

## **.02 Modifications to the International Plumbing Code.**

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A. Chapter 1, SCOPE AND ADMINISTRATION, omit PART 2 — ADMINISTRATION AND ENFORCEMENT in its entirety.

B. Chapter 2 DEFINITIONS.

(1) Insert a new definition after the definition of “NONPOTABLE WATER”. The new defined terms is: “NSF. The standards of the National Sanitation Foundation.”

(2) Delete the definition of “Vent Stack” and replace it with: “Vent Stack. A device to provide positive pressure relief from the base of individual drain stacks having five or more branch intervals.”

C. Chapter 6 WATER SUPPLY AND DISTRIBUTION.

(1) In Section 603 WATER SERVICE, add new subsection 603.3 as follows:

“(a) Underground non-metallic water service piping shall be made detectable by the installation of tracer wiring that complies with Public Utilities Article, §12-129 of the Annotated Code of Maryland.

(i) The wire shall be an insulated copper tracer wire suitable for direct burial, at least 10 AWG, or equivalent. Insulation shall be 30 mil minimum thickness, HMWPE or HDPE polyethylene, and color-coded blue. The wire shall be installed in the same trench as the piping, tied or taped to the pipe every 5 to 8 feet in the 3 o'clock position or installed within 12 inches of the pipe in fill. One end of the wire shall terminate within five feet of the building served, at or above grade, accessible for use, and resistant to physical damage.

(b) Tracer wiring installations shall be tested by location with line tracing equipment upon completion of rough grading and again prior to final acceptance.”

(2) In Section 605 WATER SERVICE PIPE:

(a) In Table 605.3, under “Material,” delete “Type M” from “Copper or copper-alloy tubing”.

(b) In subsection 605.4 in the second sentence, add the words “and cold” after “hot”.

(c) In subsection 605.5, after the last sentence, add: “Push-Fit joints shall not be installed below grade.”

(3) In Section 606 INSTALLATION OF THE BUILDING WATER DISTRIBUTION SYSTEM, in subsection 606.2, number 2, after “sillcock”, add “hose bibb”.

(4) In Section 607 HOT WATER SUPPLY SYSTEM:

(a) In subsection 607.2, in the first sentence, delete “50” and replace with “75”.

(b) In subsection 607.3, add exceptions as follows:

Exception: Instantaneous water heaters according to manufacturer’s instructions.

Hot water supply systems with water pressure tanks.

(5) In Section 608 ORITECTON OF POTABLE WATER SUPPLY, after Section 608.3.1, add new subsections as follows:

“(a) Connection to the potable water supply system for the following shall be protected against backflow:

(i) Operating, dissection, embalming and mortuary tables or similar equipment; in these installations, the hose used for water supply shall terminate at least 12 inches away from every point of the table or attachments;

(ii) Water closets equipped with flushometer valves or with flushing tanks with submerged float operated ball-cocks;

(iii) Seat-acting water closets;

(iv) Bed pan washers;

(v) Bidets;

(vi) Sterilizers with water supply connections;

(vii) Therapeutic baths with inlets below the rim of the fixture;

(viii) Water operating waste ejectors, such as used by dentists, undertakers and those who practice colonic irrigation;

(ix) Bathtubs with inlets below the rim of the fixture;

(x) Wash basins with inlets below the rim of the fixture;

(xi) Bar, soda fountain, or other sinks with submerged inlets;

(xii) Laundry trays with faucets below the rim;

- (xiv) Sinks with faucets or water inlets below the rim and sinks with loose hose connections;
- (xv) Dishwashing sinks or machines with water inlets below the rim;
- (xvi) Cuspidors with water supply connections;
- (xviii) Dental cuspidors with water supply connections;
- (xix) Hospital appliances generally, such as sterilizers, condensers, filters, stills, pipette washers, aspirators, and washers;
- (xx) Frostproof hydrants with underground bleed or automatic livestock watering devices;
- (xxi) Industrial vats, tanks, etc. of any description which have an inverted water supply connection, or a water supply connection below the top of the spill rim, or in which a hose filler is used;
- (xxii) Industrial water supplied process appliances with direct water connections;
- (xxiii) A rubber hose with hand control or self-closing faucets attached, as used in connection with baths, industrial vats, tanneries, etc.;
- (xxiv) Pressure water supplied sealing rings on sewage and sludge pumps;
- (xxv) Water supply for priming connections;
- (xxvi) Water supply (hot or cold) to laundry equipment;
- (xxvii) Condenser cooling connections for refrigeration and air conditioning machinery;
- (xxvii) Drains from fire sprinklers connected directly to sewers or wastes;
- (xxviii) Steam tables;
- (xxix) Condensers;
- (xxx) Stills;
- (xxxi) Aspirators;
- (xxxii) Chlorinators;
- (xxxiii) Photographic developing tanks;
- (xxxiv) Laboratory water faucets and cocks with serrated nipples or hose connections; and
- (xxxv) Any other fixture or installation creating a similar hazard.

