

# Submittal Information for Spears® Manufacturing Company EverTUFF® CPVC Schedule 40 and 80 Solid Wall Pipe & Fittings

Date:		GSCPVC4080-0718		
Job Name:	Location:			
Engineer:	Contractor:			

#### Scope:

This submittal covers Spears® EverTUFF® CPVC Schedule 40 and 80 solid wall pipe and CPVC fittings intended for use in pressure applications where the application operating temperature does not exceed 200° F (93°C).

#### **Product Specification:**

All Spears® EverTUFF® CPVC Schedule 80 fittings shall be manufactured in the U.S.A. by Spears® Manufacturing Company from CPVC materials with a minimum cell classification of 23447 in accordance with ASTM Standard D 1784. All injection-molded fittings through 12" shall be manufactured in compliance to ASTM F439 and certified by NSF International for use with potable water service. All CPVC 14" through 24" fabricated fittings shall be produced in accordance with Spears® Specifications (FAB-7). All CPVC 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. All EverTUFF® CPVC Schedule 40 and schedule 80 pipe shall be manufactured in the U.S.A. by Spears® Manufacturing Company from a Type IV, Grade I Chlorinated Polyvinyl Chloride (CPVC) compound with a minimum cell classification of 23447 in accordance with ASTM D1784. The pipe shall be manufactured in strict compliance to ASTM F441, consistently meeting the quality assurance test requirements of this standard. All Spears® EverTUFF® CPVC pipe shall be immediately wrapped for protection. The CPVC pipe shall be provided with plain ends in 20 foot cut lengths. All Spears® EverTUFF® CPVC pipe shall be certified by NSF International for potable water applications and marked accordingly. EverTUFF® CPVC pipe tested dry shall be listed by ICC-ES PMG-1278 to ASTM E84/UL723 having a flame spread of less than 25 and smoke developed index of less than 50. (See PMG Listing No. PMG-1278 at www.icc-es-pmg.org). Spears® EverTUFF® CPVC schedule 40 and 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.

#### **Product Marking:**

All pipe shall be marked CPVC Schedule 40 or 80 and shall be marked with NSF® Listing and ICC-ES PMG E84 25/50 rated

marking. ASTM Standard and applicable pressure @ 73° F. (23°C). CPVC Schedule 80 fittings shall be engraved with markings required by ASTM F439 and bear an NSF® Listing for potable water.

#### Installation:

Installation for Spears® EverTUFF® CPVC Schedule 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 F493. The EverTUFF® CPVC 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 CPVC materials including but not limited to fire stopping materials, plasticizers, incompatible thread sealants, etc.

**NOTE:** CPVC 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 D2774 - Procedure for Buried Pressure Pipe

ASTM/E84/UL723 - Flame & Smoke Testing

ASTM F439 - CPVC Schedule 80 Fittings

ASTM F441 - CPVC Schedule 40, 80 Pipe

ASTM F493 - Solvent Cements for CPVC Pipe & Fittings

ASTM F656 - Primers for CPVC Pipe & Fittings

ASTM F1668 – Procedures for Buried Plastic Pipe

NSF International Standard 14/61- Potable Water

ANSI B16.5 – Pipe Flange Dimensions

#### Approvals:

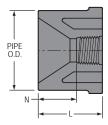
NSF® – NSF International Water ICC-PMG 1278 – Listing for Plenum Use





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

### **REDUCER BUSHING** (continued) Flush Style Spigot x Fipt



Part Number			.		Approx. Wt. (Lbs.)	
PVC	CPVC	Size	L	N	PVC	CPVC
838-207	838-207C	1-1/2x1/4	1-9/16	1-3/16	.13	.14
838-209	838-209C	1-1/2x1/2	1-11/16	31/32	.17	.17
838-210	838-210C	1-1/2x3/4	1-9/16	27/32	.13	.18
838-211	838-211C	1-1/2x1	1-23/32	13/16	.14	.16
838-212	838-212C	1-1/2x1-1/4	1-1/2	9/16	.07	.10
838-247	838-247C	2x1/2	1-29/32	1-5/32	.25	.27
838-248	838-248C	2x3/4	1-7/8	1-5/32	.26	.27
838-249	838-249C	2x1	1-29/32	1	.25	.27
838-250	838-250C	2x1-1/4	1-19/32	21/32	.18	.25
838-251	838-251C	2x1-1/2	1-9/16	5/8	.14	.20
838-287	838-287C	2-1/2x1/2	2-3/8	1-21/32	.41	.46
838-288	838-288C	2-1/2x3/4	2-7/16	1-5/8	.45	.48
838-289	838-289C	2-1/2x1	2-13/32	1-13/32	.45	.48
838-290	838-290C	2-1/2x1-1/4	2-13/32	1-3/8	.42	.45
838-291	838-291C	2-1/2x1-1/2	2-3/8	1-13/32	.47	.50
838-292	838-292C	2-1/2x2	2-1/16	1-1/16	.25	.33
838-334	838-334C	3x3/4	2-9/32	1-1/2	.57	.63
838-335	838-335C	3x1	2-9/32	1-11/32	.58	.63
838-336	838-336C	3x1-1/4	2-1/4	1-3/8	.57	.61
838-337	838-337C	3x1-1/2	2-1/4	1-5/8	.59	.62
838-338	838-338C	3x2	2-3/16	1-7/32	.63	.58
838-339	838-339C	3x2-1/2	2-3/8	3/4	.46	.50
838-419		4x1-1/2	3-3/16	2-5/16	1.44	
838-420	838-420C	4x2	2-11/16	1-21/32	1.10	1.20
838-421	838-421C	4x2-1/2	2-21/32	1-1/16	1.08	1.15
838-422	838-422C	4x3	2-5/8	1	.86	.85
838-528	838-528C	6x2	3-17/32	2-1/2	2.92	3.04
838-530	838-530C	6x3	3-17/32	2-1/8	2.98	3.14
838-532	838-532C	6x4	3-17/32	2-1/32	2.54	2.68