

SUBMITTAL FOR CHARLOTTE PIPE® PVC SCHEDULE 80 PRESSURE PIPE AND FITTING SYSTEM

Date: _____

Job Name: _____

Location: _____

Engineer: _____

Contractor: _____

► Scope:

This specification covers PVC Schedule 80 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 80 pipe shall be Iron Pipe Size (IPS) conforming to ASTM D 1785. Injection molded PVC Schedule 80 fittings shall conform to ASTM D 2467. PVC Schedule 80 threaded fittings shall conform to ASTM D 2464. 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 and ASTM D 2774. Solvent cement joints shall be made in a two-step process with a primer meeting ASTM F 656 and a medium- or heavy-bodied 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 80
 ASTM D 2464 or D 2467: PVC Threaded Fittings, Schedule 80
 ASTM D 2467: PVC Socket Fittings, Schedule 80
 ASTM D 2564: Solvent Cements for PVC Pipe and Fittings

ASTM D 2774: Underground Installation of Thermoplastic Pressure Piping
 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



Not all fitting patterns shown

Schedule 80 Tapered Socket Dimensions

PVC SCHEDULE 80 - ASTM D 2467

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																	
	1/4	3/8	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 80	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•

Union, with Viton® O-Ring Seal*

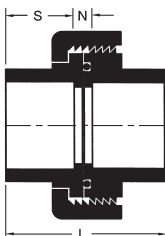
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PVC PART NO. 8700

Union, with EPDM O-Ring Seal*

S

PVC PART NO. 8710



Size	Universal Part Number		L	N	S	Approx. Wt. (Lbs.)
	with Viton O-Ring Seal	with EPDM O-Ring Seal				
1/2	857-005	897-005	2 ¹ / ₈	5 ¹ / ₁₆	29 ³ / ₃₂	0.18
3/4	857-007	897-007	2 ⁷ / ₁₆	7 ¹ / ₁₆	1	0.26
1	857-010	897-010	2 ⁵ / ₈	3 ³ / ₈	1 ¹ / ₈	0.36
1 ¹ / ₄	857-012	897-012	2 ¹⁵ / ₁₆	7 ¹ / ₁₆	1 ¹ / ₄	0.52
1 ¹ / ₂	857-015	897-015	3 ³ / ₁₆	7 ¹ / ₁₆	1 ³ / ₈	0.57
2	857-020	897-020	3 ² / ₁₆	2 ¹ / ₃₂	1 ¹ / ₂	0.90
3	857-030	897-030	5 ¹ / ₈	1 ⁵ / ₁₆	1 ²⁹ / ₃₂	2.22

* THE MAXIMUM WORKING PRESSURE IS 235 PSI AT 73°F.

Union, with Viton® O-Ring Seal*

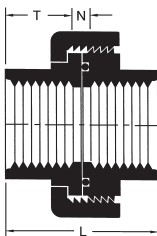
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PVC PART NO. 8800

Union, with EPDM O-Ring Seal*

FPT

PVC PART NO. 8810



Size	Universal Part Number		L	N	T	Approx. Wt. (Lbs.)
	with Viton O-Ring Seal	with EPDM O-Ring Seal				
1/2	858-005	898-005	2 ³ / ₁₆	1/2	1 ⁵ / ₁₆	0.19
3/4	858-007	898-007	2 ¹³ / ₃₂	9 ¹ / ₁₆	1 ³ / ₃₂	0.27
1	858-010	898-010	2 ⁵ / ₈	9 ¹ / ₁₆	1 ³ / ₃₂	0.40
1 ¹ / ₄	858-012	898-012	2 ³¹ / ₃₂	2 ³ / ₃₂	1 ¹ / ₄	0.58
1 ¹ / ₂	858-015	898-015	3 ¹ / ₈	2 ³ / ₃₂	1 ¹¹ / ₃₂	0.67
2**	858-020	898-020	3 ⁵ / ₈	2 ⁷ / ₃₂	1 ¹⁹ / ₃₂	1.03
3†	858-030	898-030	5 ¹ / ₈	1 ³ / ₄	1 ¹¹ / ₁₆	2.49

* THE MAXIMUM WORKING PRESSURE IS 235 PSI AT 73°F.

** THE MAXIMUM WORKING PRESSURE IS 200 PSI AT 73°F.

† THE MAXIMUM WORKING PRESSURE IS 185 PSI AT 73°F.