# SCH40 FITTING SUBMITTAL

**1.0** **GPK PVC Schedule 40 drainage/DWV** fittings shall be manufactured in accordance with either ASTM D2665 or F1866. The PVC material shall have a minimum cell classification of 12454 as defined in ASTM D-1784.

2.0 The **purpose** of GPK Schedule 40 Drainage/DWV in-line fittings is to convey and provide a drainage and venting of storm water runoff, municipal or industrial chemicals and wastes as well as many other commercial and agricultural applications. The fittings are designed for non-pressure or low pressure applications up to 25 psi.

**3.0** **Injection molded fittings** are produced in sizes 4" through 8" diameter. **Fabricated fittings** are produced in sizes 4" through 24" diameter. A fabricated fitting is any fitting made from pipe or a combination of injection molded components and pipe.

**4.0** **Chemical Resistance.** GPK PVC fittings resist attack from many acids, alkalies, alcohol, salt solutions and other chemicals. Refer to chemical resistance chart for suitability.

**5.0** **Dimensions:**

5.1 **Socket Inside Diameters** and socket depths shall comply with the values listed in ASTM D-2665 or F1866.

5.2 **Threads** shall be American National Standard Taper Pipe Threads (ANSI B1.20.1) which shall be gaged in accordance with ASTM Method D-2122.

5.3 **Gasketed Bell** connections comply with ASTM D3212 and F477.

**6.0** **Marking.** GPK Schedule 40 Drainage/DWV fittings shall be marked with applicable size, SCH 40 DRAINAGE, company name and applicable ASTM Number (D2665/ F1866). The fittings and/or packaging shall also include the manufacturer's date and shift code.

**7.0** **Installation.** Fittings shall be installed in properly engineered piping systems in accordance with established procedures and standards. The assembly of solvent cemented joints shall be in accordance with ASTM Practice D-2855. For threaded ends, use teflon tape recommended by the manufacturer for use with plastics - DO NOT use oil based pipe joint compound. One to two turns beyond finger tight is generally acceptable. Overtightening may cause damage to either pipe or fitting.

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Intro: GPK manufactures Schedule 40 drainage/DWV Fittings sizes 4" through 24" for non pressure or low pressure applications up to 25 psi in accordance with ASTM D2665 or F1866.

Material: GPK Schedule 40 Drainage/DWV Fittings are made from PVC material with a minimum cell classification of 12454 as defined in ASTM D-1784. Fabricated fittings are manufactured from PVC pipe meeting the requirements of ASTM D-2665 or D-1785.

Dimensions: Dimensions and tolerances comply with those shown in Table 1 and Table 2 of D-2665 or Table 1, Table 2 and Table 3 of ASTM F1866.

Pipe Stiffness: Extruded components exhibit a pipe stiffness which equals or exceeds the values shown in Table 3 of D-2665 when tested in accor dance with ASTM Method D-2412.

Pipe Flattening: Extruded components are flattened as described in ASTM D1785 until the distance of the plates is 40% of the outside diameter of the pipe or the walls of the pipe touch, whichever occurs first. There shall be no splitting, cracking or breaking.

Branch Bending: The chemically fused areas around the fabricated branches of tee and wye fittings are tested to ASTM F1866 to verify their strength and integrity.

Impact Resistance: Fittings are tested in accordance with ASTM D-2444 using a 12 lb. or 20 lb. Tup A and a Flat Plate Holder B. Fabricated fitting shall withstand an impact equal to or exceeding 15 Ft.lbs.

Marking: Fabricated fittings shall be marked on the body or hub with the manufacturer's name and trademark, "PVC", size, SCH 40 DRAINAGE, date.

Joining Methods: Chemically Fused Solvent Welded Joints

Solvent cement is handled and tested in accordance with ASTM D-2564 and D-2855. The Lap Shear Strength shall equal or exceed 900 psi @ 72 hours.

Heat Fusion Welded Joints (Butt Fusion Welds)

Elastomeric Seals (Gaskets)

Meets all applicable requirements of ASTM F477 and D3212.

Pressure/Pressure Deflection: Gasketed joints are tested in accordance with ASTM D3212.
Solvent cement sockets are tested in accordance with ASTM D2672.
Section 10.4 Socket Joint Tightness Test of 25psi.