

CHAPTER 10

TRAPS

1001 GENERAL

1001.1 Scope

The provisions of this chapter shall govern the materials and installation of traps.

1001.2 Trap Seal

Each fixture trap shall have a water seal of not less than 2 inches (51 mm) and not more than 4 inches (102 mm), except where a deeper seal is required by the plumbing official for special conditions.

1001.3 Trap Level and Protection

Traps shall be set level with respect to their water seals.

1001.4 Traps Underground

Underground traps, except "P" traps into which floor drains with removable strainers discharge, shall be provided with accessible and removable cleanouts.

1001.5 Prohibited Traps

1001.5.1 A trap which depends for its seal upon the action of movable parts shall not be used.

1001.5.2 "S" traps shall be prohibited, except for water closets, clinic sinks, urinals and similar fixtures with integral traps.

1001.5.3 Bell traps shall be prohibited.

1001.5.4 Crown-vented traps shall be prohibited.

1001.5.5 Baffled or partition traps other than stainless steel, glass, plastic or similar corrosion resistant materials shall be prohibited.

1001.5.6 Tubular metallic traps of less than 20 gage [0.0320 inch (0.813 mm)] thickness shall be prohibited.

1001.5.7 Running traps shall be prohibited.

1001.6 Double Trapping

A fixture shall not be double trapped.

EXCEPTION: Fixtures in mobile/manufactured homes and travel trailers are allowed to be double trapped when a trailer trap is required to be placed in the building sewer/sewer lateral as per 1003.5, B108.10, B112, C107.5.1 or C112.

1001.7 Unions (Threaded)

Unions may be used in the trap seal and on the inlet side of the trap. Unions shall have metal-to-metal seats.

1001.8 Number of Traps Per Fixture

1001.8.1 Plumbing fixtures, excepting those having integral traps, shall be separately trapped by a water seal trap, placed as close to the fixture outlet as possible.

1001.8.2 A combination plumbing fixture may be installed on one trap, if one compartment is not more than 6 inches (152 mm) deeper than the other and the waste outlets are not more than 30 inches (762 mm) apart.

1001.8.3 One trap may be installed for a set of not more than three single-compartment sinks or laundry trays or three lavatories immediately adjacent to each other in the same room, if the waste outlets are not more than 30 inches (762 mm) apart and the trap is centrally located when three compartments are installed.

1001.9 Distance of Trap to Fixture

1001.9.1 The vertical distance from the fixture outlet to the trap weir, or from the outlet of an integrally trapped water closet or similar fixture to the horizontal piping connecting the fixture to its vent, shall not exceed 24 inches (610 mm), except for washing machine (laundry) drains where such distance shall not exceed 48 inches (1219 mm).

1001.9.2 The distance from a vertical standpipe inlet for a washing machine drain to the trap weir shall be a minimum of 30 inches (762 mm) with the vertical standpipe inlet a minimum of 34 inches (864 mm) above finished floor or in accordance with the manufacturer's recommendation.

1002 DEFINITIONS

This chapter contains no unique definitions. For general definitions, see Chapter 2.

1003 TYPE AND SIZE OF TRAPS AND FIXTURE DRAINS

1003.1 Trap Size

The size (nominal diameter) of a trap for a given fixture shall be sufficient to drain the fixture rapidly but in no case less than given in Table 713.1.

1003.2 Relation to Fixture Drains

A trap shall not be larger than the fixture drain to which it is connected.

1003.3 Type of Traps

1003.3.1 Fixture traps shall be self-cleaning, other than integral traps, without partitions or movable parts, except as specifically approved in other sections of this code.

1003.3.2 Slip joints may be used on both sides of the trap and in the trap seal.

1003.3.3 A trap which is integral with the fixture shall have a uniform interior and a smooth waterway.

1003.4 Drum Traps

1003.4.1 Drum traps shall be limited to special fixtures designed for drum traps and are subject to approval by the plumbing official. They shall be not less than 4-inch diameter and shall have a water seal of not less than 2 inches (51 mm).

