

STANDARD PIPE SCHEDULE 40 — ASTM A53 GRADES A AND B

TRADE SIZE	DN DESIGNATOR	OD		ID		WALL THICKNESS		NOMINAL WEIGHT (MASS) PER UNIT LENGTH			
		in.	mm	in.	mm	in.	mm	Plain End (lbs./ft.)	Plain End (kg/m)	Threads & Couplings (lbs./ft.)	Threads & Couplings (kg/m)
½	6	0.405	10.3	0.269	6.8	0.068	1.73	0.24	0.37	0.25	0.37
¾	8	0.540	13.7	0.364	9.2	0.088	2.24	0.43	0.63	0.43	0.63
1	10	0.675	17.1	0.493	12.5	0.091	2.31	0.57	0.84	0.57	0.84
1 ¼	15	0.840	21.3	0.622	15.8	0.109	2.77	0.85	1.27	0.86	1.27
1 ½	20	1.050	26.7	0.824	20.9	0.113	2.87	1.13	1.69	1.14	1.69
2	25	1.315	33.4	1.049	26.6	0.133	3.38	1.68	2.50	1.69	2.50
2 ½	32	1.660	42.2	1.380	35.1	0.140	3.56	2.27	3.39	2.28	3.40
3	40	1.900	48.3	1.610	40.9	0.145	3.68	2.72	4.05	2.74	4.04
3 ½	50	2.375	60.3	2.067	52.5	0.154	3.91	3.66	5.44	3.68	5.46
4	65	2.875	73.0	2.469	62.7	0.203	5.16	5.80	8.63	5.85	8.67
4 ½	80	3.500	88.9	3.068	77.9	0.216	5.49	7.58	11.29	7.68	11.35
5	90	4.000	101.6	3.548	90.1	0.226	5.74	9.12	13.57	9.27	13.71
5 ½	100	4.500	114.3	4.026	102.3	0.237	6.02	10.80	16.07	10.92	16.23
6	125	5.563	141.3	5.047	128.2	0.258	6.55	14.63	21.77	14.90	22.07
6 ½	150	6.625	168.3	6.065	154.1	0.280	7.11	18.99	28.26	19.34	28.58
7	200	8.625	219.1	7.981	202.7	0.322	8.18	28.58	42.55	29.35	43.73
8	250	10.750	273.0	10.020	254.5	0.365	9.27	40.52	60.29	41.49	63.36
9	300	12.750	323.0	12.000	304.8	0.375	9.52	49.61	73.78	51.28	76.21
10	350	14.000	355.6	13.250	336.5	0.375	9.52	54.62	81.25	-	-
11	400	16.000	406.4	15.250	387.5	0.375	9.52	62.64	93.17	-	-
12	450	18.000	457.0	17.250	438.1	0.375	9.52	70.65	105.10	-	-

EXTRA-HEAVY PIPE SCHEDULE 80 — ASTM A53, TYPE F, GRADE A

TRADE SIZE	DN DESIGNATOR	OD		ID		WALL THICKNESS		NOMINAL WEIGHT (MASS) PER UNIT LENGTH			
		in.	mm	in.	mm	in.	mm	Plain End (lbs./ft.)	Plain End (kg/m)	Threads & Couplings (lbs./ft.)	Threads & Couplings (kg/m)
½	6	0.405	10.3	0.215	5.5	0.095	2.41	0.31	0.47	0.32	0.46
¾	8	0.540	13.7	0.302	7.7	0.119	3.02	0.54	0.80	0.54	0.80
1	10	0.675	17.1	0.423	10.7	0.126	3.20	0.74	1.10	0.74	1.10
1 ¼	15	0.840	21.3	0.549	13.9	0.147	3.73	1.09	1.62	1.09	1.62
1 ½	20	1.050	26.7	0.742	18.8	0.154	3.91	1.48	2.20	1.48	2.21
2	25	1.315	33.4	0.957	24.3	0.179	4.55	2.17	3.24	2.19	3.25
2 ½	32	1.660	42.2	1.278	32.5	0.191	4.85	3.00	4.47	3.03	4.49
3	40	1.900	48.3	1.500	38.1	0.200	5.08	3.63	5.41	3.65	5.39
3 ½	50	2.375	60.3	1.939	49.3	0.218	5.54	5.03	7.48	5.08	7.55
4	65	2.875	73.0	2.323	59.0	0.276	7.01	7.67	11.41	7.75	11.52
4 ½	80	3.500	88.9	2.900	73.7	0.300	7.62	10.26	15.27	10.35	15.39
5	90	4.000	101.6	3.364	85.4	0.318	8.08	12.52	18.63	12.67	18.82
5 ½	100	4.500	114.3	3.826	97.2	0.337	8.56	15.00	22.32	15.20	22.60

PERMISSIBLE VARIATIONS — ASTM A53 GRADES A AND B PIPE

	OD	OVER	UNDER
Outside Diameter	NPS ½ to 1½: DN 6 to 40	¼" (0.4 mm)	¼" (0.4 mm)
	NPS 2 and up; DN 50 and up	1%	1%
Wall Thickness at Any Point	—	—	12.5%
Weight	—	10%	10%

Mechanical Properties

Grade A: Yield — 30,000 [205 MPa] psi minimum; Tensile — 48,000 psi [330 MPa] minimum.
Grade B: Yield — 35,000 [240 MPa] psi minimum; Tensile — 60,000 psi [415 MPa] minimum.