Common Plumbing Code Issues

Not having a copy of the 2015 Uniform Plumbing Code.

102.2 Existing Installations.

If you are repairing plumbing or have too replace a drum trap, a new drum trap can be installed. The original installation had to meet the requirements of the adopted code at the time of original installation. A plumbing permit may be required.

102.4 Additions, Alterations, Renovations, or Repairs.

If a bathroom is being remodeled, fixture added or moved, then the new plumbing installation shall be installed to current code standards.

104.1 Permits required.

If drainage, waste, vent, water distribution piping or fitting are replaced, and if shut-off valve or trap is replaced or a fixture relocated, then a plumbing permit is required. You can directly replace a faucet, sink, water closet, waste and overflow, continuous waste, supply tubes etc. without a permit. If a permit is not required a license is not required.

105.2 Required Inspections

Inspections are required before pipes and fitting are buried or covered, along with a final inspection.

301.2 Minimum Standards.

All materials installed in a plumbing system shall be manufactured to a standard, tested to that standard, listed and labeled as required. When purchasing or installing certain plumbing products make sure they are approved for the use proposed.

303.0 Disposal of Liquid Waste.

All fixtures shall be properly connected to the drainage system and shall discharge to a properly designed waste disposal system or public sewer. This would include outside showers.

312.0 Protection of Piping, Materials, and Structures

No plumbing piping shall be directly embedded in concrete or masonry. Sleeve shall be provided to protect the piping system from expansion and contraction. Understand the requirements for drilling and notching structural framing members. Stud guards are required if piping is within one (1) inch of exposed framing.

402.8 Installation.

The installation instructions are part of that fixtures criteria for its’ listing.
403.3 Exposed Pipes and Surfaces.

Water and drain pipes in public bathrooms that are accessible under lavatories and sinks shall be insulated or otherwise protected against contact.

407.4 Transient Public Lavatories.

Self-closing or metered faucets are required when serving the transient public. The water temperature shall be limited to 120 degree.

408.6 Shower Compartments.

Shower compartments needs to be a minimum of 1024 square inch and encompass a 30” diameter circle. The 30” circle measures from the back wall to the center of the threshold.

412.1.1 Nonwater Urinals

A water supplied plumbing fixture shall be located upstream on the urinal’s horizontal branch and water shall be roughed in behind the wall for retrofit.

414.3 Dishwashing Machines Drainage Connection.

The dishwasher shall drain through a dishwasher air-gap fitting located in the proper location or through a drainage air-gap fitting.

601.3 Identification of a Potable and Nonpotable Water Systems.

When potable water piping is installed with nonpotable, heating, reclaimed, recycled on site treated or rainwater the piping needs to be labeled as required.

602.2 Cross-Contamination

Once potable water has been used for any other purpose it is no longer deemed potable.

603.4.4 Connections.

When potable water is discharged to the drainage system, it shall be by means of an air gap two pipe diameters of the supply inlet and no less than one inch.

608.7 Vacuum Relief Valves.

When a hot water fixture outlet is located below the top of a hot water storage tank or indirect fired tank a vacuum relief valve is required.
609.10 Water Hammer Arrestors.

Water hammer arrestors are required on the water supply system when quick acting valves are installed. These valves shall be located as close as possible to the quick acting valves and installed to manufactures installation instructions.

704.2 Single Vertical Drainage Pipe.

Two fixtures set side by side or back to back when drained into a single vertical stack shall be permitted to discharge into an approved double fixture fitting. Double sanitary tees for this application are prohibited unless sized to the requirements of this section.

705.5.2 Solvent Cement Joints.

When joining PVC with solvent cement joints it is a two-step process. Listed primers and solvent cements are required. Purple primer may be required per local ordinance.

Cleanouts.

Cleanouts are required above the fixture connection for each urinal.

710.13.3 Macerating Toilet venting.

Plumbing fixtures that discharge into macerating toilets shall be vented per Chapter 9 of this code.

801.3.3 Food handling Fixtures.

Bins, sinks or other equipment having drainage connections, which food or ice come in contact with shall be provided with an air-gap.

807.1 Appliances.

Commercial dishwashing machine shall be permitted to drain by indirect waste pipe through an air-gap discharging into an approved receptor. They may also be directly connected to the drainage system.

Condensate Waste and Control.

Condensate from fuel burning appliance; which is corrosive, shall always be neutralized, collected and shall discharge into an approved plumbing fixture or disposal area. When discharging into the drainage system it shall drain by means of indirect waste piping through a trapped receptor or standpipe.

905.0 Vent Pipe Grades and Connections.

Vent pipes shall be installed so that any water or condensation shall drain back by gravity to the trap being served. Dry vents shall have its’ invert taken off above the drainage center line of the of such pipe downstream of the trap it serves. Vents less than six (6) inches above the flood level rim of the fixture it serves shall be installed with approved drainage fitting. Wyes and wye and eighth bends are required, not sanitary tees.
908.2 Horizontal Wet Venting for a Bathroom Group.

The dry vent which serves the horizontal wet vent shall be an individual vent for a bidet, shower bathtub, bath/shower unit, or one or two lavatories. If an individual dry vent is install it shall be in accordance with 905.2 and 905.3. The horizontal wet vent shall not be less than two (2) inch for four (4) dfu’s and not less than three (3) inch for five (5) dfu’s or more. Trap arms shall not exceed the limits in table 1003.3. The water closet shall not drain past any unvented trap arm and any additional fixtures not part of the bathroom group shall be conventionally vented an shall not be connected to horizontal wet vented section of the drainage system.

910.0 Combination Waste and Vent Systems.

These systems shall be first approved by the AHJ. Vents shall be installed per 910.3 and branches exceeding 15 fifteen (15) feet shall be individually vented. The vent shall not be less than one half the cross-sectional area of the drain and shall be connect downstream of the uppermost fixture. Each waste pipe and trap shall not be less than two (2) pipe large than required in chapter 7. Branches shall be permitted to have 45 degree vertical offsets and no water closet or urinals shall be installed on such system.

911.0 Circuit Venting

Circuit venting allows up to eight (8) fixture on a horizontal branch, the fixture shall connect to the branch horizontally and the vent shall be a minimum of two (2) inch. The vent shall be located between to two most upstream fixtures and shall be a dry vent. The vent shall be installed in the vertical position.

1001.2 Traps/ Where Required.

One trap shall be permitted to serve a set of not more than three (3) single compartment sinks or lavatories. The trap shall be centrally located.

1002.4 Vent Pipe Opening.

The vent pipe opening from a soil or waste pipe, except water closets or similar fixtures shall not be below the weir of the trap.