

CONDENSED CATALOG PVC Pipe

HPB-103-A
Effective 9/1/97
Revised 6/1/99

CLEAR PVC SCHEDULE 40

Nominal Pipe Size (in.)	O.D.	Average I.D.	Min. Wall	Nominal Wt./ft.	Max. W.P. PSI†
1/4	.540	.354	.088	.081	390
3/8	.675	.483	.091	.109	310
1/2	.840	.608	.109	.161	300
3/4	1.050	.810	.113	.214	240
1	1.315	1.033	.133	.315	220
1-1/4	1.660	1.364	.140	.426	180
1-1/2	1.900	1.592	.145	.509	170
2	2.375	2.049	.154	.682	140
2-1/2	2.875	2.445	.203	1.076	150
3	3.500	3.042	.216	1.409	130
3-1/2	4.000	3.520	.226	1.697	120
4	4.500	3.998	.237	2.006	110
6	6.625	6.031	.280	3.535	90
6x1/8	6.625	6.355	.125	1.647	45
8	8.625	7.943	.322	5.305	80

CLEAR PVC SCHEDULE 80

Nominal Pipe Size (in.)	O.D.	Average I.D.	Min. Wall	Nominal Wt./ft.	Max. W.P. PSI†
1/4	.540	.288	.119	.100	570
3/8	.675	.407	.126	.138	460
1/2	.840	.528	.147	.202	420
3/4	1.050	.724	.154	.273	340
1	1.315	.935	.179	.402	320
1-1/4	1.660	1.256	.191	.554	260
1-1/2	1.900	1.476	.200	.673	240
2	2.375	1.913	.218	.932	200
3	3.500	2.864	.300	1.903	190
4	4.500	3.786	.337	2.782	160

PVC - SDR 13.5 W.P. 315 PSI (Water @ 73.4°F)

Nominal Pipe Size (in.)	O.D.	Average I.D.	Min. Wall	Nominal Wt./ft.
1/2	.840	.696	.062	.104

PVC - SDR 21 W.P. 200 PSI (Water @ 73.4°F)

Nominal Pipe Size (in.)	O.D.	Average I.D.	Min. Wall	Nominal Wt./ft.
3/4	1.050	.910	.060	.129
1	1.315	1.169	.063	.170
1-1/4	1.660	1.482	.079	.263
1-1/2	1.900	1.700	.090	.339
2	2.375	2.129	.113	.521
2-1/2	2.875	2.581	.137	.754
3	3.500	3.146	.167	1.106
3-1/2	4.000	3.596	.190	1.443
4	4.500	4.046	.214	1.825
5	5.563	5.001	.265	2.792
6	6.625	5.955	.316	3.964
8	8.625	7.755	.410	6.679

PVC - SDR 26 W.P. 160 PSI (Water @ 73.4°F)

Nominal Pipe Size (in.)	O.D.	Average I.D.	Min. Wall	Nominal Wt./ft.
1	1.315	1.175	.060	.164
1-1/4	1.660	1.512	.064	.221
1-1/2	1.900	1.734	.073	.284
2	2.375	2.173	.091	.432
2-1/2	2.875	2.635	.110	.622
3	3.500	3.210	.135	.915
3-1/2	4.000	3.672	.154	1.183
4	4.500	4.134	.173	1.494
5	5.563	5.109	.214	2.288
6	6.625	6.085	.255	3.228
8	8.625	7.921	.332	5.468
10	10.750	9.874	.413	8.492
12	12.750	11.710	.490	11.956
14	14.000	12.860	.538	14.430
16	16.000	14.696	.615	18.810
18	18.000	16.534	.692	23.860
20	20.000	18.370	.769	29.470
24	24.000	22.043	.923	42.520

