	6	8.407	4.334	0.109	0.083	4.76
☐	8 x 5	8.625	5.563	6	8.407	5.345	0.109	0.109	4.87
☐	8 x 6	8.625	6.625	6	8.407	6.407	0.109	0.109	5.05
☐	10 x 4	10.750	4.500	7	10.482	4.334	0.134	0.083	8.34
☐	10 x 5	10.750	5.563	7	10.482	5.345	0.134	0.109	8.62
☐	10 x 6	10.750	6.625	7	10.482	6.407	0.134	0.109	8.82
☐	10 x 8	10.750	8.625	7	10.482	8.407	0.134	0.109	9.17
☐	12 x 5	12.750	5.563	8	12.438	5.345	0.156	0.109	13.72
☐	12 x 6	12.750	6.625	8	12.438	6.407	0.156	0.109	14.01
☐	12 x 8	12.750	8.625	8	12.438	8.407	0.156	0.109	14.45
☐	12 x 10	12.750	10.750	8	12.438	10.482	0.156	0.134	15.03
☐	14 x 6	14.000	6.625	13	13.688	6.407	0.156	0.109	23.78
☐	14 x 8	14.000	8.625	13	13.688	8.407	0.156	0.109	25.10
☐	14 x 10	14.000	10.750	13	13.688	10.482	0.156	0.134	26.05
☐	14 x 12	14.000	12.750	13	13.688	12.438	0.156	0.156	27.64
☐	16 x 8	16.000	8.625	14	15.670	8.407	0.165	0.109	32.39
☐	16 x 10	16.000	10.750	14	15.670	10.482	0.165	0.134	34.37
☐	16 x 12	16.000	12.750	14	15.670	12.438	0.165	0.156	35.60
☐	16 x 14	16.000	14.000	14	15.670	13.688	0.165	0.156	36.48
☐	18 x 10	18.000	10.750	15	17.670	10.482	0.165	0.134	40.78
☐	18 x 12	18.000	12.750	15	17.670	12.438	0.165	0.156	41.66
☐	18 x 14	18.000	14.000	15	17.670	13.688	0.165	0.156	42.48
☐	18 x 16	18.000	16.000	15	17.670	15.670	0.165	0.165	43.64
☐	20 x 12	20.000	12.750	20	19.624	12.438	0.188	0.156	71.50
☐	20 x 14	20.000	14.000	20	19.624	13.688	0.188	0.156	72.50
☐	20 x 16	20.000	16.000	20	19.624	15.670	0.188	0.165	73.00
☐	20 x 18	20.000	18.000	20	19.624	17.670	0.188	0.165	75.50
☐	24 x 16	24.000	16.000	20	23.564	15.670	0.218	0.165	98.02
☐	24 x 18	24.000	18.000	20	23.564	17.670	0.218	0.165	100.00
☐	24 x 20	24.000	20.000	20	23.564	19.624	0.218	0.188	103.00

ss wld ftg and pipe conform to ASTM A403 & MSS SP-43; dimensionally, all ftg conform to ASME B16.9
(= Wall) & MSS SP-43

Project Name: _____
Job #: _____

ASTM A403, B16.9

ECCENTRIC REDUCERS



Grade: ☐ 304L ☐ 316L ☐ _____
Seam: ☐ Welded ☐ Seamless ☐ WPWX
Source: ☐ Import ☐ Domestic ☐ BAA ☐ AIS ☐ _____

DIMENSIONS

UOM: Inches/LBS

SELECT	NOMINAL PIPE SIZE Large End x Small End	OUTSIDE DIAMETER LARGE END (O.D.)	OUTSIDE DIAMETER SMALL END (O.D.)	LENGTH (L)	SCHEDULE 10S ☐ < SELECT				
					Inside Diameter Large End (I.D.)	Inside Diameter Small End (I.D.)	Wall Thickness Large End (W)	Wall Thickness Small End (w)	Approx Weight
☐	3/4 x 3/8	1.050	0.675	1 1/2	0.884	0.545	0.083	0.065	0.20
☐	3/4 x 1/2	1.050	0.840	1 1/2	0.884	0.674	0.083	0.083	0.22
☐	1 x 3/8	1.315	0.675	2	1.097	0.545	0.109	0.065	0.21
☐	1 x 1/2	1.315	0.840	2	1.097	0.674	0.109	0.083	0.27
☐	1 x 3/4	1.315	1.050	2	1.097	0.884	0.109	0.083	0.29
☐	1 1/4 x 1/2	1.660	0.840	2	1.442	0.674	0.109	0.083	0.35
☐	1 1/4 x 3/4	1.660	1.050	2	1.442	0.884	0.109	0.083	0.39
☐	1 1/4 x 1	1.660	1.315	2	1.442	1.097	0.109	0.109	0.39
☐	1 1/2 x 1/2	1.900	0.840	2 1/2	1.682	0.674	0.109	0.083	0.37
☐	1 1/2 x 3/4	1.900	1.050	2 1/2	1.682	0.884	0.109	0.083	0.39
☐	1 1/2 x 1	1.900	1.315	2 1/2	1.682	1.097	0.109	0.109	0.43
☐	1 1/2 x 1 1/4	1.900	1.660	2 1/2	1.682	1.442	0.109	0.109	0.46
☐	2 x 3/4	2.375	1.050	3	2.157	0.884	0.109	0.083	0.56
☐	2 x 1	2.375	1.315	3	2.157	1.097	0.109	0.109	0.62
☐	2 x 1 1/4	2.375	1.660	3	2.157	1.442	0.109	0.109	0.67
☐	2 x 1 1/2	2.375	1.900	3	2.157	1.682	0.109	0.109	0.69
☐	2 1/2 x 1	2.875	1.315	3 1/2	2.635	1.097	0.120	0.109	0.83
☐	2 1/2 x 1 1/4	2.875	1.660	3 1/2	2.635	1.442	0.120	0.109	0.95
☐	2 1/2 x 1 1/2	2.875	1.900	3 1/2	2.635	1.682	0.120	0.109	0.98
☐	2 1/2 x 2	2.875	2.375	3 1/2	2.635	2.157	0.120	0.109	1.03
☐	3 x 1	3.500	1.315	3 1/2	3.260	1.097	0.120	0.109	1.03
☐	3 x 1 1/4	3.500	1.660	3 1/2	3.260	1.442	0.120	0.109	1.03
☐	3 x 1 1/2	3.500	1.900	3 1/2	3.260	1.682	0.120	0.109	1.13
☐	3 x 2	3.500	2.375	3 1/2	3.260	2.157	0.120	0.109	1.21
☐	3 x 2 1/2	3.500	2.875	3 1/2	3.260	2.635	0.120	0.120	1.30
☐	3 1/2 x 1 1/4	4.000	1.660	4	3.760	1.442	0.120	0.109	1.37
☐	3 1/2 x 1 1/2	4.000	1.900	4	3.760	1.682	0.120	0.109	1.46

