

Pipe schedule chart and pipe weight calculator

Outside diameter, wall thickness and weight of carbon steel pipe by nominal pipe size (NPS) and schedule, per ASME B36.10M and B36.19M. Weight per foot = $10.69 \times (OD - t) \times t$, with OD and t in inches.

Nominal pipe size

Schedule

Length (m)

Pieces

4" (OD 114.3 mm) ▾

Sch 40 — 6.02 mm wall ▾

6

1

Total weight

96.42 kg

212.57 lb · 16.07 kg/m · 10.80 lb/ft

Pipe schedule chart: wall thickness and weight

Wall thickness in inches, weight in lb/ft. STD equals Sch 40 up to NPS 10; XS equals Sch 80 up to NPS 8.

NPS	OD (in)	OD (mm)	Sch 10	Sch 40	Sch 80	Sch 160	XXS
1/8"	0.405	10.3	0.049 / 0.19	0.068 / 0.24	0.095 / 0.31	—	—
1/4"	0.54	13.7	0.065 / 0.33	0.088 / 0.43	0.119 / 0.54	—	—
3/8"	0.675	17.1	0.065 / 0.42	0.091 / 0.57	0.126 / 0.74	—	—
1/2"	0.84	21.3	0.083 / 0.67	0.109 / 0.85	0.147 / 1.09	0.188 / 1.31	0.294 / 1.72
3/4"	1.05	26.7	0.083 / 0.86	0.113 / 1.13	0.154 / 1.48	0.219 / 1.95	0.308 / 2.44
1"	1.315	33.4	0.109 / 1.41	0.133 / 1.68	0.179 / 2.17	0.250 / 2.85	0.358 / 3.66
1 1/4"	1.66	42.2	0.109 / 1.81	0.140 / 2.27	0.191 / 3.00	0.250 / 3.77	0.382 / 5.22
1 1/2"	1.9	48.3	0.109 / 2.09	0.145 / 2.72	0.200 / 3.63	0.281 / 4.86	0.400 / 6.41
2"	2.375	60.3	0.109 / 2.64	0.154 / 3.66	0.218 / 5.03	0.344 / 7.47	0.436 / 9.04
2 1/2"	2.875	73	0.120 / 3.53	0.203 / 5.80	0.276 / 7.67	0.375 / 10.02	0.552 / 13.71
3"	3.5	88.9	0.120 / 4.34	0.216 / 7.58	0.300 / 10.26	0.438 / 14.34	0.600 / 18.60
3 1/2"	4	101.6	0.120 / 4.98	0.226 / 9.12	0.318 / 12.52	—	0.636 / 22.87
4"	4.5	114.3	0.120 / 5.62	0.237 / 10.80	0.337 / 15.00	0.531 / 22.53	0.674 / 27.57
4 1/2"	5	127	—	0.247 / 12.55	0.355 / 17.63	—	0.710 / 32.56
5"	5.563	141.3	0.134 / 7.78	0.258 / 14.63	0.375 / 20.80	0.625 / 32.99	0.750 / 38.59
6"	6.625	168.3	0.134 / 9.30	0.280 / 18.99	0.432 / 28.60	0.719 / 45.39	0.864 / 53.21
7"	7.625	193.7	—	0.301 / 23.57	0.500 / 38.08	—	0.875 / 63.14
8"	8.625	219.1	0.148 / 13.41	0.322 / 28.58	0.500 / 43.43	0.906 / 74.76	0.875 / 72.49
9"	9.625	244.5	—	0.342 / 33.94	0.500 / 48.77	—	—
10"	10.75	273.1	0.165 / 18.67	0.365 / 40.52	0.594 / 64.49	1.125 / 115.75	—

NPS	OD (in)	OD (mm)	Sch 10	Sch 40	Sch 80	Sch 160	XXS
12"	12.75	323.8	0.180 / 24.19	0.406 / 53.57	0.687 / 88.59	1.312 / 160.42	—
14"	14	355.6	0.250 / 36.75	0.437 / 63.36	0.750 / 106.23	1.406 / 189.29	—
16"	16	406.4	0.250 / 42.09	0.500 / 82.85	0.843 / 136.59	1.594 / 245.48	—
18"	18	457.2	0.250 / 47.44	0.562 / 104.76	0.937 / 170.91	1.781 / 308.79	—
20"	20	508	0.250 / 52.78	0.593 / 123.02	1.031 / 209.06	1.968 / 379.36	—
22"	22	558.8	0.250 / 58.13	—	1.125 / 251.05	2.125 / 451.49	—
24"	24	609.6	0.250 / 63.47	0.687 / 171.21	1.218 / 296.63	2.343 / 542.44	—
26"	26	660.4	0.312 / 85.68	—	—	—	—
28"	28	711.2	0.312 / 92.35	—	—	—	—
30"	30	762	0.312 / 99.02	—	—	—	—
32"	32	812.8	0.312 / 105.69	0.688 / 230.29	—	—	—
34"	34	863.6	0.312 / 112.36	0.688 / 245.00	—	—	—
36"	36	914.4	0.312 / 119.03	0.750 / 282.62	—	—	—
40"	40	1016	—	—	—	—	1.000 / 416.91
42"	42	1066.8	—	—	—	—	1.000 / 438.29
44"	44	1117.6	—	—	—	—	1.000 / 459.67
46"	46	1168.4	—	—	—	—	1.000 / 481.05
48"	48	1219.2	—	—	—	—	1.000 / 502.43
52"	52	1320.8	—	—	—	—	1.000 / 545.19
56"	56	1422.4	—	—	—	—	1.000 / 587.95
60"	60	1524	—	—	—	—	1.000 / 630.71
64"	64	1625.6	—	—	—	—	1.000 / 673.47
68"	68	1727.2	—	—	—	—	1.000 / 716.23
72"	72	1828.8	—	—	—	—	1.000 / 758.99
76"	76	1930.4	—	—	—	—	—
80"	80	2032	—	—	—	—	—
88"	88	2235.2	—	—	—	—	—
92"	92	2336.8	—	—	—	—	—
96"	96	2438.4	—	—	—	—	—
100"	100	2540	—	—	—	—	—
104"	104	2641.6	—	—	—	—	—
108"	108	2743.2	—	—	—	—	—

Each cell: wall thickness (in) / weight (lb/ft). Data adapted from Wikipedia, "Nominal Pipe Size" (CC BY-SA 4.0), which reproduces ASME B36.10M-2015; STD, XS and XXS checked against the AISC Shapes Database.

How pipe weight is calculated

Plain-end weight per foot (lb/ft) = $10.69 \times (OD - t) \times t$, where OD and t are in inches. In metric units, $kg/m = 0.02466 \times (OD - t) \times t$ with OD and t in mm. Both come from the area of the pipe wall, $\pi (OD - t) t$, times the density of carbon steel.