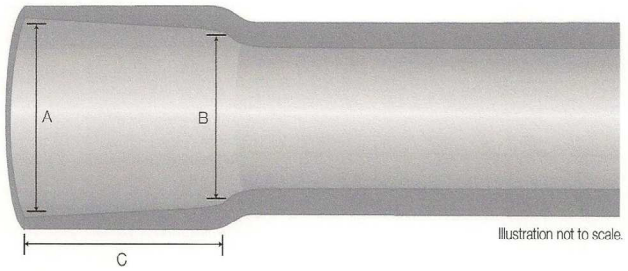
SCHEDULE 40 & 80 PVC INDUSTRIAL PIPE

NEXT Polymers Schedule 40/80 PVC Industrial Pipe outperforms metal and other polymers in many industrial applications. PVC is highly resistant to corrosive environments and has a lower thermal expansion rate than many polymers. In addition, its light weight, flexibility and simple joining
procedures make it easy to handle and faster to install. This combination of features makes PVC an economical choice, both at the time of installation and over the life of the system.

NEXT Polymers supplies complete industrial piping systems that are available in white and grey from ½''(12mm) to 12'' (300mm)



Solvent Bell End Schedule 40/80

Size		Mean ID @ Entrance A		Mean ID @ Bottom B		Minimum Socket Depth C	
in	mm	in	mm	in	mm	in	mm
½"	12	0,848	21,54	0,836	21,23	1,000	25,40
3/4"	20	1,058	26,87	1,046	26,57	1,125	28,57
1"	25	1,325	33,66	1,310	33,27	1,125	28,57
1¼"	32	1,670	42,42	1,655	42,04	1,250	31,75
1½"	40	1,912	48,56	1,894	48,11	1,375	34,92
2"	50	2,387	60,63	2,369	60,17	1,500	38,10
2½"	65	2,889	73,38	2,868	72,85	1,750	44,45
3"	75	3,516	89,31	3,492	88,69	1,875	47,62
4"	100	4,518	114,76	4,491	114,07	2,250	57,15
5"	125	5,583	141,81	5,553	141,05	2,625	66,67
6"	150	6,647	168,83	6,614	168,00	3,000	76,20
8"	200	8,655	219,84	8,610	218,69	4,000	101,60
10"	250	10,776	273,71	10,737	272,72	4,250	107,95
12"	300	12,778	324,56	12,736	323,49	4,500	114,30

Storage and Handling

NEXT Polymers Schedule pipe is packaged in modules for convenient handling by forklift. When unloading pipe by hand, do not break the module. Instead, slide each pipe out of the module until the bottom layer is reached. Be sure to lift, not drag, the bottom layer of pipe off the truck bed. Modules should be stored on level surfaces, preferably on sleepers with pipe elevated from the ground. If pipe will be exposed to sunlight for an extended period, use an opaque cover to protect it from fading.

Low Expansion Rate

PVC pipe has the lowest expansion rate of any polymer pipe, reducing the number of expansion joints and the cost of the system.

PRODUCT RANGE

Schedule 40 - White and Grey

Size		Mean OD		Mean ID		t (min		Weight*	Pressure Rating
in	mm	in	mm	in	mm	in	mm	lb/ft	psi
½"	12	0,839	21,30	0,601	15,26	0,109	2,76	0,1650	600
3/4"	20	1,051	26,70	0,806	20,46	0,113	2,86	0,2190	480
1"	25	1,315	33,40	1,029	26,14	0,133	3,38	0,3220	450
1¼"	32	1,659	42,15	1,359	34,53	0,140	3,56	0,4350	370
1½"	40	1,900	48,25	1,589	40,37	0,145	3,68	0,5180	330
2"	50	2,376	60,35	2,048	52,03	0,154	3,90	0,6950	280
2½"	65	2,874	73,00	2,444	62,08	0,203	5,16	1,0900	300
3"	75	3,500	88,90	3,043	77,28	0,216	5,48	1,4200	260
4"	100	4,500	114,30	3,998	101,56	0,237	6,02	2,0400	220
5"	125	5,563	141,30	5,017	127,42	0,257	6,54	2,7500	190
6"	150	6,626	168,30	6,035	153,28	0,280	7,10	3,6100	180
8"	200	8,624	219,05	7,944	201,79	0,322	8,18	5,5000	160
10"	250	10,750	273,05	9,983	253,57	0,365	9,26	7,7800	140
12"	300	12,752	323,90	11,898	302,20	0,406	10,30	10,3000	130