ss wld ftg and pipe conform to ASTM A403 & MSS SP-43; dimensionally, all ftg conform to ASME B16.9
(≠ Wall) & MSS SP-43

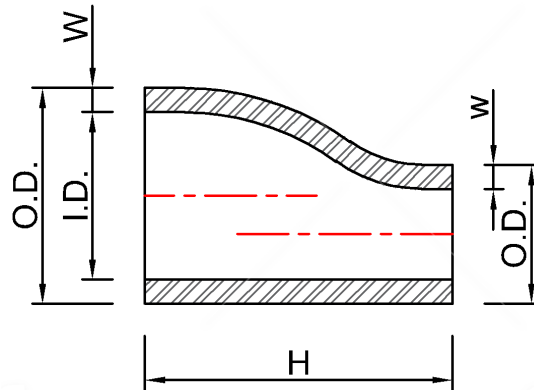
SELECT	NOMINAL PIPE SIZE Large End x Small End	OUTSIDE DIAMETER LARGE END (O.D.)	OUTSIDE DIAMETER SMALL END (O.D.)	LENGTH (L)	SCHEDULE 10S ☐ < SELECT				
					Inside Diameter Large End (I.D.)	Inside Diameter Small End (I.D.)	Wall Thickness Large End (W)	Wall Thickness Small End (w)	Approx Weight
☐	3 ½ x 2	4.000	2.375	4	3.760	2.157	0.120	0.109	1.57
☐	3 ½ x 2 ½	4.000	2.875	4	3.760	2.635	0.120	0.120	1.72
☐	3 ½ x 3	4.000	3.500	4	3.760	3.260	0.120	0.120	1.77
☐	4 x 1 ½	4.500	1.900	4	4.260	1.682	0.120	0.109	1.50
☐	4 x 2	4.500	2.375	4	4.260	2.157	0.120	0.109	1.73
☐	4 x 2 ½	4.500	2.875	4	4.260	2.635	0.120	0.120	1.83
☐	4 x 3	4.500	3.500	4	4.260	3.260	0.120	0.120	1.92
☐	4 x 3 ½	4.500	4.000	4	4.260	3.760	0.120	0.120	1.98
☐	5 x 2	5.563	2.375	5	5.295	2.157	0.134	0.109	2.83
☐	5 x 2 ½	5.563	2.875	5	5.295	2.635	0.134	0.120	3.09
☐	5 x 3	5.563	3.500	5	5.295	3.260	0.134	0.120	3.20
☐	5 x 3 ½	5.563	4.000	5	5.295	3.760	0.134	0.120	3.28
☐	5 x 4	5.563	4.500	5	5.295	4.260	0.134	0.120	3.29
☐	6 x 2 ½	6.625	2.875	5 ½	6.357	2.635	0.134	0.120	3.35
☐	6 x 3	6.625	3.500	5 ½	6.357	3.260	0.134	0.120	4.01
☐	6 x 3 ½	6.625	4.000	5 ½	6.357	3.760	0.134	0.120	4.20
☐	6 x 4	6.625	4.500	5 ½	6.357	4.260	0.134	0.120	4.31
☐	6 x 5	6.625	5.563	5 ½	6.357	5.295	0.134	0.134	4.45
☐	8 x 3 ½	8.625	4.000	6	8.329	3.760	0.148	0.120	6.48
☐	8 x 4	8.625	4.500	6	8.329	4.260	0.148	0.120	6.64
☐	8 x 5	8.625	5.563	6	8.329	5.295	0.148	0.134	6.79
☐	8 x 6	8.625	6.625	6	8.329	6.357	0.148	0.134	7.04
☐	10 x 4	10.750	4.500	7	10.420	4.260	0.165	0.120	10.43
☐	10 x 5	10.750	5.563	7	10.420	5.295	0.165	0.134	10.87
☐	10 x 6	10.750	6.625	7	10.420	6.357	0.165	0.134	11.03
☐	10 x 8	10.750	8.625	7	10.420	8.329	0.165	0.148	11.46
☐	12 x 5	12.750	5.563	8	12.390	5.295	0.180	0.134	16.07
☐	12 x 6	12.750	6.625	8	12.390	6.357	0.180	0.134	16.38
☐	12 x 8	12.750	8.625	8	12.390	8.329	0.180	0.148	16.91
☐	12 x 10	12.750	10.750	8	12.390	10.420	0.180	0.165	17.60
☐	14 x 6	14.000	6.625	13	13.624	6.357	0.188	0.134	29.00
☐	14 x 8	14.000	8.625	13	13.624	8.329	0.188	0.148	30.61
☐	14 x 10	14.000	10.750	13	13.624	10.420	0.188	0.165	31.77
☐	14 x 12	14.000	12.750	13	13.624	12.390	0.188	0.180	33.71
☐	16 x 8	16.000	8.625	14	15.624	8.329	0.188	0.148	36.81
☐	16 x 10	16.000	10.750	14	15.624	10.420	0.188	0.165	39.06
☐	16 x 12	16.000	12.750	14	15.624	12.390	0.188	0.180	40.45
☐	16 x 14	16.000	14.000	14	15.624	13.624	0.188	0.188	41.46
☐	18 x 10	18.000	10.750	15	17.624	10.420	0.188	0.165	46.34
☐	18 x 12	18.000	12.750	15	17.624	12.390	0.188	0.180	47.35
☐	18 x 14	18.000	14.000	15	17.624	13.624	0.188	0.188	48.28
☐	18 x 16	18.000	16.000	15	17.624	15.624	0.188	0.188	49.60
☐	20 x 12	20.000	12.750	20	19.564	12.390	0.218	0.180	71.50
☐	20 x 14	20.000	14.000	20	19.564	13.624	0.218	0.188	84.10
☐	20 x 16	20.000	16.000	20	19.564	15.624	0.218	0.188	84.68
☐	20 x 18	20.000	18.000	20	19.564	17.624	0.218	0.188	87.58
☐	24 x 16	24.000	16.000	20	23.500	15.624	0.250	0.188	98.02
☐	24 x 18	24.000	18.000	20	23.500	17.624	0.250	0.188	100.00
☐	24 x 20	24.000	20.000	20	23.500	19.564	0.250	0.218	103.00

