

other foreign material, apply primer – purple in color, conforming to ASTM F 656 or equivalent International Standard(s) approved by the Authority Having Jurisdiction. Primer shall be applied until pipe and fitting is softened. Solvent cements complying with ASTM D 2564 or equivalent International Standard(s) approved by the Authority Having Jurisdiction shall be applied to all joint surfaces. Joints shall be made while both the inside socket surface and outside surface of pipe are wet with solvent cement. Hold joint in place and undisturbed for 1 minute after assembly. Universal or multi-purpose solvent cement shall be prohibited. Solvent cement joints shall be installed in accordance with the manufacturer's instructions.

- (2) Mechanical joints shall be installed in accordance with the manufacturer's instructions. Such joints shall be designed to provide a permanent seal and shall be of the mechanical or push-on-joint.

The mechanical joint shall include a pipe spigot that has a wall thickness to withstand without deformation or collapse, the compressive force exerted when the fitting is tightened.

The push-on joint shall have a minimum wall thickness of the bell at any point between the ring and the pipe barrel. The gasket shall be of such size and shape as to provide a compressive force against the spigot and socket after assembly to provide a positive seal.

- (3) Threaded joints shall be installed in accordance with the manufacturer's installation instructions. A minimum of Schedule 80 shall be permitted to be threaded.

705.1.4 Polyvinylidene Fluoride (PVDF) Plastic Pipe and Joints. PVDF plastic pipe and fittings joining methods shall comply with the following:

- (1) Heat-fusion joints between PVDF pipe and fittings shall comply with ASTM D2657 or equivalent International Standard(s) approved by the Authority Having Jurisdiction and shall be assembled using butt-, socket- and electro-fusion heat methods.

Butt-fusion joints shall be made by heating the squared ends of two pipes, pipe and fitting, or two fittings by holding ends against a heated element. The heated element shall be removed where the proper

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melt is obtained and joined ends shall be placed together with applied force. Butt-fusion joints shall be installed in accordance with the manufacturer's instructions.

Socket-fusion joints shall be made by simultaneously heating the outside surface of a pipe end and the inside of a fitting socket. Where the proper melt is obtained, the pipe and fitting shall be joined by inserting one into the other with applied force. The joint shall fuse together and remain undisturbed until cool. Socket-fusion joints shall be installed in accordance with the manufacturer's instructions.

Electro-fusion joints shall be made by embedding the resistance wire in the fitting and supplying with an electric source. Pipe shall be clamped in place and power applied through a controlled processor. The material surrounding the wire shall be melted along with the pipe and shall provide the pressure required for fusion. Electro-fusion joints shall be installed in accordance with the manufacturer's instructions.

- (2) Mechanical and compression joints shall be installed in accordance with the manufacturer's instructions.

705.2 Special Joints.

705.2.1 Slip Joints. In fixture drains and traps, slip joints of approved materials shall be permitted to be used in accordance with their approvals.

705.2.2 Expansion Joints. Expansion joints shall be accessible, except when in vent piping or drainage stacks, and shall be permitted to be used where necessary to provide for expansion and contraction of the pipes.

706.0 Changes in Direction of Drainage Flow.

706.1 Changes in direction of drainage piping shall be made by the appropriate use of approved fittings and shall be of the angles presented by a 1/16 bend, 1/8 bend, or 1/6 bend, or other approved fittings of equivalent sweep.

706.2 Horizontal drainage lines, connecting with a vertical stack, shall enter through wye branches equal to 0.8 radian (45 degrees), wye branches equal to 1.1 radian (60 degrees), combination wye and 1/8 bend branches, sanitary tee or sanitary tapped tee branches, or other approved fittings of equivalent sweep. No fitting having more than one inlet at the same level shall be used unless such fitting is constructed so that the discharge from one inlet cannot readily enter any other inlet. Double sanitary tees shall be permitted to be used.