- cement becomes thicker, THROW IT AWAY. Solvent cement shall NOT be thinned
- **2.7.5 Size of Applicator**. Applicator should be about one-half the pipe diameter. Do not use small applicator on large pipes. Ordinary pure bristle paint brushes or applicators furnished with product are satisfactory. [UPC 316.1.6]
- **2.7.6 Primers.** A listed primer in compliance with ASTM F656 shall be used on all PVC DWV joints.
- **2.7.7 Application**. Solvent cement and primer shall be applied deliberately, but without delay (two men may be needed to make large joints). Use special care when temperature is over 100°F (38°C) or humidity is over 60%.

2.7.8 SAFETY REQUIREMENTS AND PRE-CAUTIONS

- **2.7.8.1 General**. Solvents contained in PVC plastic pipe cements are classified as airborne contaminants and flammable and combustible liquids. Precautions listed in this appendix should be followed to avoid injury to personnel and the hazard of fire.
- 2.7.8.2 Safety Precautions. Prolonged breathing of solvent vapors should be avoided. When pipe and fittings are being joined in partially enclosed areas, a ventilating device should be used in such a manner to minimize the entry of vapors into the breathing areas.
- **2.7.8.3** Solvent cements should be kept away from all sources of ignition, heat, sparks and open flame.
- **2.7.8.4** Containers for solvent cements should be kept tightly closed except when the cement is being used.
- **2.7.8.5** All rags and other materials used for mopping up spills should be kept in a safety waste receptacle which should be emptied daily.
- 2.7.8.6 Most of the solvents used in PVC pipe cements can be considered eye irritants and contact with the eye should be avoided for it may cause eye injury. Proper eye protection and the use of chemical goggles or face shields is advisable where the possibility of splashing exists in handling solvent cements. In case of eye contact, flush with plenty of water for 15 minutes and call a physician immediately.

- 2.7.8.7 Repeated contact with the skin should be avoided. Proper gloves impervious to and unaffected by the solvents should be worn when frequent contact with the skin is likely. Application of the solvents or solvent cements with rags and bare hand is not recommended. Brushes and other suitable applicators can be used effectively for applying the solvent cement, thus avoiding skin contact. In the event of excessive contact, remove contaminated clothing and wash skin with soap and water.
 - Step 1 Cut pipe square with hand saw and miter box, mechanical cut-off saw or tube cutter designed for plastic.
 - Step 2 Ream inside and chamfer outside of pipe (to eliminate all burrs).
 - Step 3 Clean all dirt, moisture, and grease from pipe and socket. Use a clean, dry rag.
 - Step 4 Check dry fit of pipe in fitting. Pipe should enter fitting socket from 1/3 to 3/4 depth of socket.
 - Step 5 Soften inside socket surface by applying an aggressive primer.
 - Step 6 Soften mating outside surface of pipe to depth of socket by applying a liberal coat of the (aggressive) primer. Be sure the entire surface is softened.
 - Step 7 Again coat inside socket surface with the (aggressive) primer. Then, without delay, apply solvent cement liberally to outside of pipe. Use more than enough to fill any gaps.
 - Step 8 Apply a light coat of PVC solvent cement to inside of socket using straight outward strokes (to keep excess solvent out of socket). This is also to prevent solvent cement damage to pipe. For loose fits, apply a second coat of solvent cement. Time is important at this stage. See Section 2.7.6.
 - Step 9 While both the inside socket surface and the outside surface of the pipe are SOFT and WET with solvent cement, forcefully bottom the pipe in the socket, giving the pipe a one-quarter turn, if possible. The pipe must go to the bottom of the socket.