ss wld ftg and pipe conform to ASTM A403 & MSS SP-43; dimensionally, all ftg conform to ASME B16.9 (≠ Wall) & MSS SP-43

Project Name: _____
Job #: _____

ASTM A403, B16.9

ECCENTRIC REDUCERS



Grade: ☐ 304L ☐ 316L ☐ _____
Seam: ☐ Welded ☐ Seamless ☐ WPWX
Source: ☐ Import ☐ Domestic ☐ BAA ☐ AIS ☐ _____

DIMENSIONS

UOM: Inches/LBS

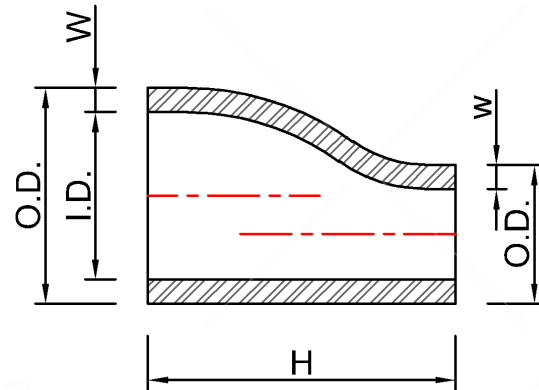
SELECT	NOMINAL PIPE SIZE Large End x Small End	OUTSIDE DIAMETER LARGE END (O.D.)	OUTSIDE DIAMETER SMALL END (O.D.)	LENGTH (L)	SCHEDULE 40S ☐ <- SELECT				
					Inside Diameter Large End (I.D.)	Inside Diameter Small End (I.D.)	Wall Thickness Large End (W)	Wall Thickness Small End (w)	Approx Weight
☐	3/4 x 3/8	1.050	0.675	1 1/2	0.824	0.493	0.113	0.091	0.27
☐	3/4 x 1/2	1.050	0.840	1 1/2	0.824	0.622	0.113	0.109	0.31
☐	1 x 3/8	1.315	0.675	2	1.049	0.493	0.133	0.091	0.33
☐	1 x 1/2	1.315	0.840	2	1.049	0.622	0.133	0.109	0.34
☐	1 x 3/4	1.315	1.050	2	1.049	0.824	0.133	0.113	0.36
☐	1 1/4 x 1/2	1.660	0.840	2	1.380	0.622	0.140	0.109	0.46
☐	1 1/4 x 3/4	1.660	1.050	2	1.380	0.824	0.140	0.113	0.49
☐	1 1/4 x 1	1.660	1.315	2	1.380	1.049	0.140	0.133	0.49
☐	1 1/2 x 1/2	1.900	0.840	2 1/2	1.610	0.622	0.145	0.109	0.50
☐	1 1/2 x 3/4	1.900	1.050	2 1/2	1.610	0.824	0.145	0.113	0.52
☐	1 1/2 x 1	1.900	1.315	2 1/2	1.610	1.049	0.145	0.133	0.28
☐	1 1/2 x 1 1/4	1.900	1.660	2 1/2	1.610	1.380	0.145	0.140	0.62
☐	2 x 3/4	2.375	1.050	3	2.067	0.824	0.154	0.113	0.80
☐	2 x 1	2.375	1.315	3	2.067	1.049	0.154	0.133	0.89
☐	2 x 1 1/4	2.375	1.660	3	2.067	1.380	0.154	0.140	0.96
☐	2 x 1 1/2	2.375	1.900	3	2.067	1.610	0.154	0.145	0.99
☐	2 1/2 x 1	2.875	1.315	3 1/2	2.469	1.049	0.203	0.133	1.42
☐	2 1/2 x 1 1/4	2.875	1.660	3 1/2	2.469	1.380	0.203	0.140	1.61
☐	2 1/2 x 1 1/2	2.875	1.900	3 1/2	2.469	1.610	0.203	0.145	1.67
☐	2 1/2 x 2	2.875	2.375	3 1/2	2.469	2.067	0.203	0.154	1.76
☐	3 x 1	3.500	1.315	3 1/2	3.068	1.049	0.216	0.133	1.81
☐	3 x 1 1/4	3.500	1.660	3 1/2	3.068	1.380	0.216	0.140	1.86
☐	3 x 1 1/2	3.500	1.900	3 1/2	3.068	1.610	0.216	0.145	2.07
☐	3 x 2	3.500	2.375	3 1/2	3.068	2.067	0.216	0.154	2.20
☐	3 x 2 1/2	3.500	2.875	3 1/2	3.068	2.469	0.216	0.203	2.38
☐	3 1/2 x 1 1/4	4.000	1.660	4	3.548	1.380	0.226	0.140	2.60
☐	3 1/2 x 1 1/2	4.000	1.900	4	3.548	1.610	0.226	0.145	2.76

ss wld ftg and pipe conform to ASTM A403 & MSS SP-43; dimensionally, all ftg conform to ASME B16.9
(≠ Wall) & MSS SP-43

