

# SUBMITTAL FOR CHARLOTTE PIPE® PVC SCHEDULE 40 PRESSURE PIPE AND FITTING SYSTEM

Date: \_\_\_\_\_

Job Name: \_\_\_\_\_

Location: \_\_\_\_\_

Engineer: \_\_\_\_\_

Contractor: \_\_\_\_\_

**► Scope:**

This specification covers PVC Schedule 40 pipe and fittings for pressure applications. This system is intended for pressure applications where the operating temperature will not exceed 140° F.

**► Specification:**

Pipe and fittings shall be manufactured from virgin rigid PVC (polyvinyl chloride) vinyl compounds with a cell class of 12454 as identified in ASTM D 1784.

PVC Schedule 40 pipe shall be Iron Pipe Size (IPS) conforming to ASTM D 1785. Injection molded PVC Schedule 40 fittings shall conform to ASTM D 2466. Pipe and fittings shall be manufactured as a system and be the product of one manufacturer. All pipe and fittings shall be manufactured in the United States. Pipe and fittings shall conform to NSF International Standard 61 and the health-effects portion of NSF Standard 14.

**► Installation:**

Installation shall comply with the latest installation instructions published by Charlotte Pipe and Foundry and shall conform to all applicable plumbing, fire, and building code requirements. Buried pipe shall be installed in accordance with ASTM F 1668. Solvent cement joints shall be made in a two-step process with primer conforming to ASTM F 656 and solvent cement conforming to ASTM D 2564. The system shall be protected from chemical agents, fire-stopping materials, thread sealant, plasticized-vinyl products or other aggressive chemical agents not compatible with PVC compounds. The system shall be hydrostatically tested after installation. **WARNING!** Never test with or transport/store compressed air or gas in PVC pipe or fittings. Doing so can result in explosive failures and cause severe injury or death.

**► Referenced Standards:**

ASTM D 1784: Rigid Vinyl Compounds  
 ASTM D 1785: PVC Plastic Pipe, Schedule 40  
 ASTM D 2466: PVC Plastic Fittings, Schedule 40  
 ASTM D 2564: Solvent Cements for PVC  
 Pipe and Fittings

ASTM F 1668: Procedures for Buried Plastic Pipe  
 NSF Standard 14: Plastic Piping Components & Related Materials  
 NSF Standard 61: Drinking Water System Components –  
 Health Effects



**Schedule 40 Tapered Socket Dimensions**

PVC SCHEDULE 40 - ASTM D 2466

Nominal Size	Schedule 80 and Schedule 40 Socket Diameter			Schedule 80 Socket Length C (Minimum)	Schedule 40 Socket Length C (Minimum)
	Entrance A	Bottom B	Tolerance		
1/2	0.848	0.836	±0.004	0.875	0.688
3/4	1.058	1.046	±0.004	1.000	0.719
1	1.325	1.310	±0.005	1.125	0.875
1 1/4	1.670	1.655	±0.005	1.250	0.938
1 1/2	1.912	1.894	±0.006	1.375	1.094
2	2.387	2.369	±0.006	1.500	1.156
2 1/2	2.889	2.868	±0.007	1.750	1.750
3	3.516	3.492	±0.008	1.875	1.875
4	4.518	4.491	±0.009	2.250	2.000
6	6.647	6.614	±0.011	3.000	3.000
8	8.655	8.610	±0.015	4.000	4.000
10	10.780	10.735	±0.015	5.000	5.000
12	12.780	12.735	±0.015	6.000	6.000

**PIPE REFERENCE GUIDE**

Product	Sizes Available															
	1/2	3/4	1	1 1/4	1 1/2	2	2 1/2	3	4	5	6	8	10	12	14	16
PVC Schedule 40	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•

*Not all fitting patterns shown*

## PVC Schedule 40 Pipe - Bell End\*

PVC SCHEDULE 40 (WHITE)		BELL END		PVC 1120		ASTM D 1785	
PART NO.	NOM. SIZE	UPC # 611942-	AVG. OD (IN.)	MIN. WALL (IN.)	MAX WORK PRESSURE AT 23° C OR 73° F	BELL DEPTH (IN.)	WT. PER 100 FT. (LBS.)
PVC 4005B**	1/2" x 10'	04986	.840	.109	600 PSI	2.00	15.9
PVC 4005B**	1/2" x 20'	03923	.840	.109	600 PSI	2.00	15.9
PVC 4007B**	3/4" x 10'	04987	1.050	.113	480 PSI	2.25	21.1
PVC 4007B**	3/4" x 20'	03926	1.050	.113	480 PSI	2.25	21.1
PVC 4010B**	1" x 10'	04988	1.315	.133	450 PSI	2.50	31.3
PVC 4010B**	1" x 20'	03929	1.315	.133	450 PSI	2.50	31.1
PVC 4012B§	1 1/4" x 10'	04989	1.660	.140	370 PSI	2.75	42.4
PVC 4012B§	1 1/4" x 20'	03930	1.660	.140	370 PSI	2.75	42.4
PVC 4015B§	1 1/2" x 10'	04990	1.900	.145	330 PSI	3.00	51.8
PVC 4015B§	1 1/2" x 20'	03931	1.900	.145	330 PSI	3.00	51.8
PVC 4020B†	2" x 10'	04991	2.375	.154	280 PSI	4.00	69.5
PVC 4020B†	2" x 20'	03932	2.375	.154	280 PSI	4.00	69.5
PVC 4025B†	2 1/2" x 20'	04206	2.875	.203	300 PSI	4.00	110.0
PVC 7300B§	3" x 10'	04853	3.500	.216	260 PSI	4.00	147.6
PVC 4030B†	3" x 20'	03933	3.500	.216	260 PSI	4.00	144.2
PVC 7400B§	4" x 10'	04835	4.500	.237	220 PSI	4.00	212.3
PVC 9400B†	4" x 20'	03964	4.500	.237	220 PSI	5.00	210.6
PVC 7600B§	6" x 10'	04850	6.625	.280	180 PSI	6.50	379.3
PVC 9600B†	6" x 20'	03965	6.625	.280	180 PSI	6.50	373.2
PVC 7800B†	8" x 10'	09903	8.625	.322	160 PSI	7.00	556.9
PVC 9800B†	8" x 20'	03967	8.625	.322	160 PSI	7.00	564.0
PVC 7910B†	10" x 20'	03960	10.750	.365	140 PSI	9.00	781.4
PVC 7912B†	12" x 20'	03962	12.750	.406	130 PSI	10.00	1033.2
PVC 7914B†	14" x 20'	04863	14.000	.437	130 PSI	10.00	1221.8
PVC 7916B†	16" x 20'	04929	16.000	.500	130 PSI	10.00	1594.5

\* Bell dimensions meet either ASTM D 2672 or ASTM F 480, depending upon pipe diameter

\*\* ASTM D 1785

† Dual Marked ASTM D 1785 & ASTM F 480

§ Dual Marked ASTM D 1785 & ASTM D 2665

† Triple Marked ASTM D 1785 & ASTM D 2665 & ASTM F 480



## ⚠ WARNING

Testing with or use of compressed air or gas in PVC / ABS / CPVC pipe or fittings can result in explosive failures and cause severe injury or death.

AIR/GAS



- NEVER test with or transport/store compressed air or gas in PVC / ABS / CPVC pipe or fittings.
- NEVER test PVC / ABS / CPVC pipe or fittings with compressed air or gas, or air over water boosters.
- ONLY use PVC / ABS / CPVC pipe or fittings for water or approved chemicals.
- Refer to warnings on PPFA's website and ASTM D 1785.