

# Submittal Information for Spears® Manufacturing Company PVC Schedule 80 Solid Wall Pipe & Fitting System

Date:		GSPVC80-0718		
Job Name:	Location:			
Engineer:	Contractor:			

#### Scope:

This submittal covers Spears® PVC Schedule 80 solid wall pipe and fittings intended for use in pressure applications where the application operating temperature does not exceed 140° F (63°C).

#### **Product Specification:**

All Spears® PVC Schedule 80 fittings shall be manufactured in the U.S.A by Spears® Manufacturing Company from PVC Type I, with a minimum cell classification 12454 in accordance with ASTM Standard D1784. All injection molded PVC Schedule 80 fittings shall be certified for potable water service by NSF International manufactured in strict compliance to ASTM D2467. All fabricated fittings shall be produced in accordance with Spears® General Specifications for Fabricated Fittings (FAB-7). Spears® PVC Schedule 80 pipe and fittings shall be capable of withstanding a vacuum of twenty-six inches of mercury (Hg) at 73° F (23° C) when subjected to a one hour test with a leak factor of not more than one inch of Hg. All PVC flanges shall be designed and manufactured to meet CL150 bolt pattern per ANSI Standard B16.5 and rated for a maximum internal pressure of 150 psi, non-shock at 73°F unless otherwise noted.

All Spears® PVC Schedule 80 pipe shall be manufactured in the U.S.A by Spears® Manufacturing Company from a Type I, Grade I Polyvinyl Chloride (PVC) compound with a minimum cell classification of 12454 in accordance with ASTM D1784. The pipe shall be manufactured in strict compliance to ASTM D1785 consistently meeting and/or exceeding the quality assurance test requirements of these standards. All Spears® EverTUFF® pipe shall be manufactured in the USA and immediately wrapped for protection. The pipe shall be provided with plain ends in 20 foot cut lengths. All Spears® EverTUFF® pipe shall be certified by NSF International for potable water applications and marked accordingly.

#### **Product Marking**

All Spears® pipe shall be marked PVC schedule 80 and shall be marked with NSF® Listing, ASTM Standard and applicable

pressure @ 73° F. (23°C). Spears® PVC Schedule 80 Fittings shall be engraved with markings required by ASTM Standard and bear an NSF® listing mark for potable water use.

#### Installation:

Installation for Spears® PVC Schedule 80 systems shall comply with current installation instructions published by Spears® Manufacturing Company, established industry practices and all applicable code requirements. Buried pipe shall be in accordance with ASTM 2774 and ASTM F1668. The piping system shall be joined using a two-step solvent cement joining process with primer conforming to ASTM F656 and solvent cement conforming to ASTM D2564. The system shall be protected from ultra violet (UV) light exposure from the sun or other source and protected from any chemicals that are not compatible with the PVC materials including but not limited to fire stopping materials, plasticizers, incompatible thread sealants etc.

**NOTE:** PVC piping systems are suitable for oil-free air handling to 25 psi, not for distribution of compressed air or gas.

#### Referenced Standards:

ASTM D1784 - Rigid Vinyl Compounds

ASTM D1785 – PVC Schedule 40, 80 & 120 Pipe

ASTM D2467 - PVC Schedule 80 Fittings

ASTM D2564 – Solvent Cements for PVC Pipe & Fittings

ASTM D2774 - Procedure for Buried Pressure Pipe

ASTM F656 - Primers for PVC Pipe & Fittings

ASTM F1668 – Procedures for Buried Plastic Pipe

ASTM F1866 - Fabricated PVC DWV Fittings

NSF International – Standard 14/61 Potable Water

ANSI B16.5 - Pipe Flange Dimensions

#### Approvals:

NSF® - NSF International Standard 14/61 Potable Water

#### Features:

Lightweight

Corrosion Resistant

Long Service Life



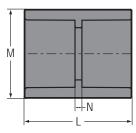


# PVC & CPVC SCHEDULE 80 FITTINGS, UNIONS, TANK ADAPTERS, EXPANSION JOINTS & SADDLES

## **COUPLING**

#### (continued)

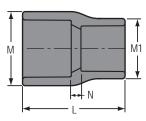
Socket x Socket



Part Number		C:	_	N/I	N	Approx. Wt. (Lbs.)	
PVC	CPVC	Size	L	М	N	PVC	CPVC
	829-120CF	12	15-1/4	14-1/8	2-3/4		27.71
829-140	829-140C	14	14-7/16	15-5/8	3/8	29.70	28.11
829-140F		14	16-1/4	15-1/2	2-1/4	29.70	
	829-140CF	14	16	15-1/2	2		33.33
829-160F	829-160CF	16	18-5/8	17-11/16	2-5/8	42.38	42.93
829-180F	829-180CF	18	22	19-7/8	4	63.81	72.89
829-200F	829-200CF	20	23-3/4	22-1/16	3-3/4	86.58	99.56
829-240F	829-240CF	24	29-1/4	26-7/16	5-1/4	147.22	

### **REDUCER COUPLING**

Socket x Socket



Part Number	6:					Approx. Wt. (Lbs.)		
PVC	CPVC	Size	L	M	M1	N	PVC	CPVC
829-101	829-101C	3/4x1/2	2-3/32	1-13/32	1-5/32	7/32	.07	.07
829-130	829-130C	1x1/2	2-3/16	1-23/32	1-13/32	7/32	.11	.12
829-131	829-131C	1x3/4	2-13/32	1-23/32	1-13/32	1/4	.10	.10
829-166	829-166C	1-1/4x1/2	2-9/16	2-3/32	1-5/32	7/16	.13	.15
829-167	829-167C	1-1/4x3/4	2-19/32	2-3/32	1-5/8	11/32	.17	.18
829-168	829-168C	1-1/4x1	2-11/16	2-1/8	1-3/4	5/16	.17	.15
829-209	829-209C	1-1/2x1/2	2-27/32	2-11/32	1-3/16	19/32	.19	.20
829-210	829-210C	1-1/2x3/4	2-7/8	2-3/8	1-13/32	17/32	.21	.19
829-211	829-211C	1-1/2x1	2-7/8	2-11/32	1-15/16	3/8	.26	.25
829-212	829-212C	1-1/2x1-1/4	2-13/16	2-13/32	2-1/8	5/32	.22	.23
829-247	829-247C	2x1/2	3-3/32	2-7/8	1-5/32	11/16	.30	.31
829-248	829-248C	2x3/4	3-7/32	2-7/8	1-13/32	23/32	.30	.32
829-249	829-249C	2x1	3-1/8	2-7/8	1-23/32	17/32	.33	.35
829-250	829-250C	2x1-1/4	3-11/32	2-7/8	2-3/32	19/32	.31	.33
829-251	829-251C	2x1-1/2	3-7/32	2-27/32	2-11/32	1/4	.30	.31
829-290 <sup>1</sup>	829-290C1	2-1/2x1-1/4	3-29/32	3-1/2	2-3/8	15/16	.57	.59
829-291	829-291C	2-1/2x1-1/2	3-3/4	3-1/2	2-3/8	19/32	.51	.51
829-292	829-292C	2-1/2x2	3-21/32	3-15/32	2-27/32	13/32	.48	.51
829-335	829-335C	3x1	4-7/16	4-1/8	2-7/8	1-7/16	1.00	1.04
829-336 <sup>1</sup>	829-336C1	3x1-1/4	4-7/32	4-5/32	2-29/32	1-1/16	.94	.97
829-337 <sup>1</sup>	829-337C1	3x1-1/2	4-13/32	4-5/32	2-7/8	1-3/16	.94	.96