Project Name: _____
Job #: _____

ASTM A403, B16.9

ECCENTRIC REDUCERS



Grade: ☐ 304L ☐ 316L ☐ _____
Seam: ☐ Welded ☐ Seamless ☐ WPWX
Source: ☐ Import ☐ Domestic ☐ BAA ☐ AIS ☐ _____

DIMENSIONS

UOM: Inches/LBS

SELECT	NOMINAL PIPE SIZE Large End x Small End	OUTSIDE DIAMETER LARGE END (O.D.)	OUTSIDE DIAMETER SMALL END (O.D.)	LENGTH (L)	SCHEDULE 80S ☐ < SELECT				
					Inside Diameter Large End (I.D.)	Inside Diameter Small End (I.D.)	Wall Thickness Large End (W)	Wall Thickness Small End (w)	Approx Weight
☐	3/4 x 3/8	1.050	0.675	1 1/2	0.742	0.423	0.154	0.126	0.37
☐	3/4 x 1/2	1.050	0.840	1 1/2	0.742	0.546	0.154	0.147	0.40
☐	1 x 3/8	1.315	0.675	2	0.957	0.423	0.179	0.126	0.42
☐	1 x 1/2	1.315	0.840	2	0.957	0.546	0.179	0.147	0.44
☐	1 x 3/4	1.315	1.050	2	0.957	0.742	0.179	0.154	0.49
☐	1 1/4 x 1/2	1.660	0.840	2	1.278	0.546	0.191	0.147	0.52
☐	1 1/4 x 3/4	1.660	1.050	2	1.278	0.742	0.191	0.154	0.56
☐	1 1/4 x 1	1.660	1.315	2	1.278	0.957	0.191	0.179	0.59
☐	1 1/2 x 1/2	1.900	0.840	2 1/2	1.500	0.546	0.200	0.147	0.68
☐	1 1/2 x 3/4	1.900	1.050	2 1/2	1.500	0.742	0.200	0.154	0.71
☐	1 1/2 x 1	1.900	1.315	2 1/2	1.500	0.957	0.200	0.179	0.74
☐	1 1/2 x 1 1/4	1.900	1.660	2 1/2	1.500	1.278	0.200	0.191	0.80
☐	2 x 3/4	2.375	1.050	3	1.939	0.742	0.218	0.154	1.11
☐	2 x 1	2.375	1.315	3	1.939	0.957	0.218	0.179	1.18
☐	2 x 1 1/4	2.375	1.660	3	1.939	1.278	0.218	0.191	1.27
☐	2 x 1 1/2	2.375	1.900	3	1.939	1.500	0.218	0.200	1.30
☐	2 1/2 x 1	2.875	1.315	3 1/2	2.323	0.957	0.276	0.179	1.92
☐	2 1/2 x 1 1/4	2.875	1.660	3 1/2	2.323	1.278	0.276	0.191	1.98
☐	2 1/2 x 1 1/2	2.875	1.900	3 1/2	2.323	1.500	0.276	0.200	2.07
☐	2 1/2 x 2	2.875	2.375	3 1/2	2.323	1.939	0.276	0.218	2.26
☐	3 x 1	3.500	1.315	3 1/2	2.900	0.957	0.300	0.179	2.39
☐	3 x 1 1/4	3.500	1.660	3 1/2	2.900	1.278	0.300	0.191	2.51
☐	3 x 1 1/2	3.500	1.900	3 1/2	2.900	1.500	0.300	0.200	2.66
☐	3 x 2	3.500	2.375	3 1/2	2.900	1.939	0.300	0.218	2.85
☐	3 x 2 1/2	3.500	2.875	3 1/2	2.900	2.323	0.300	0.276	3.28
☐	3 1/2 x 1 1/4	4.000	1.660	4	3.364	1.278	0.318	0.191	3.53
☐	3 1/2 x 1 1/2	4.000	1.900	4	3.364	1.500	0.318	0.200	3.69

ss wld ftg and pipe conform to ASTM A403 & MSS SP-43; dimensionally, all ftg conform to ASME B16.9
(≠ Wall) & MSS SP-43

