

## Steel Pipe Data SCHEDULE 40 & 80

Pipe Size	Schedule No.	O.D.	Wall Thickness	Wt. Per Foot (in lbs.)	
				Water	Pipe
3/8	40	.675	.091	.083	.567
	80		.126	.061	.738
1/2	40	.840	.109	.132	.850
	80		.147	.101	1.087
3/4	40	1.050	.113	.230	1.130
	80		.154	.186	1.473
1	40	1.315	.133	.374	1.678
	80		.179	.311	2.171
1 1/4	40	1.660	.140	.647	2.272
	80		.191	.555	2.996
1 1/2	40	1.900	.145	.882	2.717
	80		.200	.765	3.631
2	40	2.375	.154	1.452	3.652
	80		.218	1.279	5.022
2 1/2	40	2.875	.203	2.072	5.790
	80		.276	1.834	7.660
3	40	3.500	.216	3.200	7.570
	80		.300	2.860	10.250
3 1/2	40	4.000	.226	4.280	9.110
	80		.318	3.850	12.510
4	40	4.500	.237	5.510	10.790
	80		.337	4.980	14.980
	40		.258	8.660	14.620

Pipe Size	Schedule No.	O.D.	Wall Thickness	Wt. Per Foot (in lbs.)	
				Water	Pipe
5	80	5.563	.375	7.870	20.780
	40		.280	12.510	18.970
6	80	6.625	.432	11.920	28.570
	40		.322	21.600	28.550
8	80	8.625	.500	19.800	43.390
	40		.365	34.100	40.480
10	80	10.750	.593	31.100	64.400
	40		.406	48.500	53.600
12	80	12.750	.687	44.000	88.600
	40		.437	58.500	63.000
14	80	14.000	.750	51.200	107.000
	40		.500	76.500	83.000
16	80	16.000	.843	69.700	137.000
	40		.563	97.200	105.000
18	80	18.000	.937	88.500	171.000
	40		.593	120.400	123.000
20	80	20.000	1.031	109.400	209.000
	40		.687	174.200	171.000
24	80	24.000	1.218	158.200	297.000
	20		30.000	.500	286.000
30	API	36.000	.500	417.000	190.000
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## Spacing of Hangers For Steel Pipe

Nominal Pipe Size, Inches	1/2	3/4	1	1 1/4	1 1/2	2	2 1/2	3	3 1/2	4	5	6	8	10	12	14	16	18	20	24
Maximum Span. Feet	7	7	7	7	9	10	11	12	13	14	16	17	19	22	23	25	27	28	30	32
Recommended Hanger Rod Sizes	3/8	3/8	3/8	3/8	3/8	3/8	1/2	1/2	1/2	5/8	5/8	3/4	7/8	7/8	7/8	1	1	1 1/8	1 1/4	1 1/2
																		OR TRAPEZE		

**Note:** Spacing and capacities are based on pipe filled with water. Additional valves and fittings increase the load and therefore closer hanger spacing is required.

\*Many Codes and specifications require pipe hangers to be spaced every 10 feet regardless of size. Check local codes.



# TECHNICAL DATA

## Copper Tube Data

### TYPE L

Tube Size	Tubing O.D.	Wall Thickness	Wt. Per Foot (in lbs.)	
			Water	Pipe
1/4	.375	.030	.034	.126
3/8	.500	.035	.062	.198
1/2	.625	.040	.100	.285
5/8	.750	.042	.151	.362
3/4	.875	.045	.209	.455
1	1.125	.050	.357	.655
1 1/4	1.375	.055	.546	.884
1 1/2	1.625	.060	.767	1.140
2	2.125	.070	1.341	1.750
2 1/2	2.625	.080	2.064	2.480
3	3.125	.090	2.949	3.330
3 1/2	3.625	.100	3.989	4.290
4	4.125	.110	5.188	5.380
5	5.125	.125	8.081	7.610
6	6.125	.140	11.616	10.200
8	8.125	.200	20.289	19.260
10	10.125	.250	31.590	30.100
12	12.125	.280	45.426	40.400

