

**SOLVENT WELDING PROCEDURES FOR PLASTIC PIPE AND FITTINGS**  
**TWO-STEP SOLVENT WELDING METHOD FOR PVC AND CPVC PLASTIC PIPE AND FITTINGS**

1. Apply primer to the inside of the fitting socket. Be aggressive and work the solvents into the surface to break down the surface tension and to soften the surfaces.
2. Apply primer to the pipe end, equal to the depth of the fitting socket. Be aggressive.
3. Apply primer to the inside of the fitting socket.
4. While the primer is still wet and the surfaces are soft, apply a full, even layer of solvent cement, equal to the depth of the fitting socket, to the pipe end. Like the primer, be aggressive. Remember to apply enough solvent cement to fill the gap between the pipe and fitting. Use PVC solvent cement that meets ASTM D 2564 on PVC plastic pipe and fittings. Use CPVC solvent cement that meets ASTM F 493 on CPVC plastic pipe and fittings. For CPVC potable water systems, use a purple primer and orange CPVC solvent cement in accordance with UPC 605.16.2.
5. Apply a thin layer of solvent cement to the inside of the fitting socket.
  - 5.1 This will prevent puddling of the solvent cement inside of the pipe or fitting. Excessive solvent cement applied to the fitting socket can cause the joint to clog and the wall of the pipe or fitting to weaken due to softening by the trapped solvents.
6. Apply a second full, even layer of solvent cement to the pipe end. Excessive solvent cement on the pipe outer diameter (O.D.) can be easily wiped away after assembly.
7. Without delay, while the solvent cement is still wet, assemble the pipe and fitting, and twist a turn as the pipe is being inserted, if possible. Once the pipe end has reached the fitting socket stop, do not turn any further; doing so could break any fusion that is starting to occur.
8. Hold the pipe and fitting together for approximately 30 seconds to avoid push out.
9. A bead of solvent cement must be around the entire socket fitting entrance. With a clean, dry cloth, remove the excess solvent cement from the pipe and fitting socket entrance. This will allow the solvent to evaporate from within the joint.