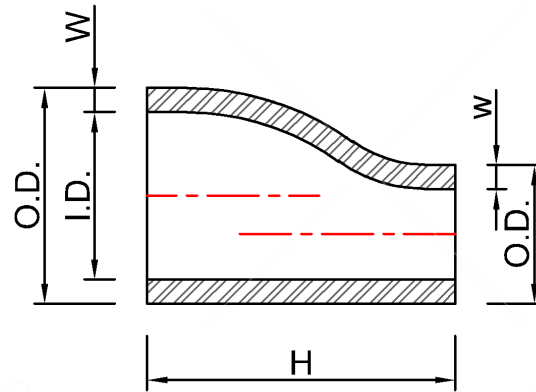
SELECT	NOMINAL PIPE SIZE Large End x Small End	OUTSIDE DIAMETER LARGE END (O.D.)	OUTSIDE DIAMETER SMALL END (O.D.)	LENGTH (L)	SCHEDULE 80S ☐ < SELECT				
					Inside Diameter Large End (I.D.)	Inside Diameter Small End (I.D.)	Wall Thickness Large End (W)	Wall Thickness Small End (w)	Approx Weight
☐	3 ½ x 2	4.000	2.375	4	3.364	2.323	0.318	0.276	3.87
☐	3 ½ x 2 ½	4.000	2.875	4	3.364	2.900	0.318	0.300	4.21
☐	3 ½ x 3	4.000	3.500	4	3.826	1.500	0.337	0.200	4.46
☐	4 x 1 ½	4.500	1.900	4	3.826	1.939	0.337	0.218	4.18
☐	4 x 2	4.500	2.375	4	3.826	2.323	0.337	0.276	4.31
☐	4 x 2 ½	4.500	2.875	4	3.826	2.900	0.337	0.300	4.83
☐	4 x 3	4.500	3.500	4	3.826	3.364	0.337	0.318	5.14
☐	4 x 3 ½	4.500	4.000	4	4.813	1.939	0.375	0.337	5.33
☐	5 x 2	5.563	2.375	5	4.813	2.323	0.375	0.276	7.25
☐	5 x 2 ½	5.563	2.875	5	4.813	2.900	0.375	0.300	7.93
☐	5 x 3	5.563	3.500	5	4.813	3.364	0.375	0.318	8.55
☐	5 x 3 ½	5.563	4.000	5	4.813	3.826	0.375	0.337	8.80
☐	5 x 4	5.563	4.500	5	5.761	2.323	0.432	0.276	9.11
☐	6 x 2 ½	6.625	2.875	5 ½	5.761	2.900	0.432	0.300	10.88
☐	6 x 3	6.625	3.500	5 ½	5.761	3.364	0.432	0.318	12.15
☐	6 x 3 ½	6.625	4.000	5 ½	5.761	3.826	0.432	0.337	12.67
☐	6 x 4	6.625	4.500	5 ½	5.761	4.813	0.432	0.375	13.14
☐	6 x 5	6.625	5.563	5 ½	3.364	2.323	0.318	0.276	13.79
☐	8 x 3 ½	8.625	4.000	6	7.625	3.364	0.500	0.318	17.61
☐	8 x 4	8.625	4.500	6	7.625	3.826	0.500	0.337	20.36
☐	8 x 5	8.625	5.563	6	7.625	4.813	0.500	0.375	21.32
☐	8 x 6	8.625	6.625	6	7.625	5.761	0.500	0.432	22.32
☐	10 x 4	10.750	4.500	7	9.750	3.826	0.500	0.337	27.68
☐	10 x 5	10.750	5.563	7	9.750	4.813	0.500	0.375	31.40
☐	10 x 6	10.750	6.625	7	9.750	5.761	0.500	0.432	32.61
☐	10 x 8	10.750	8.625	7	9.750	7.625	0.500	0.500	34.34
☐	12 x 5	12.750	5.563	8	11.750	4.813	0.500	0.375	42.78
☐	12 x 6	12.750	6.625	8	11.750	5.761	0.500	0.432	44.42
☐	12 x 8	12.750	8.625	8	11.750	7.625	0.500	0.500	46.06
☐	12 x 10	12.750	10.750	8	11.750	9.750	0.500	0.500	47.70
☐	14 x 6	14.000	6.625	13	13.000	5.761	0.500	0.432	77.81
☐	14 x 8	14.000	8.625	13	13.000	7.625	0.500	0.500	81.22
☐	14 x 10	14.000	10.750	13	13.000	9.750	0.500	0.500	85.40
☐	14 x 12	14.000	12.750	13	13.000	11.750	0.500	0.500	88.97
☐	16 x 8	16.000	8.625	14	15.000	7.625	0.500	0.500	97.49
☐	16 x 10	16.000	10.750	14	15.000	9.750	0.500	0.500	102.00
☐	16 x 12	16.000	12.750	14	15.000	11.750	0.500	0.500	105.00
☐	16 x 14	16.000	14.000	14	15.000	13.000	0.500	0.500	108.00
☐	18 x 10	18.000	10.750	15	17.000	9.750	0.500	0.500	120.00
☐	18 x 12	18.000	12.750	15	17.000	11.750	0.500	0.500	126.00
☐	18 x 14	18.000	14.000	15	17.000	13.000	0.500	0.500	127.00
☐	18 x 16	18.000	16.000	15	17.000	15.000	0.500	0.500	130.00
☐	20 x 12	20.000	12.750	20	19.000	11.750	0.500	0.500	189.00
☐	20 x 14	20.000	14.000	20	19.000	13.000	0.500	0.500	192.00
☐	20 x 16	20.000	16.000	20	19.000	15.000	0.500	0.500	195.00
☐	20 x 18	20.000	18.000	20	19.000	17.000	0.500	0.500	198.00
☐	24 x 16	24.000	16.000	20	23.000	15.000	0.500	0.500	226.00
☐	24 x 18	24.000	18.000	20	23.000	17.000	0.500	0.500	230.00
☐	24 x 20	24.000	20.000	20	23.000	19.000	0.500	0.500	234.00

ss wld ftg and pipe conform to ASTM A403 & MSS SP-43; dimensionally, all ftg conform to ASME B16.9 (≠ Wall) & MSS SP-43

Project Name: _____
Job #: _____

ASTM A403, B16.9

ECCENTRIC REDUCERS



Grade: ☐ 304L ☐ 316L ☐ _____
Seam: ☐ Welded ☐ Seamless ☐ WPWX
Source: ☐ Import ☐ Domestic ☐ BAA ☐ AIS ☐ _____