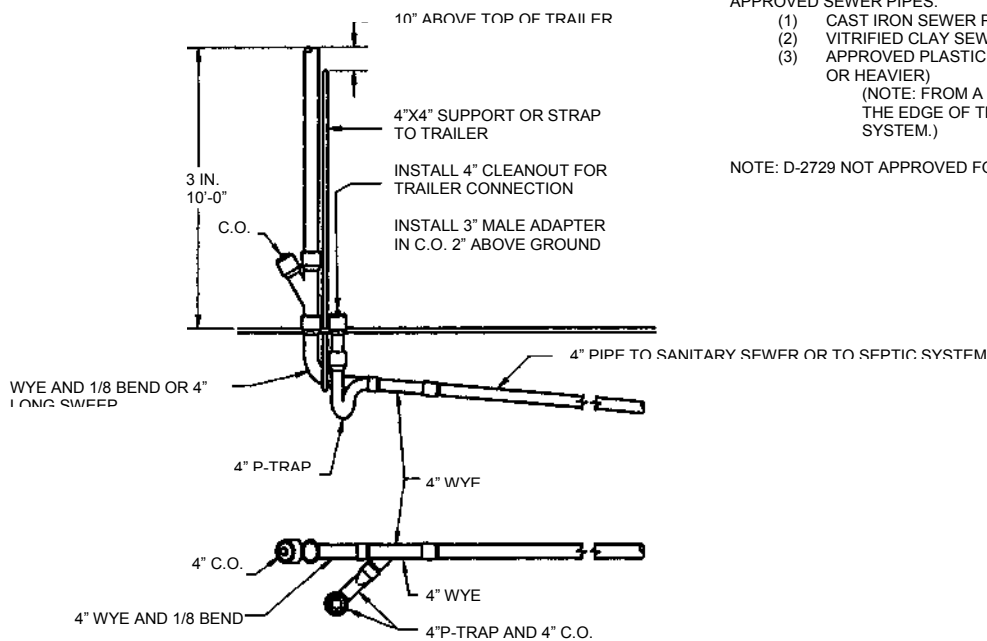
1003.4.2 The trap screw shall be one size less than the trap diameter.

1003.5 Trailer Traps

Mobile/manufactured homes and travel trailers shall be provided with a trailer trap in the building sewer/sewer lateral immediately downstream of the mobile/manufactured home or travel trailer drain outlet connection. The trailer trap shall be individually vented and the vent shall be located downstream of the trap at a distance in accord with Table 908.1. Running traps are prohibited for this installation. (See diagram under B112 or C112.)

EXCEPTION: The trailer trap for a mobile/manufactured home or travel trailer is not required to be provided with an individual vent if the mobile/manufactured home or travel trailer is connected to a park drainage system constructed in accord with B108.7 and the building sewer/sewer lateral is no longer than 30 feet (9144 mm) from the main park drainage sewer. (See B108.10 and C107.5.1)

TRAILER TRAP AND VENT



APPROVED MATERIALS FOR TRAP AND VENT

- (1) CAST IRON SEWER PIPE
- (2) ABS OR PVC PLASTIC PIPE AND FITTINGS SCH. 40
(NOTE: DO NOT MIX ABS AND PVC PIPE AND/OR FITTINGS.)

APPROVED SEWER PIPES:

- (1) CAST IRON SEWER PIPE
- (2) VITRIFIED CLAY SEWER PIPE
- (3) APPROVED PLASTIC PIPE AND FITTINGS (MIN. SDR 35 OR HEAVIER)
(NOTE: FROM A POINT AT LEAST 3 FEET OUTSIDE THE EDGE OF THE TRAILER TO SEWAGE SYSTEM.)

