



**Summary of Substantive Changes
between
IAPMO IGC 210-2005a, “Chlorinated Poly (Vinyl Chloride) (CPVC) Pipe and
Fittings for Limited Chemical Waste Drainage Systems”
and
ASTM F2618-09, “Chlorinated Poly (Vinyl Chloride) (CPVC) Pipe and Fittings for
Chemical Waste Drainage Systems”**

Presented to the IAPMO Standards Review Committee on February 13, 2012

General: There are technical differences between the two standards that might affect products currently listed to IGC 210. The major changes in ASTM F2618 are:

- decreased the allowable out-of-roundness for NPS-1-1/4, NPS-1-1/2, NPS-2, and NPS-3 pipe and spigot ends;
- allowable dimensions and tolerances for fittings and sockets are now specified;
- additional markings are required for fittings, pipe, and solvent cement;
- the test for water absorption was removed; and
- the IGC 210 section defining the average minimum diameters of waterways of fittings and Table 3 “Average Waterway Diameter, in. (mm)” were removed.

Section 2, Referenced Documents: Changed this section as follows:

~~*ASTM D 570 Water Absorption of Plastics*~~

~~*D2321 Practice for Underground Installation of Thermoplastic Pipe for Sewers and Other Gravity-Flow Applications*~~

~~*F402 Practice for Safe Handling of Solvent Cements, Primers, and Cleaners Used for Joining Thermoplastic Pipe and Fittings*~~

~~*F2135 Specification for Molded Drain, Waste, and Vent (DWV) Short-Pattern Plastic Fittings*~~

Section 5, General Requirements for Solvent Cement: Clarified the requirements as follows:

Section 5.1: *The solvent cement shall meet the general requirements of standard F493 and be classified as heavy-bodied, having a minimum viscosity of 1600 cP (1600 MPa-s).*

Section 5.2: *The cement shall not contain any inorganic fillers.*

Section 6, Dimensions and Tolerances:

Section 6.1: Included ASTM F2135 as an alternate conformance standard to ASTM D3311 for patterns, dimensions and laying lengths of molding fittings.

Section 6.1.1: Revised this section as follows: *The outside diameter and wall thickness of pipe ~~when measured in accordance with ASTM D 2122~~ shall meet the requirements of Table 1 and Table 2 ~~when measured at any point within 1.5 pipe diameters or 11.8 in. (300 mm), whichever is less, to the cut end of the pipe length.~~*



Section 6.1.2: Changed the requirements and standardized the allowable socket dimensions as follows: ~~Socket ends of fittings shall conform to the dimensional requirements for size and tolerances as provided on request by the manufacturer.~~ Fitting sockets shall conform to the dimensional requirements as specified in Table 3.

Table 1: Changed the allowable out-of-roundness from 0.05, 0.06, and 0.07 for NPS-1-1/4, NPS-1-1/2, and NPS-2, respectively, to 0.024, and from 0.080 to 0.030 for NPS-3.

Table 3: Replaced the IGC 210 Table 3 "Average Waterway Diameter, in. (mm)" with a new table for "Dimensions and Tolerances for Fitting Sockets, in. (mm)"

Section 8, Test Methods:

Section 8.1, Conditioning

Section 8.1.1: Clarified the conditioning requirements for routine quality control testing.

Section 9, Product Marking:

Section 9.2, Fittings: All fittings shall be light grey in color and have the following permanent and legible markings visible on the body or hub:

Section 9.3 Pipe: ~~Schedule designation of "Sch-40"~~

Section 9.3.1.3: If listed, the seal or mark of the laboratory making the evaluation for corrosive waste application

Section 9.3.1.5: This ASTM standard designation (F2618)

Section 9.3.1.6: Pipe shall be light gray in color with EITHER a yellow stripe OR marked with a yellow print line and a continuous "chemical waste drainage" print line that is 180° removed.

Section 9.4, Solvent Cement:

Section 9.4.4: Instructions for use,

Section 9.4.5: If listed, the seal or mark of the laboratory making the evaluation, and

Section 9.4.6: Identification of the lot number (on the label or on the can).