### TYPE K

Tube Size	Tubing O.D.	Wall Thickness	Wt. Per Foot (in lbs.)	
			Water	Pipe
1/4	.375	.035	.032	.145
3/8	.500	.049	.055	.269
1/2	.625	.049	.094	.344
5/8	.750	.049	.144	.418
3/4	.875	.065	.188	.641
1	1.125	.065	.337	.839
1 1/4	1.375	.065	.527	1.040
1 1/2	1.625	.072	.743	1.360
2	2.125	.083	1.310	2.060
2 1/2	2.625	.095	2.000	2.920
3	3.125	.109	2.960	4.000
3 1/2	3.625	.120	3.900	5.120
4	4.125	.134	5.060	6.510
5	5.125	.160	8.000	9.670
6	6.125	.192	11.200	13.870
8	8.125	.271	19.500	25.900
10	10.125	.338	30.423	40.300
12	12.125	.405	43.675	57.800

## Spacing of Hangers For Copper Tubing

Tubing Size	1/2	3/4	1	1 1/4	1 1/2	2	2 1/2	3	3 1/2	4	5	6	8	10	12
Span in Ft.	6	8	8	10	10	10	12	12	12	12	12	14	14	18	19

*Note: Spacing and capacities are based on pipe filled with water. Additional valves and fittings increase the load and therefore closer hanger spacing is required.*

## AWWA Ductile Iron Pipe Data

Based on AWWA C108-70, Table 8.2.  
Add flange weight for flanged cast iron pipe.

Nom. Pipe Size	Class	O.D. D.I. Pipe	Wall Thick.	Wt. Per Foot (in lbs.)	
				Pipe	Water
3	53	3.96	.31	11.20	3.80
4	53	4.80	.32	14.20	5.90
6	53	6.90	.34	22.00	13.10
8	53	9.05	.36	31.00	23.00
10	53	11.10	.38	40.40	36.40
12	53	13.20	.40	50.70	52.30
14	53	15.30	.42	62.40	71.10
16	53	17.40	.43	72.80	93.10
18	53	19.50	.44	83.60	117.90
20	53	21.60	.45	95.20	145.80
24	53	25.80	.47	119.20	210.20
30	53	32.00	.51	161.30	326.50
36	53	38.30	.58	219.50	469.30
42	53	44.50	.65	285.20	634.90
48	53	50.80	.72	360.30	828.90

## Glass Pipe Data

### REGULAR SCHEDULE

Nom. Pipe Size	O.D.	Wall Thickness	Wt. Per Foot (in lbs.)	
			Pipe	Water
1 1/2	1.84	.12	.64	.89
2	2.34	.14	.94	1.45
3	3.41	.17	1.60	3.19
4	4.53	.20	2.60	5.79
6	6.66	.24	4.70	12.78

### HEAVY SCHEDULE

1	1.31	.16	.60	.35
1 1/2	1.84	.17	.87	.76
2	2.34	.17	1.10	1.36
3	3.41	.20	2.00	3.06
4	4.53	.26	3.40	5.44
6	6.66	.33	6.30	12.42

Spacing of Hangers for glass pipe support every 8-10 ft. Pad all hangers. Use only clevis or trapeze, do not tie down pipe.

## PVC Plastic Pipe Data SCHEDULE 40 & 80

Pipe Size	Schedule No.	O.D.	Wall Thickness	Wt. Per Foot (in lbs.)	
				Water	Pipe
1/8	40	.405	.068	.025	.043
	80		.095	.016	.055
1/4	40	.540	.088	.045	.074
	80		.119	.031	.094
3/8	40	.675	.091	.083	.100
	80		.126	.061	.129
1/2	40	.840	.109	.132	.150
	80		.147	.101	.150
3/4	40	1.050	.113	.230	.199
	80		.154	.186	.259
1	40	1.315	.133	.374	.295
	80		.179	.311	.382
1 1/4	40	1.660	.140	.647	.400
	80		.191	.555	.527
1 1/2	40	1.990	.145	.882	.478
	80		.200	.765	.639
2	40	2.375	.154	1.452	.643
	80		.218	1.279	.884

