

FLOWGUARD GOLD® PLUMBING SYSTEMS

INSTALLATION QUICK REFERENCE GUIDE

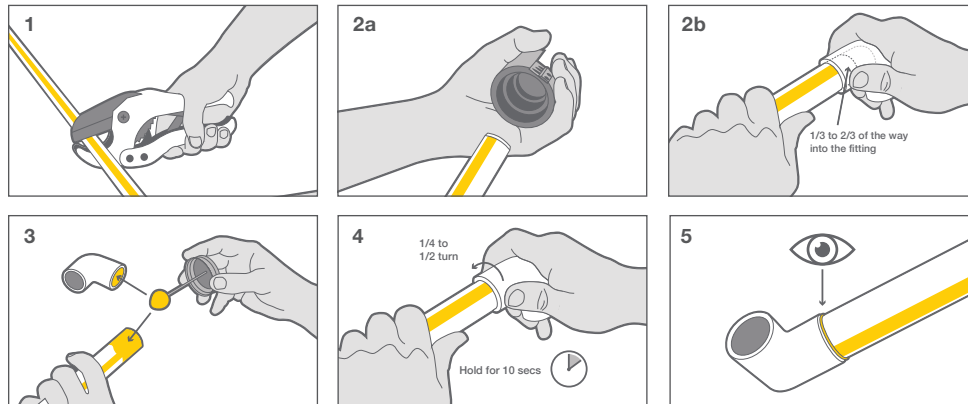


FLOWGUARD GOLD® IS JOINED USING A FAST AND EASY ONE-STEP SOLVENT WELDING PROCESS.

- 1. Cut the pipe:** Using ratchet cutters*, wheel cutters or a fine tooth saw, cut a clean end at least 2" beyond visible damage.
- 2. Prepare the pipe and fittings:** (a) Using a chamfering tool, remove any burrs or filings and bevel the end of the pipe. Using a dry rag, wipe away any moisture from the joint surfaces. (b) Check that the pipe makes contact with the socket wall 1/3 to 2/3 of the way into the fitting socket. If it goes all the way into the fitting, discard the fitting.
- 3. Apply FlowGuard Gold One-Step Solvent Cement:** Apply a heavy coat of solvent

cement to the outside of pipe end. Using the same applicator, apply a thin coat inside the fitting socket. Do not allow excess cement to puddle in the fitting. UV indicator solvent cement are available to assist in verifying installations.

- 4. Assemble the joint:** Insert the pipe into the fitting, rotating the pipe 1/4 to 1/2 turn while inserting to ensure even distribution of cement. Properly align the fitting and hold for 10 seconds, allowing the joint to set.
- 5. Verify proper installation:** Check that an even bead of cement is visible around the joint, if it is not, remake the joint to ensure system integrity.



*Do not use ratchet cutters on previously installed pipe.

DO'S & DON'TS

- Do not pre-assemble the plumbing system without solvent cement, this increases the risk of dry-fit failures.
- Ensure proper coverage of cement on the pipe and fitting. Too little solvent cement can result in gaps and leak paths and too much solvent cement may puddle in the fittings and/or pipe softening the material.
- Dry-fits are extremely rare and avoidable with proper installation practices. Always visually inspect the joint to verify the presence of a continuous bead of solvent cement at the fitting.
- Always allow room for expansion and contraction of the pipe.
- Do not place hangers or straps that restrict the natural movement of the pipe caused by expansion and contraction.
- Do not butt-up elbows or tees against fixed structures (joists, studs, walls, etc...).
- Never use scissor-type pipe cutters.
- When cutting into aged pipe, use a fine tooth saw or wheel cutter. Do not use ratchet cutters on aged pipe.
- Never install plumbing pipes in uninsulated areas which may be subject to freezing.
- Avoid excessive stress in the system.

EXPANSION & CONTRACTION

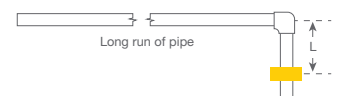
FlowGuard Gold will expand about 1 inch per 50 feet of straight length of pipe per 50°F temperature increase. Expansion & contraction mainly affect hot water lines, but can affect cold water lines when they are installed in unusually hot or cold conditions. It is important to follow a few best practices when allowing for expansion & contraction including:

- Do not put additional stress on the pipes or fittings in an expansion loop, offset or change of direction.
- Do not restrict natural movement of the pipe in the direction of expansion and contraction.
- Always leave adequate spacing between elbows and hangers/restraints.

In most cases, expansion & contraction can be accommodated with normal changes of direction. For long, straight runs loops or offsets will be necessary. For underslab installations, install the pipe so that it snakes from side to side in the trench to allow for expansion & contraction.

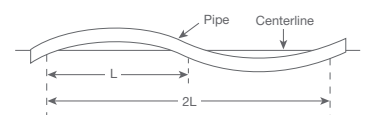
Change of Direction

Do not butt up against fixed structure (joist, stud of wall).

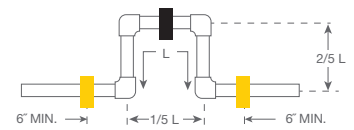


Snaking of Pipe

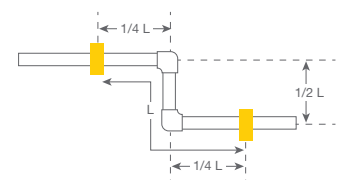
To be used within a trench for underslab installations only.



Loop



Offset



Visit FlowGuardGold.com or call 1-855-735-1431 to learn more.

©The Lubrizol Corporation 2017, all rights reserved. All marks are property of The Lubrizol Corporation, a Berkshire Hathaway Company. This guide is a generalization and does not replace complete manufacturer instructions. Always consult pipe, fitting and solvent cement manufacturer instructions as well as local codes prior to installation. Links to manufacturer instructions can be found at www.FlowGuardGold.com/installation/step-by-step-instructions/. Verify chemical compatibility with FlowGuard Gold at www.FBCsystemcompatible.com or download the product finder app on Android or iTunes.

The information contained herein is reliable based on current information but the advertiser makes no representations, guarantees or warranties, express or implied, including any implied warranties of merchantability or fitness for a particular purpose, or regarding the completeness, accuracy, or timeliness of any information. Always consult your pipe and/or fitting manufacturer for current recommendations.

FLOWGUARD GOLD®
PIPE & FITTINGS