



Development
SERVICES DEPARTMENT

Building a Better and Safer Austin Together

Building Criteria Manual & Plumbing Systems Testing Requirements



Meeting Purpose

For discussion and action on changes in how we test PVC drain, waste and vent systems.

Proposed Changes

Removing all air and vacuum testing allowances with the following exceptions:

1. In multi-story structures and occupied buildings where water damage could result from water testing leakages, an air test can be utilized. The air test must be conducted in accordance with all sections of A.S.T.M. designation F1417-11a. If the system is to be tested with air, a Class 1A diaphragm test gauge that is calibrated to an accuracy of ± 1 percent of the span must be utilized. See test gauge requirements in the plumbing code.
2. Other materials approved by pipe manufacturers for air testing
3. Non-human medical gas and vacuum systems
4. Vacuum manhole testing

Reason For Proposed Changes

1. Potential life safety and property damage hazards associated with air expansion
2. Systems consistently over pressurized
3. No known manufacturer allows air testing
4. No published code allows for air testing
5. No known jurisdictions allow air testing other than Austin

Facts About Air Testing

- ✓ ASTM F1417-11a is a standard for air testing PVC
- ✓ Air testing is supported by Uni-Bell PVC Pipe Association since 1998
 - ✓ These are the only known guidelines for air testing. Both methods have very specific, stringent guidelines and very limited applications. Neither are listed or approved by the Uniform or International Plumbing Codes.
- ✓ Air testing has been in the City of Austin ordinance since 1983

Facts About Air Testing Cont'd

- ✓ Air testing is prohibited by all nationally accredited plumbing codes and all pipe manufacturers
- ✓ There are no known occurrence of injuries caused by air testing of DWV lines utilizing PVC
- ✓ There are documented occurrences of pressurized PVC causing injury when being used in compressed air lines, and OSHA prohibits their use in compressed air systems

Outcome

- Improved job site safety for plumbers, other workers and inspectors
- Potential cost increase
- Potential delayed inspections due to lack of water
- Will require more water to be used

Questions



Board Action

