

# 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**

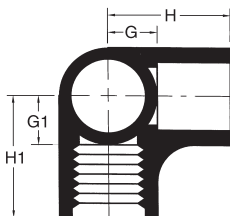
Product	Sizes Available															
	1/2	3/4	1	1 1/4	1 1/2	2	2 1/2	3	4	5	6	8	10	12	14	16
PVC Schedule 40	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•

*Not all fitting patterns shown*

**Side Outlet Elbow**

S x S x FPT

PVC PART NO. 2520

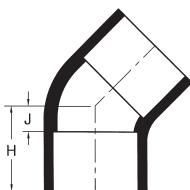


Size	Universal Part Number	H	G	H1	G1	Approx. Wt. (Lbs.)
3/4 X 3/4 X 1/2	414-101	1 <sup>9</sup> / <sub>16</sub>	9/ <sub>16</sub>	1 1/2	3/4	0.112

**45 Degree Elbow**

S x S

PVC PART NO. 2309



Size	Universal Part Number	H	J	Approx. Wt. (Lbs.)
1/2	417-005	1 <sup>1</sup> / <sub>16</sub>	5/ <sub>16</sub>	0.040
3/4	417-007	1 <sup>5</sup> / <sub>16</sub>	5/ <sub>16</sub>	0.047
1	417-010	1 <sup>7</sup> / <sub>16</sub>	5/ <sub>16</sub>	0.120
1 1/4	417-012	1 <sup>3</sup> / <sub>4</sub>	1/2	0.176
1 1/2	417-015	1 <sup>29</sup> / <sub>32</sub>	1 <sup>9</sup> / <sub>32</sub>	0.216
2	417-020	2 <sup>1</sup> / <sub>8</sub>	3/4	0.338
2 1/2	417-025	2 <sup>15</sup> / <sub>32</sub>	1 <sup>1</sup> / <sub>16</sub>	0.556
3	417-030	2 <sup>27</sup> / <sub>32</sub>	2 <sup>7</sup> / <sub>32</sub>	0.835
4	417-040	3 <sup>5</sup> / <sub>32</sub>	1 <sup>3</sup> / <sub>32</sub>	1.296
6	417-060	5 <sup>1</sup> / <sub>4</sub>	1 <sup>3</sup> / <sub>4</sub>	3.878
8	417-080	6 <sup>27</sup> / <sub>32</sub>	2 <sup>11</sup> / <sub>32</sub>	7.912

SCHEDULE 40 FITTINGS