



# Submittal Information for Spears® Manufacturing Company PVC Schedule 40/80 Low Pressure Fabricated Fittings

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

GSPVCLP4080-1021

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

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

**Scope:**

This submittal covers Spears® PVC Schedule 40 and 80 PVC Low Pressure Fittings intended for use in Low Pressure applications where the application operating temperature does not exceed 140° F (63°C).

**Product Specification:**

All Spears® PVC Schedule 40 and 80 Low Pressure Fittings shall be fabricated in the U.S.A by Spears® Manufacturing Company from PVC pipe with a Type I with a minimum cell classification 12454 in accordance with ASTM D1784. Pipe stock shall be certified for potable water service by NSF International and manufactured in strict compliance to ASTM D1785. All PVC schedule 40 fabricated fittings shall be produced in accordance with ASTM F1866, applicable portions of CAN/CSA B181.2 and Spears® General Specifications for Fabricated Fittings.

All fabricated Spears® PVC Low Pressure Fittings shall meet or exceed the applicable performance criteria below:

**Dimensional Conformance**

- a. All sockets shall have an interference fit with applicable pipe.
- b. All change-of-direction fittings shall not exceed ± 1° variance in the specified angle.
- c. All standard stock fittings shall have specified cut lengths for all components in order to maintain dimensional consistency. Maximum overall deviations shall not exceed ± 1/2" for fittings to 12", ± 1" for sizes 14" & larger and all wyes.

**Structural Conformance**

- a. Burst Pressure - representative sample of fittings shall be tested to a minimum of two times the applicable maximum internal pressure rating in accordance with ASTM D 1599.
- b. Fabricated fittings shall meet the applicable requirements of the following Quality Assurance testing in accordance with the designated Standard Test Method.

Spears® PVC Low Pressure 40 and 80 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.

Water pressure ratings for PVC fabricated Low Pressure Fittings shall be as follows @ 73° F (23° C):

- Schedule 40 & 80 Low Pressure (thru 12") 130psi
- Schedule 40 & 80 Low Pressure (14" thru 24") 100psi
- IPS Flange (Steel Ring) 150psi
- IPS Flange (Plastic Ring) 50psi

**Product Marking:**

Fittings or product packaging shall be labeled with the manufacturer's name, part number, size, description, product code and ASTM Specification Number, if applicable.

**Installation:**

Installation for PVC Schedule 40 and 80 Low Pressure Fittings shall comply with current installation instructions published by Spears® Manufacturing Company, established industry practices and all applicable code requirements. Buried pipe installed with Spears® PVC Low Pressure Fittings 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 D1599 – Short Term Hydrostatic Burst
- ASTM D1784 – Rigid Vinyl Compounds
- ASTM D1785 – PVC Schedule 40, 80 & 120 Pipe
- 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
- CAN/CSA B181.2 PVC DWV Pipe and Pipe Fittings
- NSF® – NSF International-Potable Water

**Approvals:**

NSF® – NSF International-Potable Water

**PROJECT APPROVAL**

Approved: \_\_\_\_\_  
PRINT

Sign: \_\_\_\_\_

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