Pipe Size	Schedule No.	O.D.	Wall Thickness	Wt. Per Foot (in lbs.)	
				Water	Pipe
2 1/2	40	2.875	.203	2.072	1.020
	80		.276	1.834	1.350
3	40	3.500	.216	3.200	1.333
	80		.300	2.860	1.804
3 1/2	40	4.000	.226	4.280	1.598
	80		.318	3.850	2.195
4	40	4.500	.237	5.510	1.899
	80		.337	4.980	2.636
5	40	5.563	.258	8.660	2.770
	80		.375	7.870	4.126
6	40	6.625	.280	12.150	3.339
	80		.432	11.290	5.028
8	40	8.625	.322	21.600	5.280
	80		.500	19.800	8.023
10	40	10.750	.366	34.100	7.505
	80		.593	31.100	11.894
12	40	12.750	.406	48.500	10.023
	80		.687	44.000	16.365

## Spacing of Hangers For PVC Plastic Pipe

Schedule 40 Pipe Size	Support Spacings (In Feet)									
	Temperature									
	20°F	40°F	60°F	80°F	100°F	110°F	120°F	130°F	140°F	150°F
1/2 to 3/4	5.00	4.75	4.50	4.25	4.00	3.75	3.33	3.00	2.66	2.00
	5.50	5.25	5.00	4.66	4.33	4.00	3.75	3.33	2.80	2.25
1 to 1 1/4	5.80	5.50	5.25	5.00	4.66	4.33	3.80	3.50	3.00	2.50
1 1/2 to 2	6.66	6.33	6.00	5.50	5.25	4.80	4.50	4.00	3.50	2.80
	6.80	6.50	6.25	5.80	5.50	5.25	4.75	4.25	3.66	3.00
3	7.33	7.00	6.50	6.25	5.80	5.50	5.00	4.50	3.80	3.25
4	7.80	7.50	7.00	6.80	6.33	5.80	5.33	4.80	4.25	3.50

Schedule 80 Pipe Size	Support Spacings (In Feet)									
	Temperature									
	20°F	40°F	60°F	80°F	100°F	110°F	120°F	130°F	140°F	150°F
1/2 to 3/4	5.75	5.50	5.25	4.80	4.50	4.33	3.80	3.50	3.00	2.50
	6.33	6.00	5.75	5.33	5.00	4.60	4.33	3.80	3.33	2.75
1 to 1 1/4	6.66	6.33	6.00	5.66	5.25	4.80	4.50	4.00	3.50	3.00
2	7.00	6.50	6.25	6.00	5.50	5.12	4.75	4.33	3.66	3.12
	7.80	7.50	7.00	6.66	6.33	5.80	5.33	4.75	4.25	3.33
2 1/2	8.20	7.75	7.33	7.00	6.50	6.00	5.50	5.00	4.33	3.50
	8.66	8.25	7.80	7.33	6.80	6.33	5.80	5.25	4.66	3.75
3	9.80	9.33	8.80	8.33	7.80	7.33	6.50	6.00	5.12	4.25



# TECHNICAL DATA

## Conduit Data

### ELECTRICAL METALLIC TUBING DATA

Nominal Size EMT Conduit	O.D. Conduit	O.D. Coupling	Weight Conduit W/C Plg. lbs./ft.	Approx. Max. Weight Conduit and Conductor lbs./ft.	
				Lead Covered	Not Lead Covered
1/2	.706	N/A	.29	N/A	.54
3/4	.922	—	.45	—	1.16
1	1.163	—	.65	—	1.83
1 1/4	1.510	—	.96	—	2.96
1 1/2	1.740	—	1.11	—	3.68
2	2.197	—	1.41	—	4.45
2 1/2	2.875	—	2.15	—	6.41
3	3.500	—	2.60	—	9.30
3 1/2	4.000	—	3.25	—	12.15
4	4.500	—	3.90	—	15.40

Note: 2 1/2 through 4" EMT same as steel rigid conduit.