PVC SCHEDULE 40

Nominal Pipe Size (in.)	O.D.	Average I.D.	Min. Wall	Nominal Wt./ft.	Max. W.P. PSI†
1/8	.405	.261	.068	.045	810
1/4	.540	.354	.088	.081	780
3/8	.675	.483	.091	.109	620
1/2	.840	.608	.109	.161	600
3/4	1.050	.810	.113	.214	480
1	1.315	1.033	.133	.315	450
1-1/4	1.660	1.364	.140	.426	370
1-1/2	1.900	1.592	.145	.509	330
2	2.375	2.049	.154	.682	280
2-1/2	2.875	2.445	.203	1.076	300
3	3.500	3.042	.216	1.409	260
3-1/2	4.000	3.520	.226	1.697	240
4	4.500	3.998	.237	2.006	220
5	5.563	5.017	.258	2.726	190
6	6.625	6.031	.280	3.535	180
8	8.625	7.943	.322	5.305	160
10	10.750	9.976	.365	7.532	140
12	12.750	11.890	.406	9.949	130
14	14.000	13.072	.437	11.810	130
16	16.000	14.940	.500	15.416	130
18	18.000	16.809	.562	20.112	130
20	20.000	18.743	.593	23.624	120
24	24.000	22.544	.687	32.873	120

PVC SCHEDULE 80

Nominal Pipe Size (in.)	O.D.	Average I.D.	Min. Wall	Nominal Wt./ft.	Max. W.P. PSI†
1/8	.405	.203	.095	.058	1230
1/4	.540	.288	.119	.100	1130
3/8	.675	.407	.126	.138	920
1/2	.840	.528	.147	.202	850
3/4	1.050	.724	.154	.273	690
1	1.315	.935	.179	.402	630
1-1/4	1.660	1.256	.191	.554	520
1-1/2	1.900	1.476	.200	.673	470
2	2.375	1.913	.218	.932	400
2-1/2	2.875	2.289	.276	1.419	420
3	3.500	2.864	.300	1.903	370
3-1/2	4.000	3.326	.318	2.322	350
4	4.500	3.786	.337	2.782	320
5	5.563	4.767	.375	3.867	290
6	6.625	5.709	.432	5.313	280
8	8.625	7.565	.500	8.058	250
10	10.750	9.492	.593	11.956	230
12	12.750	11.294	.687	16.437	230
14	14.000	12.410	.750	19.790	220
16	16.000	14.214	.843	25.430	220
18	18.000	16.014	.937	31.830	220
20	20.000	17.814	1.031	40.091	220
24	24.000	21.418	1.218	56.882	210

PVC SCHEDULE 120

Nominal Pipe Size (in.)	O.D.	Average I.D.	Min. Wall	Nominal Wt./ft.	Max. W.P. PSI†
1/2	.840	.480	.170	.223	1010
3/4	1.050	.690	.170	.295	770
1	1.315	.891	.200	.440	720
1-1/4	1.660	1.204	.215	.614	600
1-1/2	1.900	1.423	.225	.744	540
2	2.375	1.845	.250	1.052	470
2-1/2	2.875	2.239	.300	1.529	470
3	3.500	2.758	.350	2.184	440
4	4.500	3.572	.437	3.516	430
6	6.625	5.434	.562	6.759	370

PVC - SDR 41 W.P. 100 PSI (Water @ 73.4°F)

Nominal Pipe Size (in.)	O.D.	Average I.D.	Min. Wall	Nominal Wt./ft.
18	18.000	17.070	.439	15.370
20	20.000	18.970	.488	18.920
24	24.000	22.748	.585	27.320

† For water at 73.4°F with solvent-cemented joints. Threading recommended for Schedules 80 and 120 only. Threaded pipe requires a 50% pressure de-rating.

NOTES:

Complete range of PVC fittings in Schedules 40 and 80 as well as valves are stocked.

Standard color is gray unless otherwise noted.

Bell, Gasket, and Roll Grooved Pipe is available in Schedules 40, 80, 120 and SDR's 21, 26, and 41.

All PVC pipe is produced from compounds which conform to and are specified in ASTM D1784.

Schedules 40, 80, and 120 PVC Pipe are manufactured in strict compliance with ASTM Standard D-1785.

Pressure-Rated (SDR Series) PVC Pipe is manufactured in strict compliance with ASTM D2241.

All PVC piping is manufactured from NSF-Approved compounds and are NSF-Listed for potable water use.

