



High Quality, Flawless Design  
UPVC, CPVC, PE PIPES & FITTINGS

TECHNICAL  
20  20  
EDITION



Hydratech®

HydroCanada  
PIPING SYSTEM



### Manufacturer's Product Specification (PVC & CPVC Tubes)

#### *Scope:*

This specification sheet covers the manufacturer's requirements for PVC and CPVC tubes in accordance with respective international standards. These tubes meet or exceed the standards set by the American Society for Testing & Materials, the National Sanitation Foundation, British Standards Institute, German Industrial Norms and Japanese Industrial Standards.

#### *Dimensions and Wall Thickness:*

Physical dimensions, wall thickness and tolerances of PVC and CPVC tubes meet the requirements of ASTM, DIN and BS specification for tubes.

#### *PVC and CPVC Materials:*

Rigid PVC (polyvinyl chloride) and CPVC (chlorinated polyvinyl chloride) used in the manufacture of tubes is Type I, Grade 1 PVC compound, and Type IV, Grade 1 CPVC compound as stated in ASTM D-1784. Raw material used in extrusion shall contain the specified amounts of color pigment, stabilizers, and other additives approved by the National Sanitation Foundation.

#### *Marking:*

PVC and CPVC tubes are marked as prescribed in ASTM D-1784 to indicate the manufacturer's name or trademark, size of tubes, material designation, batch number and month of production. There must be clear distinguishing on those products that are PVC and those products that are CPVC. Where there is no restriction of space, wall thickness shall also be indicated.

## HydroCanada SCH-80 PVC & CPVC Pipes, Valves & Fittings System

# 1



Hydro Canada SCH-40, SCH-80 & SDR / Sewerage  
PVC, CPVC & UPVC Tubes

## Hydro Canada

a. Schedule 80 PVC Tube Dimensions .....	1.01
b. Schedule 80 PVC Fitting Dimensions .....	1.02
c. Schedule 40 & 80 CPVC Tube Dimensions .....	1.03
d. Schedule 80 CPVC Fitting Dimensions .....	1.04
e. Schedule 40 & SDR UPVC Tube Dimensions .....	1.05

# SCHEDULE 80 PVC TUBE

*Hydro Canada Tube Is Manufactured To The Following Standard Specifications*

Type	Material (Cell Classification)	Dimension	Commercial Classification
PVC Schedule 80	ASTM D-1784 (12454)	ASTM D-1785	Type I, Grade 1, PVC 1120

\*ASTM F480 Well Casing



*Schedule 80 PVC Tube Dimensions, Weights and Maximum Operating Pressure*

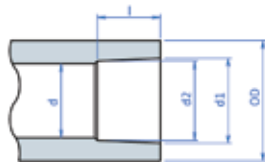
Size	OD (d) mm	Thickness (s) mm		Weight kg / m	Pressure PSI
		max	min		
1/2"	21.34	3.73	4.24	0.31	850
3/4"	26.67	3.91	4.42	0.41	690
1"	33.40	4.55	5.08	0.60	630
1-1/4"	42.16	4.85	5.43	0.84	520
1-1/2"	48.26	5.08	5.69	1.03	470
2"	60.32	5.54	6.20	1.41	400
2-1/2"	73.02	7.01	7.85	2.15	420
3"	88.90	7.62	8.53	2.88	370
4"	114.30	8.56	9.58	4.22	320
6"	168.28	10.97	12.29	8.05	280
8"	219.08	12.70	14.22	12.23	250
10"	262.80	15.00	15.90	19.10	230
12"	323.80	16.50	17.20	25.55	230

# SCHEDULE 80 PVC FITTINGS

Hydro Canada Thermoplastic Fittings Are Manufactured To The Following Standard Specifications

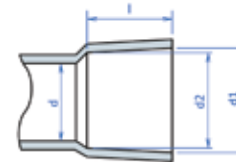
Type		Material (Cell Classification)	Dimensions	Commercial Classification
PVC Schedule 80	Socket-Type	ASTM D-1784 (12454)	ASTM D-2467	Type I, Grade 1, PVC 1120
	Threaded-Type		ASTM D-2464	