DIMENSIONS

UOM: Inches/LBS

SELECT	NOMINAL PIPE SIZE Large End x Small End	OUTSIDE DIAMETER LARGE END (O.D.)	OUTSIDE DIAMETER SMALL END (O.D.)	LENGTH (L)	SCHEDULE 160S ☐ < SELECT				
					Inside Diameter Large End (I.D.)	Inside Diameter Small End (I.D.)	Wall Thickness Large End (W)	Wall Thickness Small End (w)	Approx Weight
☐	3/4 x 3/8	1.050	0.675	1 1/2	-----	-----	-----	-----	-----
☐	3/4 x 1/2	1.050	0.840	1 1/2	0.612	0.466	0.219	0.187	0.55
☐	1 x 3/8	1.315	0.675	2	-----	-----	-----	-----	-----
☐	1 x 1/2	1.315	0.840	2	0.815	0.466	0.250	0.187	0.57
☐	1 x 3/4	1.315	1.050	2	0.815	0.614	0.250	0.218	0.61
☐	1 1/4 x 1/2	1.660	0.840	2	1.160	0.466	0.250	0.187	0.67
☐	1 1/4 x 3/4	1.660	1.050	2	1.160	0.614	0.250	0.218	0.73
☐	1 1/4 x 1	1.660	1.315	2	1.160	0.815	0.250	0.250	0.82
☐	1 1/2 x 1/2	1.900	0.840	2 1/2	1.338	0.466	0.281	0.187	0.95
☐	1 1/2 x 3/4	1.900	1.050	2 1/2	1.338	0.614	0.281	0.218	0.99
☐	1 1/2 x 1	1.900	1.315	2 1/2	1.338	0.815	0.281	0.250	1.03
☐	1 1/2 x 1 1/4	1.900	1.660	2 1/2	1.338	1.160	0.281	0.250	1.12
☐	2 x 3/4	2.375	1.050	3	1.689	0.614	0.343	0.218	1.74
☐	2 x 1	2.375	1.315	3	1.689	0.815	0.343	0.250	1.85
☐	2 x 1 1/4	2.375	1.660	3	1.689	1.160	0.343	0.250	1.99
☐	2 x 1 1/2	2.375	1.900	3	1.689	1.338	0.343	0.281	2.04
☐	2 1/2 x 1	2.875	1.315	3 1/2	2.125	0.815	0.375	0.250	2.59
☐	2 1/2 x 1 1/4	2.875	1.660	3 1/2	2.125	1.160	0.375	0.250	2.67
☐	2 1/2 x 1 1/2	2.875	1.900	3 1/2	2.125	1.338	0.375	0.281	2.79
☐	2 1/2 x 2	2.875	2.375	3 1/2	2.125	1.689	0.375	0.343	3.05
☐	3 x 1	3.500	1.315	3 1/2	2.624	0.815	0.438	0.250	3.32
☐	3 x 1 1/4	3.500	1.660	3 1/2	2.624	1.160	0.438	0.250	3.63
☐	3 x 1 1/2	3.500	1.900	3 1/2	2.624	1.338	0.438	0.281	3.85
☐	3 x 2	3.500	2.375	3 1/2	2.624	1.689	0.438	0.343	4.13
☐	3 x 2 1/2	3.500	2.875	3 1/2	2.624	2.125	0.438	0.375	4.75
☐	3 1/2 x 1 1/4	4.000	1.660	4	-----	-----	-----	-----	-----
☐	3 1/2 x 1 1/2	4.000	1.900	4	-----	-----	-----	-----	-----

ss wld ftg and pipe conform to ASTM A403 & MSS SP-43; dimensionally, all ftg conform to ASME B16.9
(≠ Wall) & MSS SP-43

SELECT	NOMINAL PIPE SIZE Large End x Small End	OUTSIDE DIAMETER LARGE END (O.D.)	OUTSIDE DIAMETER SMALL END (O.D.)	LENGTH (L)	SCHEDULE 160S ☐ < SELECT				
					Inside Diameter Large End (I.D.)	Inside Diameter Small End (I.D.)	Wall Thickness Large End (W)	Wall Thickness Small End (w)	Approx Weight
☐	3 ½ x 2	4.000	2.375	4	----	----	----	----	----
☐	3 ½ x 2 ½	4.000	2.875	4	----	----	----	----	----
☐	3 ½ x 3	4.000	3.500	4	----	----	----	----	----
☐	4 x 1 ½	4.500	1.900	4	3.438	1.338	0.531	0.281	6.56
☐	4 x 2	4.500	2.375	4	3.438	1.689	0.531	0.343	6.76
☐	4 x 2 ½	4.500	2.875	4	3.438	2.125	0.531	0.375	7.58
☐	4 x 3	4.500	3.500	4	3.438	2.624	0.531	0.438	8.07
☐	4 x 3 ½	4.500	4.000	4	----	----	----	----	----
☐	5 x 2	5.563	2.375	5	4.313	1.689	0.625	0.343	12.03
☐	5 x 2 ½	5.563	2.875	5	4.313	2.125	0.625	0.375	13.16
☐	5 x 3	5.563	3.500	5	4.313	2.624	0.625	0.438	14.19
☐	5 x 3 ½	5.563	4.000	5	----	----	----	----	----
☐	5 x 4	5.563	4.500	5	4.313	3.438	0.625	0.531	15.12
☐	6 x 2 ½	6.625	2.875	5 ½	5.187	2.125	0.719	0.375	18.06
☐	6 x 3	6.625	3.500	5 ½	5.187	2.624	0.719	0.438	20.17
☐	6 x 3 ½	6.625	4.000	5 ½	----	----	----	----	----
☐	6 x 4	6.625	4.500	5 ½	5.187	3.438	0.719	0.531	21.81
☐	6 x 5	6.625	5.563	5 ½	5.187	4.313	0.719	0.625	22.89
☐	8 x 3 ½	8.625	4.000	6	----	----	----	----	----
☐	8 x 4	8.625	4.500	6	6.813	3.438	0.906	0.531	36.85
☐	8 x 5	8.625	5.563	6	6.813	4.313	0.906	0.625	38.50
☐	8 x 6	8.625	6.625	6	6.813	5.187	0.906	0.719	40.30
☐	10 x 4	10.750	4.500	7	8.500	3.438	1.125	0.531	62.30
☐	10 x 5	10.750	5.563	7	8.500	4.313	1.125	0.625	70.60
☐	10 x 6	10.750	6.625	7	8.500	5.187	1.125	0.719	73.30
☐	10 x 8	10.750	8.625	7	8.500	6.813	1.125	0.906	77.10
☐	12 x 5	12.750	5.563	8	10.126	4.313	1.312	0.625	112.00
☐	12 x 6	12.750	6.625	8	10.126	5.187	1.312	0.719	116.00
☐	12 x 8	12.750	8.625	8	10.126	6.813	1.312	0.906	120.00
☐	12 x 10	12.750	10.750	8	10.126	8.500	1.312	1.125	124.00
☐	14 x 6	14.000	6.625	13	11.188	5.187	1.406	0.719	----
☐	14 x 8	14.000	8.625	13	11.188	6.813	1.406	0.906	----
☐	14 x 10	14.000	10.750	13	11.188	8.500	1.406	1.125	----
☐	14 x 12	14.000	12.750	13	11.188	10.126	1.406	1.312	----
☐	16 x 8	16.000	8.625	14	12.812	6.813	1.594	0.906	----
☐	16 x 10	16.000	10.750	14	12.812	8.500	1.594	1.125	----
☐	16 x 12	16.000	12.750	14	12.812	10.126	1.594	1.312	----
☐	16 x 14	16.000	14.000	14	12.812	11.188	1.594	1.406	----
☐	18 x 10	18.000	10.750	15	14.438	8.500	1.781	1.125	----
☐	18 x 12	18.000	12.750	15	14.438	10.126	1.781	1.312	----
☐	18 x 14	18.000	14.000	15	14.438	11.188	1.781	1.406	----
☐	18 x 16	18.000	16.000	15	14.438	12.812	1.781	1.594	----
☐	20 x 12	20.000	12.750	20	19.624	16.062	10.126	1.969	----
☐	20 x 14	20.000	14.000	20	19.624	16.062	11.188	1.969	----
☐	20 x 16	20.000	16.000	20	19.624	16.062	12.812	1.969	----
☐	20 x 18	20.000	18.000	20	19.624	16.062	14.438	1.969	----
☐	24 x 16	24.000	16.000	20	23.564	19.312	12.812	2.344	----
☐	24 x 18	24.000	18.000	20	23.564	19.312	14.438	2.344	----
☐	24 x 20	24.000	20.000	20	23.564	19.312	16.062	2.344	----