ASTM D1784 Material Classification Equivalents:

PVC Normal Impact = Type I Grade
I = PVC 1120 = Cell Classification 12454-B

Custom sizes, lengths and colors are available; contact factory for details.

PVC Industrial Pipe: Schedule 40

Application:

Corrosion resistant pressure pipe, IPS sizes $\frac{1}{8}$ " through 24", for use at temperatures up to and including 140°F. Pressure rating (120 psi to 810 psi) varies with schedule, pipe size, and temperature as stated in Harvel Plastics, Inc. engineering bulletin (Product Bulletin 112/401). Pipe is also suitable for PVC plastic drain, waste, and vent (DWV) applications. Generally resistant to most acids, bases, salts, aliphatic solutions, oxidants, and halogens. Chemical resistance data is available and should be referenced for proper material selection. Pipe exhibits excellent physical properties and flammability characteristics (independently tested flame and smoke characteristics-ULC). Typical applications include: chemical processing, plating, high purity applications, potable water systems, water and wastewater treatment, drainage, irrigation, agricultural, and other applications involving corrosive fluid transfer.

Scope:

This specification outlines minimum manufacturing requirements for Polyvinyl Chloride (PVC) Schedule 40 iron pipe size (IPS) pressure pipe. This pipe is intended for use in applications where the fluid conveyed does not exceed 140°F. This pipe meets and or exceeds the industry standards and requirements as set forth by the American Society for Testing and Materials (ASTM D1785 & D2665) and the National Sanitation Foundation (NSF International STD 61 & Std 14).

PVC Materials:

The material used in the manufacture of the pipe shall be domestically produced rigid polyvinyl chloride (PVC) compound, Type I Grade I, with a Cell Classification of 12454 as defined in ASTM D1784, trade name designation H707 PVC. This compound shall be white or gray in color as specified, and shall be approved by NSF International for use with potable water (NSF Std 61).

Dimensions:

All sizes of PVC Schedule 40 pipe shall be manufactured in strict accordance to the requirements of ASTM D1785 for physical dimensions and tolerances. PVC Sch 40 pipe sizes $\frac{1}{4}$ " through 24" diameters shall also meet the requirements of ASTM D2665 Standard Specification for PVC plastic drain, waste and vent (DWV) pipe and shall be dual marked as such. Each production run of pipe manufactured in compliance to the standard, shall also meet or exceed the test requirements for materials, workmanship, burst pressure, flattening, and extrusion quality defined in ASTM D1785 and ASTM D2665 as applicable. All belled-end pipe shall have tapered sockets to create an interference-type fit, which meet or exceed the dimensional requirements and the minimum socket length for pressure-type sockets as defined in ASTM D2672. All PVC Schedule 40 pipe must also meet the requirements of NSF Standard 14 and CSA Standard B137.3 rigid PVC pipe for pressure applications, and shall bear the mark of these Listing agencies. This pipe shall have a flame spread rating of 0-25 when tested for surface burning characteristics in accordance with CAN/ULC-S102-2-M88 or equivalent.

Marking:

Product marking shall meet the requirements of ASTM D1785 and ASTM D2665 as applicable and shall include: the manufacturer's name (or the manufacturer's trademark when privately labeled); the nominal pipe size; the material designation code; the pipe schedule and pressure rating in psi for water @ 73°F; the ASTM designation D1785; the ASTM designation D2665 (when dual marked); the independent laboratory's seal of approval for potable water usage; and the date and time of manufacture.

Sample Specification:

All PVC Schedule 40 pipe shall be manufactured from a Type I, Grade I Polyvinyl Chloride (PVC) compound with a Cell Classification of 12454 per ASTM D1784. The pipe shall be manufactured in strict compliance to ASTM D1785 and D2665 (where applicable), consistently meeting and/or exceeding the Quality Assurance test requirements of these standards with regard to material, workmanship, burst pressure, flattening, and extrusion quality. The pipe shall be manufactured in the USA, using domestic materials, by an ISO 9001 certified manufacturer. Standard lengths of pipe sizes 6" and larger shall be beveled each end by the pipe manufacturer. All pipe shall be stored indoors after production at the manufacturing site until shipped from factory. This pipe shall carry the National Sanitation Foundation (NSF) seal of approval for potable water applications. All pipe shall be manufactured by HARVEL® PLASTICS, INC.