NOTE: D-2729 NOT APPROVED FOR ANY PART OF THE SYSTEM

1004 INTERCEPTORS AND SEPARATORS

1004.1 When required

Interceptors or separators shall be provided for the proper handling of liquid wastes containing grease, oil, flammable waste, sand, solids or other ingredients harmful to the building drainage system, the public or private sewer or sewage treatment plant or processes except when, in the opinion of the Plumbing Official, they are not necessary.

1004.2 Size and Type

The size, type and location of each interceptor or separator shall be approved by the plumbing official.

1004.3 Type of Waste

No wastes other than those requiring treatment or separation shall be discharged into any interceptor or separator except where otherwise specifically permitted.

1004.4 Grease Traps/Grease Interceptors

An approved type grease trap/grease interceptor, complying with the provisions of this section and Appendix M of this code, shall be installed in the waste line leading from sinks, drains and other fixtures or equipment in establishments such as restaurants; cafes; lunch counters; cafeterias; bars and clubs; hotels; hospitals; sanitariums; factory, school or day care center kitchens; markets; or other establishments where grease may be introduced into the drainage or sewage system in quantities that can affect line stoppage or hinder sewage treatment or private sewage disposal, except when, in the opinion of the Plumbing Official, they are not necessary.

1004.5 Oil Separators

An oil separator shall be installed in the drainage system section of the system where, in the opinion of the plumbing official, a hazard exists or where oils or other flammables can be introduced or admitted into the drainage system by accident or otherwise.

1004.6 Sand Interceptors

Sand and similar interceptors for heavy solids shall have a water seal of not less than 2 inches (51 mm).

1004.7 Venting Interceptors

Interceptors shall be so designed that they will not become air bound if closed covers are used. Each interceptor shall be properly vented.

1004.8 Accessibility Of Interceptors

Each interceptor shall be so installed as to provide ready accessibility to the cover and means for servicing and maintaining the interceptor in working and operating condition. The use of ladders or the removal of bulky equipment in order to service interceptors shall constitute a violation of accessibility.

1004.9 Water Connection

If permitted by the Plumbing Official, water connection for cooling or operating an interceptor shall be such that backflow cannot occur.

1004.10 Special Occupancy Provisions

1004.10.1 Laundries.

1004.10.1.1 Interceptors. Commercial laundries shall be equipped with an interceptor having a removable wire basket or similar device that will prevent strings, rags, buttons, or other materials detrimental to the public sewerage system from passing into the drainage system.

1004.10.1.2 Intercepting Device. A basket or other device shall prevent passage into the drainage system of solids 1/2 inch (12.7 mm) or larger in size. The basket or device shall be removable for cleaning purposes.

1004.10.2 Bottling Plants. Bottling plants shall discharge their process wastes into an interceptor which will provide for the separation of broken glass or other solids, before discharging liquid wastes into the drainage system.

1004.10.3 Slaughter House Drains. Slaughtering room drains shall be equipped with separators which shall prevent the discharge into the drainage system of feathers, entrails and other materials likely to clog the drainage system.

1004.11 Food Service

1004.11.1 Commercial Food Grinders

Where commercial food-waste grinders are installed, the waste from those units shall discharge through a grease trap.

1004.11.2 Wash Racks

Every wash rack and/or floor or slab used for cleaning shall be adequately protected against storm or surface water and shall drain or discharge into an interceptor of an approved design for this use.

1004.12 Maintenance

1004.12.1 Grease Traps and Grease Interceptors.

Grease traps and grease interceptors shall be maintained in efficient operating condition by periodic removal of the accumulated grease. No such collected grease shall be introduced into any drainage piping, or public or private sewer.

1004.12.2 Interceptors and Separators in General.

Interceptors and separators of all types shall be maintained in efficient operating condition by periodic removal of accumulated material for which the interceptor or separator has been designed. No such collected material shall be introduced into any drainage piping, or public or private sewer.

1004.13 Special Type Separators

The plumbing official may require the submittal of drawings and other pertinent information.