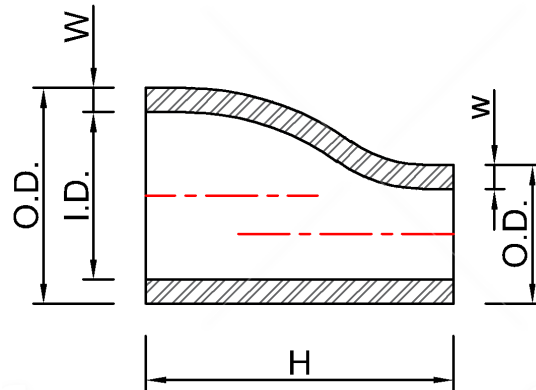


Project Name: _____
Job #: _____

FITTINGS
A403
(ER)

ASTM A403, B16.9

ECCENTRIC REDUCERS



Grade: ☐ 304L ☐ 316L ☐ _____
Seam: ☐ Welded ☐ Seamless ☐ WPWX
Source: ☐ Import ☐ Domestic ☐ BAA ☐ AIS ☐ _____

DIMENSIONS

UOM: Inches/LBS

SELECT	NOMINAL PIPE SIZE Large End x Small End	OUTSIDE DIAMETER LARGE END (O.D.)	OUTSIDE DIAMETER SMALL END (O.D.)	LENGTH (L)	XX STRONG WALL ☐ < SELECT				Approx Weight
					Inside Diameter Large End (I.D.)	Inside Diameter Small End (I.D.)	Wall Thickness Large End (W)	Wall Thickness Small End (w)	
☐	3/4 x 3/8	1.050	0.675	1 1/2	-----	-----	-----	-----	-----
☐	3/4 x 1/2	1.050	0.840	1 1/2	0.434	0.252	0.308	0.294	0.80
☐	1 x 3/8	1.315	0.675	2	-----	-----	-----	-----	-----
☐	1 x 1/2	1.315	0.840	2	0.599	0.252	0.358	0.294	0.88
☐	1 x 3/4	1.315	1.050	2	0.599	0.434	0.358	0.308	0.98
☐	1 1/4 x 1/2	1.660	0.840	2	0.896	0.252	0.382	0.294	1.04
☐	1 1/4 x 3/4	1.660	1.050	2	0.896	0.434	0.382	0.308	1.12
☐	1 1/4 x 1	1.660	1.315	2	0.896	0.599	0.382	0.358	1.18
☐	1 1/2 x 1/2	1.900	0.840	2 1/2	1.100	0.252	0.400	0.294	1.36
☐	1 1/2 x 3/4	1.900	1.050	2 1/2	1.100	0.434	0.400	0.308	1.42
☐	1 1/2 x 1	1.900	1.315	2 1/2	1.100	0.599	0.400	0.358	1.48
☐	1 1/2 x 1 1/4	1.900	1.660	2 1/2	1.100	0.896	0.400	0.382	1.60
☐	2 x 3/4	2.375	1.050	3	1.503	0.434	0.436	0.308	2.22
☐	2 x 1	2.375	1.315	3	1.503	0.599	0.436	0.358	2.36
☐	2 x 1 1/4	2.375	1.660	3	1.503	0.896	0.436	0.382	2.54
☐	2 x 1 1/2	2.375	1.900	3	1.503	1.110	0.436	0.400	2.60
☐	2 1/2 x 1	2.875	1.315	3 1/2	1.771	0.599	0.552	0.358	3.84
☐	2 1/2 x 1 1/4	2.875	1.660	3 1/2	1.771	0.896	0.552	0.382	3.96
☐	2 1/2 x 1 1/2	2.875	1.900	3 1/2	1.771	1.110	0.552	0.400	4.14
☐	2 1/2 x 2	2.875	2.375	3 1/2	1.771	1.503	0.552	0.436	4.52
☐	3 x 1	3.500	1.315	3 1/2	2.300	0.599	0.600	0.358	4.76
☐	3 x 1 1/4	3.500	1.660	3 1/2	2.300	0.896	0.600	0.382	5.02
☐	3 x 1 1/2	3.500	1.900	3 1/2	2.300	1.110	0.600	0.400	5.23
☐	3 x 2	3.500	2.375	3 1/2	2.300	1.503	0.600	0.436	5.70
☐	3 x 2 1/2	3.500	2.875	3 1/2	2.300	1.771	0.600	0.552	6.56
☐	3 1/2 x 1 1/4	4.000	1.660	4	2.728	0.896	0.636	0.382	7.06
☐	3 1/2 x 1 1/2	4.000	1.900	4	2.728	1.100	0.636	0.400	7.38

ss wld ftg and pipe conform to ASTM A403 & MSS SP-43; dimensionally, all ftg conform to ASME B16.9
(≠ Wall) & MSS SP-43

