

TECHNICAL BULLETIN

SOLVENT WELDING DURING COLD WEATHER

Working in freezing temperatures is never easy. However, if the job of solvent cement welding is necessary, you can do it successfully with Solvent Cements.

By following our standard instructions and using a little extra care and patience, successful solvent cemented joints can be made at temperatures even as low as -26°C (-15°F). In cold weather, solvents penetrate and soften the plastic pipe and fitting surfaces slower than in warm weather. In addition, the plastic is more resistant to solvent attack, making it more important to pre-soften surfaces with an aggressive primer. Because of the slower evaporation, a longer cure time is necessary. Our cure schedules allow a margin for safety, but for colder weather, more time should be allowed.

TIPS TO FOLLOW

1. Prefabricate as much of the system as is possible in a heated work area.
2. Store cements, cleaners and primers in a warmer area when not in use and make sure they remain fluid.
3. Joints that must be made outside should be protected with a portable shelter and heated with indirect heat to surface temperatures above 5°C (41°F) before joining. The shelter and heat should remain in place for at least two hours after joint assembly.
4. Take special care to remove moisture including ice and snow from the surfaces to be joined. On PVC and CPVC pipe and fittings the surfaces must be cleaned.
5. Before assembly, after the pipe has been cut, cleaned and dry fitted as per the instructions on the label, Primer must be used to soften the joining surfaces on PVC or CPVC installations before applying cement.. More than one application may be necessary.
6. Allow a longer cure period before the system is used. A heat blanket may be used to speed up the set and cure times.
7. It is extremely important to read and follow all our directions carefully before installation.

For all practical purposes, good solvent-cemented joints can be made in very cold conditions with proper care and a little common sense.

CAUTION: DO NOT ATTEMPT TO SPEED THE SETTING OR DRYING OF THE CEMENT BY APPLYING DIRECT HEAT TO THE SOLVENT WELDED JOINT. Forced rapid drying by heating will cause the cement solvents to boil off, forming porosity, bubbles and blisters in the cement film.