Schedule 80 - Grey

Size		Mean OD		Mean ID		t (min		Weight*	Pressure Rating
in	mm	in	mm	in	mm	in	mm	lb/ft	psi
½"	12	0,839	21,30	0,525	13,34	0,146	3,72	0,220	850
3/4"	20	1,051	26,70	0,724	18,38	0,154	3,90	0,290	690
1"	25	1,315	33,40	0,936	23,78	0,179	4,54	0,420	630
1¼"	32	1,659	42,15	1,255	31,87	0,191	4,84	0,580	520
1½"	40	1,900	48,25	1,476	37,49	0,200	5,08	0,686	470
2"	50	2,376	60,35	1,914	48,61	0,218	5,54	0,949	400
2½"	65	2,874	73,00	2,290	58,16	0,276	7,00	1,415	425
3"	75	3,500	88,90	2,864	72,74	0,300	7,62	1,940	370
4"	100	4,500	114,30	3,786	96,16	0,337	8,56	2,830	320
6"	150	6,626	168,30	5,713	145,10	0,433	11,00	5,421	280
8"	200	8,624	219,05	7,570	192,27	0,500	12,70	8,320	250
10"	250	10,750	273,05	9,503	241,37	0,594	15,10	12,350	230
12"	300	12,752	323,90	11,313	287,36	0,685	17,40	16,980	230

Additional sizes available upon request.
*Weights are approximate.
Note: Custom fabricated pipe is available.

NEXT Polymers Schedule pipe Advantages

Superior Flow Capacity

NEXT Polymers Schedule pipe has a smooth interior wall (Manning's coefficient of roughness n = .009) that remains smooth during service because it does not pit, scale or corrode. This results in superior flow factors that permit the use of smaller diameter pipe.

Installation Economy

NEXT Polymers Schedule pipe's light weight and impact resistance make it easy to store, handle and install. Manufactured in 10' (3 m) and 20' (6.1 m) lengths, it can easily be cut to any desired length. A simple solvent-cement process provides secure joints. No special equipment or certified welders are required. These features minimize waste and significantly reduce labor, both in the initial installation and during any repairs which may be required.

Corrosion and Chemical Resistance

By resisting corrosion and chemical attacks, PVC reduces expensive maintenance and replacement. PVC is chemically inert, and can therefore transport a wide range of chemicals, including most acids, aliphatic hydrocarbons, alkalies, brine, fluorides, mineral oils, photo solutions and plating solutions. It handles highly corrosive and high purity liquids, including potable water, without hazardous leaching or contamination.

While PVC is highly resistant to many chemicals, factors such as temperature, pressure and chemical concentration must be considered. PVC should not ordinarily be used with aldehydes, chlorinated hydrocarbons, esters or ketone.

Low Thermal Conductivity

Since it conducts far less heat than metal pipe, it maintains service temperature with little variation or need for insulation.

Controls and Standards

Typical Applications
Schedule pipe can be installed in a variety of industrial, commercial and residential projects. Typical applications include manufacturing plant water supply and recirculation, chemical processing, heating and cooling systems, skating rinks and pools, aquaculture and irrigation, and product distribution in food and beverage processing operations. It should not be used with compressed air or gas.

Mechanical and Physical Properties
NEXT Polymers Schedule 40/80 PVC Pressure Pipe is cell classification 12454-B conforming to ASTM compound specification D 1784.

Flame Spread Resistance
PVC pipe is difficult to ignite and will not support combustion in the absence of an external source.

Maximum Service Temperature
PVC safely withstands service temperatures up to 140°F (60°C).

Impact
In accordance with CSA B 137.3, industrial pipe will not split or crack during impact tests performed at 32°F (0°C).

Flattening
NEXT Polymers industrial pipe can withstand a compression of 95% of its original O.D. without splitting or breaking.

Extrusion Quality
Average outside diameter, out-of-roundness, wall thickness and bell dimensions are measured hourly to ensure extrusion quality conforms to standard.

Fusion
Industrial PVC pipe shows no visible sign of flaking or cracking when immersed in anhydrous acetone for 20 minutes.

Standards
Schedule 40 & 80 pipes meets or exceeds the following standards:

- CSA B 137.3: Rigid PVC Pipe for Pressure Application.
- ASTM D 2855: Making Solvent- Cemented Joints with PVC Pipe and fittings.
- ASTM D 1785: PVC Pipe Schedule 40, 80 and 120
- NSF61: Plastic Piping System Components and Related Materials.

340 Churchill Road W., PO Box 1240, Prescott, ON, Canada K0E 1T0
www.nextpolymers.com