## Socket Dimensions



inch-lb unit

Nominal Pipe Size	OD inch	Inside Diameter min d inch	Socket Entrance Diameter d1 inch	Socket Bottom Diameter d2 inch	Socket Length min l inch
1/2"	1.181	0.630	0.848 ±0.004	0.836 ±0.004	0.875
3/4"	1.378	0.866	1.058 ±0.004	1.046 ±0.004	1.000
1"	1.693	1.063	1.325 ±0.005	1.310 ±0.005	1.125
1-1/4"	2.087	1.457	1.670 ±0.005	1.655 ±0.005	1.250
1-1/2"	2.362	1.654	1.912 ±0.006	1.894 ±0.006	1.375
2"	2.874	2.126	2.387 ±0.006	2.369 ±0.006	1.500
2-1/2"	3.465	2.598	2.889 ±0.007	2.868 ±0.007	1.750
3"	4.213	3.228	3.516 ±0.008	3.492 ±0.008	1.875
4"	5.236	4.094	4.016 ±0.009	4.491 ±0.009	2.250
5"	6.378	5.197	5.583 ±0.010	5.553 ±0.010	2.638
6"	7.559	6.142	6.647 ±0.011	6.614 ±0.011	3.031
8"	9.724	8.268	8.655 ±0.015	8.610 ±0.015	4.016
10"	12.087	10.433	10.780 ±0.015	10.735 ±0.015	5.512
12"	14.291	12.402	12.780 ±0.015	12.735 ±0.015	6.102
14"	15.512	13.622	14.030 ±0.015	13.985 ±0.015	7.087
16"	17.756	15.591	16.038 ±0.015	15.981 ±0.015	8.071

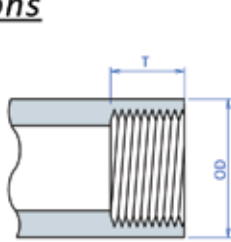


SI unit

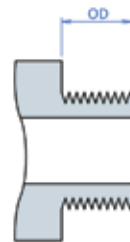
Nominal Pipe Size	OD mm	Inside Diameter min d mm	Socket Entrance Diameter d1 mm	Socket Bottom Diameter d2 mm	Socket Length min l mm
1/2"	30	16	21.54 ±0.10	21.23 ±0.10	22.22
3/4"	35	22	26.87 ±0.10	26.57 ±0.10	25.40
1"	43	27	33.65 ±0.13	33.27 ±0.13	28.58
1-1/4"	53	37	42.42 ±0.13	42.04 ±0.13	31.75
1-1/2"	60	42	48.56 ±0.15	48.11 ±0.15	34.93
2"	73	54	60.63 ±0.15	60.17 ±0.15	38.10
2-1/2"	88	66	73.38 ±0.18	72.85 ±0.18	44.45
3"	107	82	89.31 ±0.20	88.70 ±0.20	47.63
4"	133	104	114.76 ±0.23	114.10 ±0.23	57.15
5"	162	132	141.81 ±0.25	141.00 ±0.25	67.00
6"	192	156	168.83 ±0.28	168.00 ±0.28	77.00
8"	247	210	219.84 ±0.38	218.70 ±0.38	102.00
10"	307	265	273.81 ±0.38	272.67 ±0.38	140.00
12"	363	315	324.61 ±0.38	323.47 ±0.38	155.00
14"	394	346	356.36 ±0.380	355.22 ±0.38	180.00
16"	451	396	407.36 ±0.380	405.82 ±0.38	205.00

PVC & CPVC SCHEDULE-80  
TAPER DOCKET DIMENSIONS  
(SOLVENT CEMENT STYLE)  
ASTM D-2467 (PVC) F-439 (CPVC)