PVC Industrial Pipe: Schedule 40

Schedule 40 Dimensions

Nom. Pipe Size (in.)	O.D.	Average I.D.	Min. Wall	Nom. Wt./Ft.	Max. W.P.
1/8	0.405	0.249	0.068	0.051	810
1/4	0.540	0.344	0.088	0.086	780
3/8	0.675	0.473	0.091	0.115	620
1/2	0.840	0.602	0.109	0.170	600
3/4	1.050	0.804	0.113	0.226	480
1	1.315	1.029	0.133	0.333	450
* 1-1/4	1.660	1.360	0.140	0.450	370
* 1-1/2	1.900	1.590	0.145	0.537	330
* 2	2.375	2.047	0.154	0.720	280
* 2-1/2	2.875	2.445	0.203	1.136	300
* 3	3.500	3.042	0.216	1.488	260
* 3-1/2	4.000	3.521	0.226	1.789	240
* 4	4.500	3.998	0.237	2.118	220
5	5.563	5.016	0.258	2.874	190
* 6	6.625	6.031	0.280	3.733	180
* 8	8.625	7.942	0.322	5.619	160
* 10	10.750	9.976	0.365	7.966	140
* 12	12.750	11.889	0.406	10.534	130
* 14	14.000	13.073	0.437	12.462	130
* 16	16.000	14.940	0.500	16.286	130
* 18	18.000	16.809	0.562	20.587	130
* 20	20.000	18.743	0.593	24.183	120
* 24	24.000	22.544	0.687	33.652	120

* Denotes these sizes are dual marked as being in compliance with both ASTM D1785 (pressure pipe) and ASTM D2665 (drain, waste & vent pipe- DWV).

The pressure ratings given are for water, non-shock, @ 73° F. The following temperature de-rating factors are to be applied to the working pressure ratings (WP) listed when operating at elevated temperatures.

Multiply the working pressure rating of the selected pipe at 73° F, by the appropriate de-rating factor to determine the maximum working pressure rating of the pipe at the elevated temperature chosen.

EX:

10" PVC SCH 40 @ 120° F = ?
140 psi x 0.40 = 56 psi max.
@ 120° F

De-Rating Factor	
Operating Temp (°F)	De-Rating Factor
73	1.00
80	0.88
90	0.75
100	0.62
110	0.51
120	0.40
130	0.31
140	0.22

THE MAXIMUM SERVICE TEMPERATURE FOR PVC IS 140° F.

Solvent-cemented joints should be utilized when working at or near maximum temperatures. Harvel Plastics does not recommend the use of PVC for threaded connections at temperatures above 110° F; use flanged joints, unions, or roll grooved couplings where disassembly is necessary at elevated temperatures.

Threading of Schedule 40 PVC pipe is not a recommended practice due to insufficient wall thickness. Thread only Schedule 80 or heavier walls. *Threading requires a 50% reduction in pressure rating stated for plain end pipe @ 73° F.*

Chemical resistance data should be referenced for proper material selection and possible de-rating when working with fluids other than water. Refer to Harvel Plastics 112/401 Product Bulletin for chemical resistance, installation data, and additional information.

ASTM STANDARD D1784 MATERIAL EQUIVALENTS:

Cell Classification 12454 = PVC Type I Grade I = PVC1120

Pipe sizes shown are manufactured in strict compliance with ASTM D1785 and ASTM D2665 where applicable.

