

PLANNING & COMMUNITY DEVELOPMENT BUILDING & INSPECTION DEPARTMENT

MEMORANDUM

To: PCD Plumbing Department Staff

From: James Metzgar, Chief Building Official

cc: Bill Neville, Elton "JR" Harmon

Date: May 31, 2023

Re: Plumbing Changes effective immediately

The following changes will take effective immediately:

TESTING AND INSPECTION

- Once the roughing-in is completed on a plastic DWV piping system, it is important to test and
 inspect all piping for leaks. Concealed work should remain uncovered until the required test is made
 and approved. When testing, the system should be properly restrained at all bends, changes of
 direction, and the end of runs. A water, hydrostatic test, or vacuum test method for inspecting a
 completed plastic piping system shall be required. The purpose of the test is to locate any leaks at
 the joints and correct them prior to putting the system into operation. Since it is important to be able
 to visually inspect the joints, a water test should be conducted prior to closing in the piping or
 backfilling of underground piping.
- The system should be properly restrained at all bends, changes of direction, and the end of runs. To isolate each floor or section being tested, test plugs are inserted through test tees in the stack. All other openings should be plugged. The system should be properly restrained at all bends, changes of direction, and the end of runs. To isolate each floor or section being tested, test plugs are inserted through test tees in the stack. All other openings should be plugged or capped with test plugs or test caps.
- Fill the system to be tested with water at the highest point. As water fills the vertical pipe it creates hydrostatic pressure. The pressure increases as the height of the water in the vertical pipe increases. Filling the system slowly should allow any air in the system to escape as the water rises in the vertical pipe. All entrapped air in the system should be expelled prior to the beginning of the test. Failure to remove entrapped air may give faulty test results. Once the stack is filled to "ten feet of head," a visual inspection of the

section being tested should be made to check for leaks. If a leak is found, the joint must be cut out and a new section installed. Once the system has been successfully tested, it should be drained and the next section prepared for testing.



ALTERNATE TEST METHOD

 Vacuum testing of ABS and PVC DWV piping system to 8.75 inches of mercury is a safe practice and the manufacturer Charlotte Pipe recommends this type of test. However, vacuum testing is complex and requires dedicated equipment.

• <u>305.3 Pipes through foundation walls.</u>

Any pipe that passes through a foundation wall shall be provided with a relieving arch, or a pipe sleeve pipe shall be built into the foundation wall. The sleeve shall be two pipe sizes greater than the pipe passing through the wall.



• 305.4 Freezing.

Water, soil and waste pipes shall not be installed outside of a building, in attics or crawl spaces, concealed in outside walls, or in any other place subjected to freezing temperatures unless adequate provision is made to protect such pipes from freezing by insulation or heat or both. Exterior water supply system piping shall be installed not less than 6 inches below the frost line, (24") below grade.



• 802.1.1 Food handling.

Equipment and fixtures utilized for the storage, preparation and handling of food shall discharge through an indirect waste pipe <u>1 ½ " minimum</u> by means of an *air gap*. Each well of a multiple-compartment sink shall discharge independently to a waste receptor.





