

PLUMBING AND MECHANICAL
INTERPRETATION MANUAL



CODE: IPC & IRC

DATE:

CODE REF: IPC 312.2 and IRC P2503.5.1

1/30/2006

SUBJECT: Drainage System Testing (1 of 2)

Question: How high a water test is required for drainage system? Is the drainage and venting system required to have this required 10ft.

Answer: Section 312.2 states that a 10ft. head water test is required on all parts of the drainage system except for upper 10ft of pipe.

312.2 Drainage and vent water test.

A water test shall be applied to the drainage system either in its entirety or in sections. If applied to the entire system, all openings in the piping shall be tightly closed, except the highest opening, and the system shall be filled with water to the point of overflow. If the system is tested in sections, each opening shall be tightly plugged except the highest openings of the section under test, and each section shall be filled with water, but no section shall be tested with less than a 10-foot (3048 mm) head of water. In testing successive sections, at least the upper 10 feet (3048 mm) of the next preceding section **shall be tested so that no joint or pipe in the building, except the uppermost 10 feet (3048 mm) of the system, shall have been submitted to a test of less than a 10-foot (3048 mm) head of water.** This pressure shall be held for at least 15 minutes. The system shall then be tight at all points.

You will note that 312.2 states “drainage system” not drainage and venting system. According to the IPC the drainage system is defined as :

DRAINAGE SYSTEM. Piping within a public or private premise that conveys sewage, rainwater or other liquid wastes to a point of disposal. A drainage system does not include the mains of a public sewer system or a private or public sewage treatment or disposal plant.

Section 905.5 states that the vent begins at a point 6 inches above the flood rim of fixture.

905.5 Height above fixtures. A connection between a vent pipe and a vent stack or stack vent shall be made at least 6 inches (152 mm) above the flood level rim of the highest fixture served by the vent. Horizontal vent pipes forming branch vents, relief vents or loop vents shall be at least 6 inches (152 mm) above the flood level rim of the highest fixture served.

Therefore a water test will only be required at the intersection of the vent and the drainage system. Section 312.2 states that the uppermost section is not required having a 10ft. head pressure test.

Section 312. 2 “...uppermost 10 feet (3048 mm) of the system, shall have been submitted to a test of less than a 10-foot (3048 mm) head of water.”

Conclusion: The City of Dallas plumbing inspection will no longer require a water test through the roof. But as outlined in the code as stated prior. Although the requirements for IRC is stated just a little different we will apply this interpretation to both.

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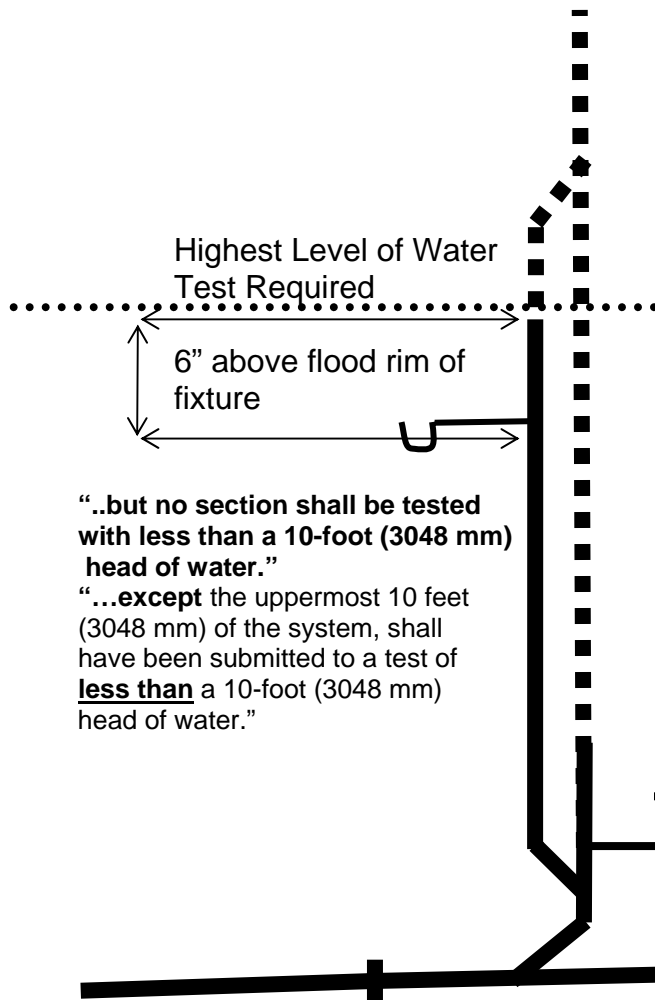
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SUBJECT: Drainage System Testing (2 of 2)



“..but no section shall be tested with less than a 10-foot (3048 mm) head of water.”
“...except the uppermost 10 feet (3048 mm) of the system, shall have been submitted to a test of less than a 10-foot (3048 mm) head of water.”

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SIGNATURE: *Lonnie Erwin,*
Chief Plumbing and Mechanical Inspector
City of Dallas