PVC Industrial Pipe: Schedule 80

Application:

Corrosion resistant pressure pipe, IPS sizes $\frac{1}{8}$ " through 24", for use at temperatures up to and including 140°F. Pressure rating (210 psi to 1230 psi) varies with schedule, pipe size, and temperature as stated in Harvel Plastics, Inc. engineering bulletin (Product Bulletin 112/401). Generally resistant to most acids, bases, salts, aliphatic solutions, oxidants, and halogens. Chemical resistance data is available and should be referenced for proper material selection. Pipe exhibits excellent physical properties and flammability characteristics (independently tested flame and smoke characteristics-ULC). Typical applications include: chemical processing, plating, high purity applications, potable water systems, water and wastewater treatment, irrigation, agricultural, and other industrial applications involving corrosive fluid transfer.

Scope:

This specification outlines minimum manufacturing requirements for Polyvinyl Chloride (PVC) Schedule 80 iron pipe size (IPS) pressure pipe. This pipe is intended for use in applications where the fluid conveyed does not exceed 140°F. This pipe meets and or exceeds the industry standards and requirements as set forth by the American Society for Testing and Materials (ASTM) and the National Sanitation Foundation (NSF International).

PVC Materials:

The material used in the manufacture of the pipe shall be domestically produced rigid polyvinyl chloride (PVC) compound, Type I Grade I, with a Cell Classification of 12454 as defined in ASTM D1784, trade name designation H707 PVC. This compound shall be gray in color as specified, and shall be approved by NSF International for use with potable water (NSF Std 61).

Dimensions:

PVC Schedule 80 pipe shall be manufactured in strict accordance to the requirements of ASTM D1785 for physical dimensions and tolerances. Each production run of pipe manufactured in compliance to this standard, shall also meet or exceed the test requirements for materials, workmanship, burst pressure, flattening, and extrusion quality defined in ASTM D1785. All belled-end pipe shall have tapered sockets to create an interference-type fit, which meet or exceed the dimensional requirements and the minimum socket length for pressure-type sockets as defined in ASTM D2672. All PVC Schedule 80 pipe must also meet the requirements of NSF Standard 14 and CSA Standard B137.3 rigid PVC pipe for pressure applications, and shall bear the mark of these Listing agencies. This pipe shall have a flame spread rating of 0-25 when tested for surface burning characteristics in accordance with CAN/ULC-S102-2-M88 or equivalent.

Marking:

Product marking shall meet the requirements of ASTM D1785 and shall include: the manufacturer's name (or the manufacturer's trademark when privately labeled); the nominal pipe size; the material designation code; the pipe schedule and pressure rating in psi for water @ 73°F; the ASTM designation D1785; the independent laboratory's seal of approval for potable water usage; and the date and time of manufacture.

Sample Specification:

All PVC Schedule 80 pipe shall be manufactured from a Type I, Grade I Polyvinyl Chloride (PVC) compound with a Cell Classification of 12454 per ASTM D1784. The pipe shall be manufactured in strict compliance to ASTM D1785, consistently meeting and/or exceeding the Quality Assurance test requirements of this standard with regard to material, workmanship, burst pressure, flattening, and extrusion quality. The pipe shall be manufactured in the USA, using domestic materials, by an ISO 9001 certified manufacturer. Standard lengths of pipe sizes 6" and larger shall be beveled each end by the pipe manufacturer. All pipe shall be stored indoors after production at the manufacturing site until shipped from factory. This pipe shall carry the National Sanitation Foundation (NSF) seal of approval for potable water applications. All pipe shall be manufactured by HARVEL PLASTICS, INC.

PVC Industrial Pipe: Schedule 80

Schedule 80 Dimensions

Nom. Pipe Size (in.)	O.D.	Average I.D.	Min. Wall	Nom. Wt./Ft.	Max. W.P.
1/8	0.405	0.195	0.095	0.063	1230
1/4	0.540	0.282	0.119	0.105	1130
3/8	0.675	0.403	0.126	0.146	920
1/2	0.840	0.526	0.147	0.213	850
3/4	1.050	0.722	0.154	0.289	690
1	1.315	0.936	0.179	0.424	630
1-1/4	1.660	1.255	0.191	0.586	520
1-1/2	1.900	1.476	0.200	0.711	470
2	2.375	1.913	0.218	0.984	400
2-1/2	2.875	2.290	0.276	1.500	420
3	3.500	2.864	0.300	2.010	370
3-1/2	4.000	3.326	0.318	2.452	350
4	4.500	3.786	0.337	2.938	320
5	5.563	4.768	0.375	4.078	290
6	6.625	5.709	0.432	5.610	280
8	8.625	7.565	0.500	8.522	250
10	10.750	9.493	0.593	12.635	230
12	12.750	11.294	0.687	17.384	230
14	14.000	12.410	0.750	20.852	220
16	16.000	14.213	0.843	26.810	220
18	18.000	16.014	0.937	33.544	220
20	20.000	17.814	1.031	41.047	220
24	24.000	21.418	1.218	58.233	210

