

HOW TO INSTALL FLEXIBLE PIPE

FOUR EASY STEPS

1. CUT IT
2. JOIN IT
3. CLAMP IT
4. LAY IT

HOW TO INSTALL SOLVENT CEMENTED PIPE

1. **CUTTING THE PIPE:** Use a fine tooth saw and make sure the pipe is cut square. Use a knife or abrasive paper to remove all burrs.
2. **CLEAN THE PIPE AND FITTING:** Use a clean dry cloth to clean the pipe surface and fitting socket to be joined.
3. **DRY TEST THE FIT:** The pipe should enter the fitting or bell to 1/3 - 1/2 of the socket depth.
4. **APPLICATION OF PRIMER:** Remove the gloss from pipe and fittings by wiping with Primer.

NOTE: SOLVENT CEMENTS ARE HIGHLY VOLATILE AND HYGROSCOPIC. THE COVER SHOULD BE KEPT TIGHTLY ON THE CAN WHEN THE SOLVENT IS NOT BEING USED. INSPECTION OF THE SOLVENT CEMENT FROM TIME TO TIME FOR THE PRESENCE OF WATER AND/OR EXCESS THICKENING SHOULD BE MADE. IF EITHER CONDITION IS EVIDENT, THE SOLVENT CEMENT SHOULD NO LONGER BE USED.

(OVER)

5. **APPLICATION OF CEMENT:** Use a natural bristle brush with a width of at least 1/2 the nominal pipe size. Daubers may be used with sizes through 1-1/4" only. Solvent cements are **NOT** interchangeable. Be sure to use the solvent cement intended for the type of pipe being joined. Solvent cement is fast drying and must be applied as quickly as possible. Apply a uniform **LIGHT** coat of cement to the inside of the fitting. Extra caution is required when applying solvent cement to belled end pressure pipe because too much cement in the bell portion of the pipe will cause puddling and could result in a leak when the system is pressurized. Apply a **LIBERAL** coat of cement to the outside of the pipe and immediately stab the pipe into the fitting. A slight rotating motion (1/4 turn) is used during assembly. The joint should be held together for several minutes to keep the pipe from backing out of the fitting or bell. Excess cement should be wiped from the joint.
6. **SET TIME:** Allow the newly assembled joints to carefully set before installation or backfilling:
 - 30 Minutes at 60-100° F.
 - 1 Hour at 40-60° F.
 - 2 Hours at 20-40° F.
 - 4 Hours at 1-20° F.
7. **CURE TIME:** It requires approximately 24 hours for the solvent cement joints to thoroughly cure. The system should not be put under working or test pressures until 24 hours has elapsed. If the joints have been carefully made, there will be no leaks, as properly made joints are as strong and reliable as the pipe itself.
8. **STORAGE:** Solvent cements should be stored in a cool place except when actually in use at the job site. These cements have a limited shelf life and inventories must be constantly rotated.

PIPE HANDLING AND INSTALLATION

1. **STORING:** Pipe should be stored so as to support the pipe for its full length.
2. **HANDLING AND TRANSPORTATION:** Plastic pipe should not be subjected to rough handling or abuse because it is susceptible to damage by abrasion and gouging. Practices of dragging the pipe should be avoided. The pipe should be transported on flat-bed trucks and supported so as not to cause undue strain or damage during transportation. Damaged portions of pipe should be cut out and destroyed.
3. **TRENCHING:** The pipe should be buried deep enough to protect it from freezing and mechanical damage. Water lines should be buried at least 12" below the maximum expected frost penetration and a minimum of 24 inch cover should be maintained for lines subject to traffic or live loads. The trench width should be wide enough to allow for snaking, if necessary, and the trench bottom should be flat, smooth and free of rocks. It is advisable to pad the trench with sand or compacted fine soils.
4. **INSTALLATION:** Allow for the proper solvent cement "set time" before handling the pipe. The pipe should be snaked in the trench to allow for expansion and contraction. It should be supported continuously with fine (particle size of 1/2" or less), firm (compacted), layers of stable backfill.
5. **TESTING:** After the proper "cure time," it is recommended that the piping system be subjected to a hydrostatic test at normal working conditions **BEFORE** backfilling. In testing, a pressure gage, shut-off valve and safety valve should be installed between the source and new line. Before pressure is applied, **ALL AIR MUST BE REMOVED FROM THE LINE.** Damaged or defective pipe should be repaired before backfilling.
6. **FINAL HOOK-UP:** The line should be flushed free of sand, dirt or other foreign material that may have entered the pipe during installation. The line should be equipped with a pressure regulator to protect it from working pressures and surges that would exceed the recommended working pressures of the piping system. The piping should be cooled to ground temperatures before making the final connection and backfilling.
7. **BACKFILLING:** Should be done during the coolest part of the day. Use clean backfill with particle sizes of 1/2" or less to surround the pipe. Layer and compact the backfill to sufficiently develop uniform soil forces. It may be advisable to have the system under pressure during backfilling.

If the above precautions are followed, you will find plastic pipe will give many years of corrosion-free service.