### STEEL RIGID CONDUIT DATA

Nominal Size EMT Conduit	O.D. Conduit	O.D. Coupling	Weight Conduit W/C Plg. lbs./ft.	Approx. Max. Weight Conduit and Conductor lbs./ft.	
				Lead Covered	Not Lead Covered
1/2	.840	1.010	.80	1.17	1.04
3/4	1.050	1.250	1.09	1.75	1.40
1	1.315	1.525	1.65	2.62	2.35
1 1/4	1.660	1.869	2.15	4.31	3.58
1 1/2	1.900	2.155	2.58	5.89	4.55
2	2.375	2.650	3.52	8.53	7.21
2 1/2	2.875	3.250	5.67	11.51	10.22
3	3.500	3.870	7.14	16.51	14.51
3 1/2	4.000	4.500	8.60	19.05	17.49
4	4.500	4.875	10.00	24.75	21.48
5	5.563	6.000	13.20	35.87	30.83
6	6.625	7.200	17.85	50.69	43.43

### INTERMEDIATE METAL CONDUIT DATA

Nominal Size EMT Conduit	O.D. Conduit	O.D. Coupling	Weight Conduit W/C Plg. lbs./ft.	Approx. Max. Weight Conduit and Conductor lbs./ft.	
				Lead Covered	Not Lead Covered
1/2	.815	1.010	.60	.97	.84
3/4	1.029	1.250	.82	1.48	1.13
1	1.290	1.525	1.16	2.13	1.86
1 1/4	1.638	1.869	1.50	3.66	2.93
1 1/2	1.883	2.155	1.82	5.13	3.79
2	2.360	2.650	2.42	7.43	6.11
2 1/2	2.857	3.250	4.28	10.12	8.83
3	3.476	3.870	5.26	14.63	12.63
3 1/2	3.971	4.500	6.12	16.57	15.01
4	4.466	4.875	6.82	21.57	18.30

## Threaded Rod Data

Nominal Rod Dia. (in inches)	Root Area Thread (in inches) <sup>2</sup>	Max. Rec. Load/lbs.	
		650°F	750°F
1/4	.027	240	210
3/8	.068	610	540
1/2	.126	1130	1010
5/8	.202	1810	1610
3/4	.302	2710	2420
7/8	.419	3770	3360
1	.552	4960	4420
1 1/8	.693	6230	5560
1 1/4	.889	8000	7140
1 1/2	1.293	11630	10370
1 3/4	1.744	15700	14000
2	2.300	20700	18460
2 1/4	3.023	27200	24260
2 1/2	3.719	33500	29880

## SERVICE WEIGHT CAST IRON SOIL PIPE DATA (Bell & Spigot Type)

### Cast Iron Data

Nominal Pipe Size	O.D. of Cast Iron Pipe	Wall Thickness	Weight Per Foot (in lbs.)	
			Pipe	Water
2	2.25	.17	4.00	1.50
3	3.25	.17	6.00	3.40
4	4.25	.18	8.00	6.20
5	5.25	.18	10.40	12.30
6	6.25	.18	13.00	13.90
8	8.38	.23	20.00	25.70
10	10.50	.28	29.00	40.60
12	12.50	.28	38.00	58.20
15	15.62	.31	51.00	96.60

## EXTRA WEIGHT CAST IRON SOIL PIPE DATA (Bell & Spigot Type)

Nominal Pipe Size	O.D. of Cast Iron Pipe	Wall Thickness	Weight Per Foot (in lbs.)	
			Pipe	Water
2	2.38	.190	5.00	1.60
3	3.50	.250	9.00	3.70
4	4.50	.250	12.00	6.50
5	5.50	.250	15.00	10.20
6	6.50	.250	19.00	14.70
8	8.62	.310	30.00	26.10
10	10.75	.375	43.00	40.80
12	12.75	.375	54.00	58.80
15	15.88	.440	75.00	91.80

## NO-HUB CAST IRON SOIL PIPE DATA

Nominal Pipe Size	O.D. of Cast Iron Pipe	Wall Thickness	Weight Per Foot (in lbs.)	
			Pipe	Water
1½	1.90	.16	2.70	3.50
2	2.35	.16	3.60	5.00
3	3.35	.16	5.20	8.30
4	4.38	.19	7.40	12.80
5	5.30	.19	9.60	17.90
6	6.30	.19	11.00	23.00
8	8.38	.23	18.00	39.50
10	10.50	.28	26.20	43.34
12	12.50	.28	35.50	62.51