

# CHAPTER 10

## TRAPS AND INTERCEPTORS

### 1001.0 Traps Required.

**1001.1** Each plumbing fixture, excepting those having integral traps or as permitted in Section 1001.2, shall be separately trapped by an approved type of liquid seal trap. Not more than one trap shall be permitted on a trap arm.

**1001.2** One trap shall be permitted to serve a set of not more than three single compartment sinks or laundry tubs of the same depth or three lavatories immediately adjacent to each other and in the same room if the waste outlets are not more than 80cm (30 in.) apart and the trap is centrally located when three compartments are installed.

**1001.3** No food waste disposal unit shall be installed with any set of restaurant, commercial, or industrial sinks served by a single trap; each such food waste disposal unit shall be connected to a separate trap. Each domestic clothes washer and each laundry tub shall be connected to a separate and independent trap, except that a trap serving a laundry tub shall be permitted to receive the waste from a clothes washer set adjacent thereto. No clothes washer or laundry tub shall be connected to any trap for a kitchen sink.

**1001.4** The vertical distance between a fixture outlet and the trap weir shall be as short as practicable, but in no case shall the tailpiece from any fixture exceed 60cm (2 ft.) in length.

### 1002.0 Traps Protected by Vent Pipes.

**1002.1** Each plumbing fixture trap, except as otherwise provided in this code, shall be protected against siphonage and back-pressure, and air circulation shall be assured throughout all parts of the drainage

system by means of a vent pipe installed in accordance with the requirements of this code.

**1002.2** Each fixture trap shall have a protecting vent so located that the developed length of the trap arm from the trap weir to the inner edge of the vent shall be within the distance given in Table 10-1, but in no case less than two times the diameter of the trap arm.

**1002.3** A trap arm shall be permitted to change direction without the use of a cleanout when such change of direction does not exceed 1.6 radian (90 degrees). All horizontal changes in direction of trap arms shall comply with Section 706.3.

**Exception:** For trap arms 80mm (3 in.) in diameter and larger, the change of direction shall not exceed 2.4 radian (135 degrees) without the use of a cleanout.

**1002.4** The vent pipe opening from a soil or waste pipe, except for water closets and similar fixtures, shall not be below the weir of the trap.

### 1003.0 Traps — Described.

**1003.1** Each trap, except for traps within an interceptor or similar device, shall be self-cleaning. Traps for bathtubs, showers, lavatories, sinks, laundry tubs, floor drains, urinals, drinking fountains, dental units, and similar fixtures shall be of standard design and weight and shall be of ABS, cast brass, cast-iron, PP, PVC, or other approved material. An exposed and readily accessible drawn-brass tubing trap, not less than 1mm (0.045 in.) (No. 17 B&S Gauge), shall be permitted to be used on fixtures discharging domestic sewage. Drum and bottle traps shall be permitted for special conditions and approved by the Authority Having Jurisdiction.

**TABLE 10-1**  
**Horizontal Lengths of Trap Arms**  
**(Except for water closets and similar fixtures)\***

Trap Arm Pipe Diameter mm	Distance Trap to Vent Minimum mm	Length Maximum m
32	65	0.8
40	80	1.0
50	100	1.5
80	150	1.8
100	200	3.0
Exceeding 100	2 × Diameter	3.0

Maintain 20mm/m (1/4 in./ft.) slope.

\* The developed length between the trap of a water closet or similar fixture (measured from the top of the closet, flange to the inner edge of the vent) and its vent shall not exceed 1.8m (6 ft.).

SI: 1mm= 0.04 in.; 1m= 3.3 ft.