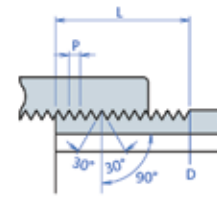
## Thread Dimensions



FEMALE TAPER THREADS  
ASTM D-2464 (PVC) F-437 (CPVC)  
ASTM F-1496



MALE TAPER THREADS  
ASTM D-2464 (PVC) F-437 (CPVC)  
ASTM F-1496



AMERICAN NATIONAL STANDARD  
TAPER PIPE THREADS (NPT)  
ASME (ANSI) B1.20.1  
ASTM F-1498

inch-lb unit

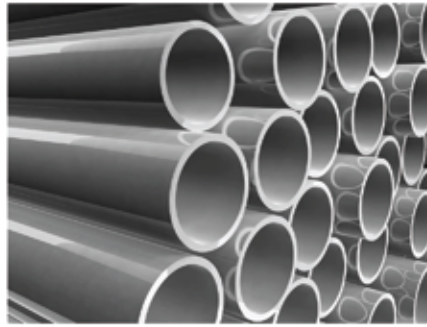
Nominal Pipe Size	Inch Pipe O.D. (D)	Female Thread Min. Length (T)	Male Thread Min. Length (S)	Overall Pipe Thread Length (L)	Pitch Of Thread (P)	Threads Per In.	Height Of Thread	ØD
1/2"	0.840	0.91	0.73	0.782	0.071	14.0	0.057	1.280
3/4"	1.050	1.02	0.73	0.794	0.071	14.0	0.057	1.500
1"	1.315	1.14	0.83	0.985	0.087	11.5	0.070	1.810
1-1/4"	1.660	1.26	0.96	1.009	0.087	11.5	0.070	2.200
1-1/2"	1.900	1.38	0.96	1.025	0.087	11.5	0.070	2.500
2"	2.375	1.57	1.06	1.058	0.087	11.5	0.070	3.000
2-1/2"	2.875	1.77	1.57	1.571	0.125	8.0	0.100	3.580
3"	3.500	1.89	1.65	1.634	0.125	8.0	0.100	4.300
4"	4.500	2.28	1.75	1.734	0.125	8.0	0.100	5.430

# SCHEDULE 40 & 80 CPVC TUBE

*Hydro Canada Tube Is Manufactured To The Following Standard Specifications*

Type	Material (Cell Classification)	Dimension	Commercial Classification
CPVC Schedule 40 & 80	ASTM D-1784 (23447)	ASTM F-441	Type IV, Grade 1, CPVC 4120

\*ASTM F480 Well Casing



## *Schedule 40 CPVC Tube Dimensions, Weights and Maximum Operating Pressure*

Size	OD (d) mm	Thickness (s) mm		Weight kg / m	Pressure PSI
		max	min		
1/2"	21.34	2.77	3.28	0.24	600
3/4"	26.64	2.87	3.38	0.33	480
1"	33.40	3.38	3.39	0.48	450
1-1/4"	42.16	3.56	4.07	0.65	370
1-1/2"	48.26	3.68	4.19	0.77	330
2"	60.32	3.91	4.42	1.04	280
2-1/2"	73.12	5.16	5.77	1.62	300
3"	88.90	5.49	6.15	2.14	260
4"	114.30	6.02	6.73	3.05	220
6"	168.28	7.11	7.97	5.37	180
8"	219.08	8.18	9.17	8.36	160
10"	273.05	9.27	10.39	11.68	140
12"	323.85	10.31	11.55	15.50	130

## *Schedule 80 CPVC Tube Dimensions, Weights and Maximum Operating Pressure*

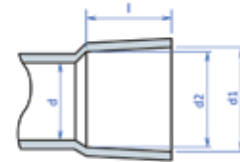
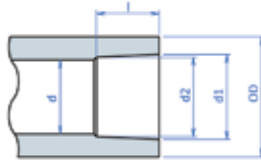
Size	OD (d) mm	Thickness (s) mm		Weight kg / m	Pressure PSI
		max	min		
1/2"	21.34	3.73	4.24	0.24	850
3/4"	26.64	3.91	4.42	0.33	690
1"	33.40	4.55	5.08	0.48	630
1-1/4"	42.16	4.85	5.43	0.65	520
1-1/2"	48.26	5.08	5.69	0.77	470
2"	60.32	5.54	6.20	1.04	400
2-1/2"	73.12	7.01	7.85	1.62	420
3"	88.90	7.62	8.53	2.14	370
4"	114.30	8.56	9.58	3.05	320
6"	168.28	10.97	12.29	5.37	280
8"	219.08	12.70	14.22	8.36	250
10"	273.05	15.06	16.86	11.68	230
12"	323.85	17.45	19.55	15.50	230

# SCHEDULE 80 CPVC FITTINGS

*Hydro Canada Thermoplastic Fittings Are Manufactured To The Following Standard Specifications*

Type		Material (Cell Classification)	Dimensions	Commercial Classification
CPVC Schedule 80	Socket-Type	ASTM D-1784 (23447)	ASTM F-439	Type I, Grade 1, CPVC 4120
	Threaded-Type		ASTM F-437	