The pressure ratings given are for water, non-shock, @ 73°F. The following temperature de-rating factors are to be applied to the working pressure ratings (WP) listed when operating at elevated temperatures.

Multiply the working pressure rating of the selected pipe at 73°F, by the appropriate de-rating factor to determine the maximum working pressure rating of the pipe at the elevated temperature chosen.

EX:

10" PVC SCH 80 @ 120°F = ?
230 psi x 0.40 = 92 psi max.
@ 120°F

De-Rating Factor	
Operating Temp (°F)	De-Rating Factor
73	1.00
80	0.88
90	0.75
100	0.62
110	0.51
120	0.40
130	0.31
140	0.22

THE MAXIMUM SERVICE TEMPERATURE FOR PVC IS 140°F.

Solvent-cemented joints should be utilized when working at or near maximum temperatures. Harvel Plastics does not recommend the use of PVC for threaded connections at temperatures above 110°F; use flanged joints, unions, or roll grooved couplings where disassembly is necessary at elevated temperatures.

Thread only Schedule 80 or heavier walls. *Threading requires a 50% reduction in pressure rating stated for plain end pipe @73°F.* Threading of Schedule 40 PVC pipe is not a recommended practice due to insufficient wall thickness.

Chemical resistance data should be referenced for proper material selection and possible de-rating when working with fluids other than water. Refer to Harvel Plastics 112/401 Product Bulletin for chemical resistance, installation data, and additional information.

ASTM STANDARD D1784 MATERIAL EQUIVALENTS:

Cell Classification 12454 = PVC Type I Grade I = PVC1120

Pipe sizes shown are manufactured in strict compliance with ASTM D1785.

PVC Industrial Pipe: Schedule 120

Application:

High pressure corrosion resistant, IPS sizes 1/2" through 8", for use at temperatures up to and including 140 °F. Pressure rating (380 psi to 1010 psi) varies with pipe size and temperature as stated in Harvel Plastics, Inc. engineering bulletin (Product Bulletin 112/401). Generally resistant to most acids, bases, salts, aliphatic solutions, oxidants, and halogens. Chemical resistance data is available and should be referenced for proper material selection. Pipe exhibits excellent physical properties and flammability characteristics (independently tested flame and smoke characteristics-ULC). Typical applications include: chemical processing, plating, high purity applications, potable water systems, water and wastewater treatment, and other industrial applications involving corrosive fluid transfer where high pressures are encountered. Schedule 120 heavy wall dimensions provide sufficient wall thickness suitable for many drilling, tapping, and other custom machining/fabrication operations.

Scope:

This specification outlines minimum manufacturing requirements for Polyvinyl Chloride (PVC) schedule 120 iron pipe size (IPS) pressure pipe. This pipe is intended for use in industrial systems where the fluid conveyed does not exceed 140 °F. This pipe meets and or exceeds the industry standards and requirements as set forth by the American Society for Testing and Materials (ASTM) and NSF International (NSF Std. 61 and NSF Std 14).

PVC Materials:

The material used in the manufacture of the pipe shall be domestically produced rigid polyvinyl chloride (PVC) compound, Type I Grade I, with a Cell Classification of 12454 as defined in ASTM D1784. This compound shall be gray in color, and shall be approved by the NSF International (NSF) for use with potable water.

