

410.0 Flushing Devices for Water Closets and Urinals.

410.1 Flushing Devices Required. Each water closet, urinal, clinic sink, or other plumbing fixture that depends on trap siphonage to discharge its waste contents shall be provided with a flushometer valve, flushometer tank, or flush tank designed and installed so as to supply water in sufficient quantity and rate of flow to flush the contents of the fixture to which it is connected, to cleanse the fixture, and to refill the fixture trap without excessive water use. Flushing devices shall meet anti-siphon requirements required in Section 603.4.

410.2 Automatic Flushing Tanks. Automatic flushing tanks for urinals shall not be used to prevent excessive usage of water. However, manually/automatically controlled flushing devices shall be installed with each urinal.

410.3 Flushometer Valves. No manually controlled flushometer valve shall be used to flush more than one urinal, and each such urinal flushometer valve shall be an approved, self-closing type discharging a predetermined quantity of water. Flushometers shall be installed so that they will be accessible for repair. Flushometer valves shall not be used where the water pressure is insufficient to properly operate them. When the valve is operated, it shall complete the cycle of operation automatically, opening fully and closing positively under the line water pressure. Each flushometer shall be provided with a means for regulating the flow through it.

410.4 Water Supply for Flush Tanks. An adequate quantity of water shall be provided to flush and clean the fixture served. The water supply for flushing tanks and flushometer tanks equipped for manual flushing shall be controlled by a float valve or other automatic device designed to refill the tank after each discharge and to completely shut off the water flow to the tank when the tank is filled to operational capacity. Provision shall be made to automatically supply water to the fixture so as to refill the trap seal after each flushing.

410.5 Overflows in Flush Tanks. Flush tanks shall be provided with overflows discharging into the water closet or urinal connected thereto. Overflows supplied as original parts with the fixture shall be of sufficient size to prevent tank flooding at the maximum rate at which the tank is supplied with water under normal operating conditions and when installed per manufacturer's instructions.

411.0 Floor Drains and Shower Stalls.

411.1 Floor drains shall be considered plumbing fixtures, and each such drain shall be provided with an

approved-type strainer having a waterway equivalent to the area of the tailpiece. Floor drains, floor receptors, and shower drains shall be of an approved type, suitably flanged to provide a water-tight joint in the floor.

411.2 Location of Floor Drains. Floor drains shall be installed in the following areas:

411.2.1 Toilet rooms or ablution rooms containing water closets, urinals, hand-held sprays, or any combination thereof, containing two or more water closets or a combination of one water closet and one urinal.

411.2.2 Commercial kitchens and in accordance with Section 704.3.

411.2.3 Laundry rooms in commercial buildings and common laundry facilities in multi-family dwelling buildings.

411.3 Food Storage Areas. If drains are provided in storerooms, walk-in freezers, walk-in coolers, refrigerated equipment, or other locations where food is stored, such drains shall have indirect waste piping. Separate waste pipes shall be run from each food storage area, each with an indirect connection to the building sanitary drainage system. Traps shall be provided where required under Section 803.0 of this code and shall be vented.

Indirect drains shall be permitted to be located in freezers or other spaces where freezing temperatures are maintained, provided that traps, when supplied, are located where the seal will not freeze. Otherwise, the floor of the freezer shall be sloped to a floor drain located outside of the storage compartment.

411.4 Floor Slope. Floors shall be sloped to floor drains where drainage occurs on a regular or frequent basis, or as otherwise required by the Authority Having Jurisdiction.

411.5 Shower receptors are plumbing fixtures and shall conform to the general requirements contained in Section 401.0. Each such shower receptor shall be constructed of vitrified china or earthenware, ceramic tile, porcelain-enamelled metal, or of such other material acceptable to the Authority Having Jurisdiction. No shower receptor shall be installed unless it conforms to acceptable standards as referenced in Table 14-1, equivalent International Standard(s) approved by the Authority of Having Jurisdiction or until a specification or a prototype or both of such receptor has first been submitted to and approval obtained from the Authority Having Jurisdiction.

411.6 Each shower receptor shall be an approved type and be so constructed as to have a finished dam, curb, or threshold that is not less than 25mm (1 in.) lower than the sides and back of such receptor. In