## Socket Dimensions



PVC & CPVC SCHEDULE-80  
TAPER DOCKET DIMENSIONS  
(SOLVENT CEMENT STYLE)  
ASTM D-2464 (PVC) F-439 (CPVC)

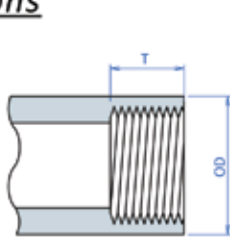
inch-lb unit

Nominal Pipe Size	OD inch	Inside Diameter min d inch	Socket Entrance Diameter d1 inch	Socket Bottom Diameter d2 inch	Socket Length min l inch
1/2"	1.181	0.630	0.848 ±0.004	0.836 ±0.004	0.875
3/4"	1.378	0.866	1.058 ±0.004	1.046 ±0.004	1.000
1"	1.693	1.063	1.325 ±0.005	1.310 ±0.005	1.125
1-1/4"	2.087	1.457	1.670 ±0.005	1.655 ±0.005	1.250
1-1/2"	2.362	1.654	1.912 ±0.006	1.894 ±0.006	1.375
2"	2.874	2.126	2.387 ±0.006	2.369 ±0.006	1.500
2-1/2"	3.465	2.598	2.889 ±0.007	2.868 ±0.007	1.750
3"	4.213	3.228	3.516 ±0.008	3.492 ±0.008	1.875
4"	5.236	4.094	4.016 ±0.009	4.491 ±0.009	2.250
5"	6.378	5.197	5.583 ±0.010	5.553 ±0.010	2.638
6"	7.559	6.142	6.647 ±0.011	6.614 ±0.011	3.031
8"	9.724	8.268	8.655 ±0.015	8.610 ±0.015	4.016
10"	12.087	10.433	10.780 ±0.015	10.735 ±0.015	5.512
12"	14.291	12.402	12.780 ±0.015	12.735 ±0.015	6.102
14"	15.512	13.622	14.030 ±0.015	13.985 ±0.015	7.087
16"	17.756	15.591	16.038 ±0.015	15.981 ±0.015	8.071

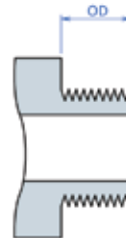
SI unit

Nominal Pipe Size	OD mm	Inside Diameter min d mm	Socket Entrance Diameter d1 mm	Socket Bottom Diameter d2 mm	Socket Length min l mm
1/2"	30	16	21.54 ±0.10	21.23 ±0.10	22.22
3/4"	35	22	26.87 ±0.10	26.57 ±0.10	25.40
1"	43	27	33.65 ±0.13	33.27 ±0.13	28.58
1-1/4"	53	37	42.42 ±0.13	42.04 ±0.13	31.75
1-1/2"	60	42	48.56 ±0.15	48.11 ±0.15	34.93
2"	73	54	60.63 ±0.15	60.17 ±0.15	38.10
2-1/2"	88	66	73.38 ±0.18	72.85 ±0.18	44.45
3"	107	82	89.31 ±0.20	88.70 ±0.20	47.63
4"	133	104	114.76 ±0.23	114.10 ±0.23	57.15
5"	162	132	141.81 ±0.25	141.00 ±0.25	67.00
6"	192	156	168.83 ±0.28	168.00 ±0.28	77.00
8"	247	210	219.84 ±0.38	218.70 ±0.38	102.00
10"	307	265	273.81 ±0.38	272.67 ±0.38	140.00
12"	363	315	324.61 ±0.38	323.47 ±0.38	155.00
14"	394	346	356.36 ±0.380	355.22 ±0.38	180.00
16"	451	396	407.36 ±0.380	405.82 ±0.38	205.00