Dimensions:

PVC Schedule 120 pipe shall be manufactured in strict accordance to the requirements of ASTM D1785 for physical dimensions and tolerances. Each production run of pipe manufactured in compliance to this standard, shall also meet or exceed the test requirements for materials, workmanship, burst pressure, flattening, and extrusion quality defined in ASTM D1785. All belled-end pipe shall have tapered sockets to create an interference-type fit, which meet or exceed the dimensional requirements and the minimum socket length for pressure-type sockets as defined in ASTM D2672.

Marking:

Product marking shall meet the requirements of ASTM D1785 and shall include: the manufacturers name (or the manufacturers trademark when privately labeled); the nominal pipe size; the PVC 1120 material designation code; the pipe schedule and pressure rating in psi for water @ 73 °F; the ASTM designation D1785; the independent laboratory's seal of approval for potable water usage (NSF-pw), and the date of manufacture.

Sample Specification:

All PVC Schedule 120 pipe shall be manufactured from a Type I, Grade I Polyvinyl Chloride (PVC) compound with a Cell Classification of 12454 per ASTM D1784, trade name H707 PVC. The pipe shall be manufactured in strict compliance to ASTM D1785, consistently meeting and/or exceeding the Quality Assurance test requirements of this standard with regard to material, workmanship, burst pressure, flattening, and extrusion quality. The pipe shall be manufactured in the USA, using domestic materials, by an ISO 9002 certified manufacturer. All pipe shall be stored indoors after production at the manufacturing site until shipped from factory. This pipe shall carry the National Sanitation Foundation (NSF) seal of approval for potable water applications. All pipe shall be manufactured by HARVEL PLASTICS, INC.

PVC Industrial Pipe: Schedule 120

Schedule 120 Dimensions

Nom. Pipe Size (in.)	O.D.	Average I.D.	Min. Wall	Nom. Wt./Ft.	Max. W.P.
1/2	0.840	0.480	0.170	0.236	1010
3/4	1.050	0.690	0.170	0.311	770
1	1.315	0.891	0.200	0.464	720
1-1/4	1.660	1.204	0.215	0.649	600
1-1/2	1.900	1.423	0.225	0.787	540
2	2.375	1.845	0.250	1.111	470
2-1/2	2.875	2.239	0.300	1.615	470
3	3.500	2.758	0.350	2.306	440
4	4.500	3.574	0.437	3.713	430
6	6.625	5.434	0.562	7.132	370
8	8.625	7.189	0.718	11.277	380

ASTM STANDARD D1784 MATERIAL EQUIVALENTS:
Cell Classification 12454 = PVC Type I Grade I = PVC1120

PIPE SIZES SHOWN ARE MANUFACTURED IN STRICT COMPLIANCE WITH ASTM D1785

The working pressure ratings (W.P.) given are for water, non-shock, @ 73 °F. The following temperature de-rating factors are to be applied to the working pressure ratings (W.P.) listed when operating at elevated temperatures.

Multiply the working pressure rating of the selected pipe at 73 °F by the appropriate de-rating factor to determine the maximum working pressure rating of the pipe at the elevated temperature chosen.

EX: 6" PVC SCHEDULE 120
@ 130 °F = ?
370 psi x 0.31 =
115 psi max. @ 130 °F

De-Rating Factor	
Operating Temp (°F)	De-Rating Factor
73	1.00
80	0.88
90	0.75
100	0.62
110	0.51
120	0.40
130	0.31
140	0.22

THE MAXIMUM SERVICE TEMPERATURE FOR PVC IS 140 °F.

Solvent cemented joints should be utilized when working at or near maximum temperatures.

Harvel Plastics does not recommend the use of PVC for threaded connections at temperatures above 110 °F; use flanged joints, unions, or roll grooved couplings where disassembly is necessary at elevated temperatures.

Threading requires a 50% reduction in pressure rating stated for plain end pipe @73 °F.

Chemical resistance data should be referenced for proper material selection and possible de-rating when working with fluids other than water. Refer to Harvel Plastics 112/401 Product Bulletin for chemical resistance and installation data.

Reference Harvel Plastics, Inc Product Bulletin 112/401 for information pertaining to chemical resistance, physical properties, joining methods, hangers and supports, collapse pressure ratings, system components and other system design and installation related data.