

710.10 Sumps and receiving tanks shall be provided with substantial covers having a bolt-and-gasket-type manhole or equivalent opening to permit access for inspection, repairs, and cleaning. The top shall be provided with a vent pipe that shall extend separately through the roof or, where permitted, be combined with other vent pipes. Such vent shall be large enough to maintain atmospheric pressure within the sump under normal operating conditions and, in no case, shall be less in size than that required by Table 7-4 for the number and type of fixtures discharging into the sump, nor less than 4cm (1.5 in.) in diameter. When the foregoing requirements are met and the vent, after leaving the sump, is combined with vents from fixtures discharging into the sump, the size of the combined vent need not exceed that required for the total number of fixtures discharging into the sump. No vent from an air-operating sewage ejector shall combine with other vents.

710.11 Air tanks shall be so proportioned as to be of equal cubical capacity to the ejectors connected therewith in which there shall be maintained an air pressure of not less than 3kg for each metre (2 pounds for each foot) of height the sewage is to be raised. No water-operated ejectors shall be permitted.

710.12 Grinder Pump Ejector. Grinder pumps shall be permitted to be used.

710.12.1 Discharge Piping. The discharge piping shall be sized per the manufacturer's instructions and shall be not less than 32mm (1-1/4 in.) in diameter. A check valve and fullway-type shutoff valve shall be located within the discharge line.

710.13 Macerating Toilet Systems. Listed macerating toilet systems shall be permitted as an alternate to a sewage pump system when approved by the Authority Having Jurisdiction.

710.13.1 Sumps. The sump shall be water- and gas-tight.

710.13.2 Discharge Piping. The discharge piping shall be sized per manufacturer's instructions and shall be not less than 20mm (3/4 in.) in diameter. The developed length of the discharge piping shall not exceed the manufacturer's recommendations. A check valve and fullway-type shutoff valve shall be located within the discharge line or internally within the device.

710.13.3 Venting. The plumbing fixtures that discharge into the macerating device shall be vented per this code. The sump shall be vented per manufacturer's instructions and such vent shall be permitted to connect to the fixture venting.

711.0 Suds Relief.

Drainage connections shall not be made into a drainage piping system within 2.4m (8 ft.) of any vertical to horizontal change of direction of a stack containing suds-producing fixtures. Bathtubs, laundries, washing machine standpipes, kitchen sinks, and dishwashers shall be considered suds-producing fixtures. Where parallel vent stacks are required, they shall connect to the drainage stack at a point of 2.4m (8 ft.) above the lowest point of the drainage stack.

Exceptions:

- (1) Single-family residences.
- (2) Stacks receiving the discharge from less than three stories of plumbing fixtures.

712.0 Testing.

712.1 Media. The piping of the drainage, waste, and venting systems (DWV) shall be tested with water or air, except that plastic pipe shall not be tested with air. The Authority Having Jurisdiction shall be permitted to require the removal of any cleanouts, etc., to ascertain whether the pressure has reached all parts of the system. After the plumbing fixtures have been set and their traps filled with water, they shall be submitted to a final test.

712.2 Water Test. The water test shall be applied to the drainage and vent systems either in its entirety or in sections. If the test is applied to the entire system, openings in the piping shall be tightly closed, except the highest opening, and the system filled with water to point of overflow. If the system is tested in sections, each opening shall be tightly plugged, except the highest opening of the section under test, and each section shall be filled with water, but no section shall be tested with less than a 3m (10 ft.) head of water. In testing successive sections, not less than the upper 3m (10 ft.) of the next preceding section shall be tested, so that no joint or pipe in the building [except the uppermost 3m (10 ft.) of the system] shall have been submitted to a test of less than a 3m (10 ft.) head of water. The water shall be kept in the system, or in the portion under test, for not less than 15 minutes before inspection starts. The system shall then be tight at points.

712.3 Air Test. The air test shall be made by attaching an air compressor testing apparatus to any suitable opening and, after closing all other inlets and outlets to the system, forcing air into the system until there is a uniform gauge pressure of 35kPa (5 psi) or sufficient to balance a column of mercury 25cm (10 in.) in height. The pressure shall be held without introduction of additional air for a period of not less than 15 minutes.