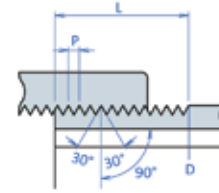
## Thread Dimensions



FEMALE TAPER THREADS  
ASTM D-2464 (PVC) F-437 (CPVC)  
ASTM F-1496



MALE TAPER THREADS  
ASTM D-2464 (PVC) F-437 (CPVC)  
ASTM F-1496



AMERICAN NATIONAL STANDARD  
TAPER PIPE THREADS (NPT)  
ASME (ANSI) B1.20.1  
ASTM F-1498

inch-lb unit

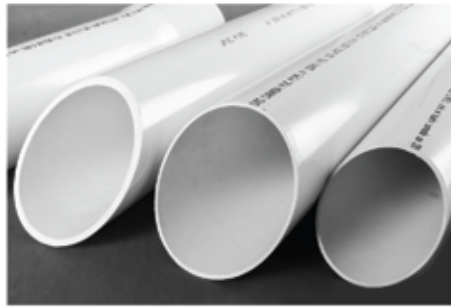
Nominal Pipe Size	Inch Pipe O.D. (D)	Female Thread Min. Length (T)	Male Thread Min. Length (S)	Overall Pipe Thread Length (L)	Pitch Of Thread (P)	Threads Per In.	Height Of Thread	∅D
1/2"	0.840	0.91	0.73	0.782	0.071	14.0	0.057	1.280
3/4"	1.050	1.02	0.73	0.794	0.071	14.0	0.057	1.500
1"	1.315	1.14	0.83	0.985	0.087	11.5	0.070	1.810
1-1/4"	1.660	1.26	0.96	1.009	0.087	11.5	0.070	2.200
1-1/2"	1.900	1.38	0.96	1.025	0.087	11.5	0.070	2.500
2"	2.375	1.57	1.06	1.058	0.087	11.5	0.070	3.000
2-1/2"	2.875	1.77	1.57	1.571	0.125	8.0	0.100	3.580
3"	3.500	1.89	1.65	1.634	0.125	8.0	0.100	4.300
4"	4.500	2.28	1.75	1.734	0.125	8.0	0.100	5.430

# UPVC SEWERAGE SCHEDULE 40 & SDR TUBE

*Hydro Canada Tube Is Manufactured To The Following Standard Specifications*

Type	Material (Cell Classification)	Dimension	Commercial Classification
UPVC Schedule 40 & SDR	ASTM D-1784 (12454)	ASTM D-1785 ASTM D-2241	Type I, Grade 1, UPVC 1120

\*ASTM F480 Well Casing



*Schedule 40 UPVC Tube Dimensions, Weights and Maximum Operating Pressure*

SIZE	OD (d) mm	Thickness (s) mm		Weight kg/m	Pressure Rating Bar
		min	max		
1/2"	21.34	2.77	3.28	0.24	41.40
3/4"	26.64	2.87	3.38	0.33	33.10
1"	33.40	3.38	3.89	0.48	31.00
1 1/4"	42.16	3.56	4.06	0.65	25.50
1 1/2"	48.26	3.68	4.19	0.77	22.80
2"	60.32	3.91	4.42	1.04	19.30
2 1/2"	73.12	5.15	5.77	1.62	20.50
3"	88.90	5.49	6.15	2.14	17.90
4"	114.30	6.02	6.73	3.05	15.20
6"	168.28	7.11	7.98	5.37	12.40
8"	219.08	8.17	9.16	8.36	11.00
10"	273.05	9.27	10.38	11.68	9.70
12"	323.85	10.31	11.55	15.50	9.00

*Schedule SDR UPVC Tube Dimensions, Weights and Maximum Operating Pressure*

SIZE	OD (d) mm	Thickness (s) mm		Weight kg/m	Pressure Rating Bar
		min	max		
2" SDR 26	60.32	2.32	2.82	0.77	11.00
3" SDR 26	88.90	3.43	3.94	1.42	11.00
4" SDR 26	114.30	4.40	4.90	2.33	11.00
3" SDR 32.5	88.90	2.74	3.25	1.09	8.62
4" SDR 32.5	114.30	3.50	4.00	2.08	8.62
6" SDR 32.5	168.28	5.18	5.69	3.99	8.62
8" SDR 32.5	219.08	6.73	7.24	6.99	8.62
10" SDR 32.5	273.10	8.41	9.42	10.78	8.62
12" SDR 32.5	323.90	9.96	11.15	15.15	8.62
4" SDR 41	114.30	2.80	3.30	1.67	6.89
6" SDR 41	168.28	4.12	5.69	3.45	6.89
8" SDR 41	219.08	5.33	5.40	5.80	6.89
10" SDR 41	273.10	6.65	7.44	8.60	6.89
12" SDR 41	323.60	7.90	8.84	11.20	6.89
6" SDR 64	168.28	2.64	3.15	2.45	4.34





# Hydro Canada<sup>®</sup>

High Quality, Flawless Design  
UPVC, CPVC, PE PIPES & FITTINGS