(b) Fixture inlets or valved outlets with hose attachments which may constitute a cross-connection shall be protected by an approved vacuum breaker installed at least 6 inches above the highest point of usage and located on the discharge side of the last valve. Fixtures with integral vacuum breakers manufactured as a unit may be installed in accordance with their approval requirements.”

#### D. Chapter 7 SANITARY DRAINAGE.

(1) In Section 703 BUILDING SEWER, add new subsections that read as follows:

“(a) Building Sanitary Sewer Tracer Wiring. Underground building sanitary sewer non-metallic piping shall be made detectable by the installation of tracer wiring that complies with Public Utilities Article, §12-129 of the Annotated Code of Maryland.

(b) The wire shall be an insulated copper tracer wire suitable for direct burial, at least 10 AWG, or equivalent. Insulation shall be 30 mil minimum thickness, HMWPE or HDPE polyethylene, and color-coded green. The wire shall be installed in the same trench as the piping, tied or taped to the pipe every 5 to 8 feet in the 3 o’clock position or installed within 12 inches of the pipe in fill. One end of the wire shall terminate within five feet of the building served, at or above grade, accessible for use, and resistant to physical damage.

(c) Tracer wiring installations shall be tested by location with line tracing equipment upon completion of rough grading and again prior to final acceptance.”

(2) In Table 710.1(2), replace the language of note “b.” with “The size of the drain stack should be maintained full-size to its stack vent to provide the air associated with the high velocity drain flow that the vent stack is relieving at its base.”

E. Chapter 8 INDIRECT/SPECIAL WASTE. In Section 802 INDIRECT WASTES, subsection 802.1.4, after final sentence, add “No outside deck drain or surface water drain shall enter sanitary sewer.”

#### F. Chapter 9 VENTS.

(1) In Section 904 OUTDOOR VENT EXTENSIONS, subsection 904.3, after “outdoors”, delete the remainder of the sentence.

(2) In Section 905 VENT CONNECTIONS AND GRADES, subsection 905.1, substitute the following text:

“Individual vents, common vents, branch vents, and circuit vents should not be connected to vent stacks. They should connect to stack vents, other atmospheric vent piping, or be extended to an outdoor vent terminal. Air admittance valves may be used where permitted as set forth in Section 918.”

(3) In Section 918 AIR ADMITTANCE VALVES:

(a) In subsection 918.3, omit second sentence;

(b) Omit subsection 918.3.1 in its entirety.

(c) In subsection 918.3.2, after “vent terminal for” omit, “vent stacks or”; and

(d) In subsection 918.8, omit the third sentence: “Air admittance valves shall not be used to vent sumps or tanks except where the vent system for the sump or tank has been designed by an engineer.” The revised paragraph should read as follows:

“Air admittance valves shall not be installed in nonneutralized special waste systems as described in Chapter 8 except where such valves are in compliance with ASSE 1049, are constructed of materials approved in accordance with section 702.5 and are tested for chemical resistance in accordance with ASTM F1412. Air admittance valves shall not be located in spaces utilized as supply or return air plenums. Air admittance valves shall not be installed on outdoor vent terminals for the sole purpose of reducing clearances to gravity air intakes of mechanical air intakes.”

G. Chapter 11 STORM DRAINAGE. In Section 1101 GENERAL, add new subsection 1101.10 as follows:

“(a) Building Storm Sewer Tracer Wiring. Underground building storm sewer non-metallic piping shall be made detectable by the installation of tracer wiring that complies with Public Utilities Article, §12-129 of the Annotated Code of Maryland.

(b) The wire shall be an insulated copper tracer wire suitable for direct burial, at least 10 AWG, or equivalent. Insulation shall be 30 mil minimum thickness, HMWPE or HDPE polyethylene, and color-coded green. The wire shall be installed in the same trench as the piping, tied or taped to the pipe every 5 to 8 feet in the 3 o'clock position or installed within 12 inches of the pipe in fill. One end of the wire shall terminate within five feet of the building served, at or above grade, accessible for use, and resistant to physical damage.

(c) Tracer wiring installations shall be tested by location with line tracing equipment upon completion of rough grading and again prior to final acceptance.”

H. Chapter 12 STORAGE PIPING AND STORAGE SYSTEMS. In Section 1202 MEDICAL GASES, subsection 1202.1, omit Exception 2.