SELECT	NOMINAL PIPE SIZE Large End x Small End	OUTSIDE DIAMETER LARGE END (O.D.)	OUTSIDE DIAMETER SMALL END (O.D.)	LENGTH (L)	XX STRONG WALL ■ < SELECT				
					Inside Diameter Large End (I.D.)	Inside Diameter Small End (I.D.)	Wall Thickness Large End (W)	Wall Thickness Small End (w)	Approx Weight
☐	3 ½ x 2	4.000	2.375	4	2.728	1.771	0.636	0.552	7.74
☐	3 ½ x 2 ½	4.000	2.875	4	2.728	2.300	0.636	0.600	8.42
☐	3 ½ x 3	4.000	3.500	4	3.152	1.100	0.674	0.400	8.92
☐	4 x 1 ½	4.500	1.900	4	3.152	1.503	0.674	0.436	8.36
☐	4 x 2	4.500	2.375	4	3.152	1.771	0.674	0.552	8.62
☐	4 x 2 ½	4.500	2.875	4	3.152	2.300	0.674	0.600	9.66
☐	4 x 3	4.500	3.500	4	3.152	2.728	0.674	0.636	10.28
☐	4 x 3 ½	4.500	4.000	4	4.063	1.503	0.750	0.436	10.66
☐	5 x 2	5.563	2.375	5	4.063	1.771	0.750	0.552	14.50
☐	5 x 2 ½	5.563	2.875	5	4.063	2.300	0.750	0.600	15.86
☐	5 x 3	5.563	3.500	5	4.063	2.728	0.750	0.636	17.10
☐	5 x 3 ½	5.563	4.000	5	4.063	3.152	0.750	0.674	17.60
☐	5 x 4	5.563	4.500	5	4.897	1.771	0.864	0.552	18.22
☐	6 x 2 ½	6.625	2.875	5 ½	4.897	2.300	0.864	0.600	21.76
☐	6 x 3	6.625	3.500	5 ½	4.897	2.728	0.864	0.636	24.30
☐	6 x 3 ½	6.625	4.000	5 ½	4.897	3.152	0.864	0.674	25.34
☐	6 x 4	6.625	4.500	5 ½	4.897	4.063	0.864	0.750	26.28
☐	6 x 5	6.625	5.563	5 ½	2.728	1.771	0.636	0.552	27.58
☐	8 x 3 ½	8.625	4.000	6	6.875	2.728	0.875	0.636	30.81
☐	8 x 4	8.625	4.500	6	6.875	3.152	0.875	0.674	35.63
☐	8 x 5	8.625	5.563	6	6.875	4.063	0.875	0.750	37.31
☐	8 x 6	8.625	6.625	6	6.875	4.897	0.875	0.864	39.06
☐	10 x 4	10.750	4.500	7	-----	-----	-----	-----	-----
☐	10 x 5	10.750	5.563	7	-----	-----	-----	-----	-----
☐	10 x 6	10.750	6.625	7	-----	-----	-----	-----	-----
☐	10 x 8	10.750	8.625	7	-----	-----	-----	-----	-----
☐	12 x 5	12.750	5.563	8	-----	-----	-----	-----	-----
☐	12 x 6	12.750	6.625	8	-----	-----	-----	-----	-----
☐	12 x 8	12.750	8.625	8	-----	-----	-----	-----	-----
☐	12 x 10	12.750	10.750	8	-----	-----	-----	-----	-----
☐	14 x 6	14.000	6.625	13	-----	-----	-----	-----	-----
☐	14 x 8	14.000	8.625	13	-----	-----	-----	-----	-----
☐	14 x 10	14.000	10.750	13	-----	-----	-----	-----	-----
☐	14 x 12	14.000	12.750	13	-----	-----	-----	-----	-----
☐	16 x 8	16.000	8.625	14	-----	-----	-----	-----	-----
☐	16 x 10	16.000	10.750	14	-----	-----	-----	-----	-----
☐	16 x 12	16.000	12.750	14	-----	-----	-----	-----	-----
☐	16 x 14	16.000	14.000	14	-----	-----	-----	-----	-----
☐	18 x 10	18.000	10.750	15	-----	-----	-----	-----	-----
☐	18 x 12	18.000	12.750	15	-----	-----	-----	-----	-----
☐	18 x 14	18.000	14.000	15	-----	-----	-----	-----	-----
☐	18 x 16	18.000	16.000	15	-----	-----	-----	-----	-----
☐	20 x 12	20.000	12.750	20	-----	-----	-----	-----	-----
☐	20 x 14	20.000	14.000	20	-----	-----	-----	-----	-----
☐	20 x 16	20.000	16.000	20	-----	-----	-----	-----	-----
☐	20 x 18	20.000	18.000	20	-----	-----	-----	-----	-----
☐	24 x 16	24.000	16.000	20	-----	-----	-----	-----	-----
☐	24 x 18	24.000	18.000	20	-----	-----	-----	-----	-----
☐	24 x 20	24.000	20.000	20	-----	-----	-----	-----	-----

ss wld ftg and pipe conform to ASTM A403 & MSS SP-43; dimensionally, all ftg conform to ASME B16.9 (≠ Wall) & MSS SP-43