

Plumbing Permits

Materials

All pipe, pipe fittings, traps, fixtures, material, and devices used in a plumbing system shall be listed or labeled by a listing agency or shall be approved by the Administrative Authority when listing or labeling by a listing agency is not available.

Soil and Waste Lines

Soil and waste lines shall have a uniform slope of not less than one-fourth (1/4) inch to the foot. Cast iron or ABS-DWV Plastic must be used under all structures. ABS-DWV Plastic is limited to structures where combustible construction is allowed. ABS and PVC are not permitted to be exposed on the outside of a building, except for vents projecting through the roof.

All piping in the ground must be laid on a firm soil bed the entire length. No piping shall be built into or embedded in concrete or masonry walls or footings.

All non-metallic yard building sewer shall have an electrically conductive tracer wire (18 ga. minimum) insulated cooper, green in color, installed in the trench for locating the pipe in the future. Trace wire shall run the full length of the installed pipe, one end left above the finished grade at the building end or clean-out next to wall and clearly marked. The other end of the tracer wire shall be spliced into the serving utilities wire, when present.

Drain, Waste and Vent Materials

Drainage and vent piping shall be cast iron (hub and spigot or hubless), galvanized steel, galvanized wrought iron, lead, cooper, brass, schedule 40 ABS DWV, schedule 40 PVC DWV or other approved materials having a smooth and uniform bore, except that no galvanized wrought-iron or galvanized steel pipe shall be used underground and shall be kept at least six (6) inches above ground. Drainage piping shall have a uniform slope of not less than ¼-inch per foot grade.

Water Pipe and Fittings

Water Supply

Materials for underground water-supply systems and water-service pipe, may be a minimum of Type M copper type, brass, or galvanized steel. Underground piping for water-service when installed outside of the foundation walls of the building, may be of pressure-rated plastic conforming to approved standards. The minimum pressure rating shall be 160 p.s.i. at 73 degrees F.

Materials for water-distribution pipes and tubing shall be brass, copper water type minimum Type M, cast-iron pressure pipe, galvanized steel, chlorinated polyvinyl

chloride (CPVC) or tubing, all to be installed with approved fittings. The minimum pressure rating for plastic pipe or tubing shall be 100 p.s.i. at 180 degrees F.

Joints in copper pipe or tube installed in a concrete floor slab or under a concrete floor slab on grade, shall be installed using wrought-copper fittings and brazed joints.

Inadequate Water Pressure

The minimum average residual pressure at the building entrance for either public or private water service shall be 15 p.s.i.

Water Service Pipe Size

The water-service pipe shall be of sufficient size to furnish water to the dwelling in required quantities and pressures, but in no case shall be less than $\frac{3}{4}$ " nominal diameter and per Table 3410.2 of 1998 International 1 & 2 Family Dwelling Code.

Water Service Pipe Installation

Piping shall be installed in trenches so that it rests on solid and continuous bedding. Where over-excavated, the trench shall be back-filled to the proper grade with compacted earth, sand, fine gravel or similar granular material. Piping may not be supported on rocks or blocks at any point. Rocky or unstable soil shall be over-excavated by two or more pipe diameters and brought to the proper grade with suitable compacted granular material. Care shall be exercised in back-filling trenches to avoid rocks, broken concrete, frozen chunks and other rubble until the pipe is covered by at least 12 inches of tamped earth. Backfill shall be placed evenly on both sides of the pipe and tamped to retain proper alignment.

Excessive Water Pressure

Where water pressure is in excess of eighty (80) p.s.i., an approved type pressure regulator shall be installed and the pressure reduced to eighty (80) or less.

Pressure Relief Valves

Pressure-relief valves shall have a relief rating adequate to meet the pressure conditions for equipment being protected. No check or shutoff valve shall be installed between a relief valve and a tank or heating equipment. The discharge pipe shall not be smaller than the relief-valve outlet, shall not be trapped, and shall extend from the valve to a discharge location which will avoid hazard to persons or damage to property.
