

Food Establishment Plumbing Requirements Guide

PLUMBING FIXTURE REQUIREMENTS

Utensil Washing Sink

A utensil washing sink, normally one or three compartments, with all compartments/basins sized to immerse the largest item to be washed, must be provided. Three compartment sinks are generally required for all food facilities preparing potentially hazardous food. An exemption to a three-compartment sink will be based upon individual review of menu and complexity of operation. Plumbing Code requires a direct connection for a utensil washing sink which may or may not have a grease trap.

Grease Trap or Interceptor

The mandatory installation and sizing of grease trap units are regulatory requirements governed by the Industrial Waste Unit of the Water Department. The piping to the grease trap is regulated by the Plumbing Code. A sink plumbed to a grease trap may not have the normally required trapped drain. In particular food processing applications when significant quantities of grease or fat may be discharged a grease trap may precede the required indirect waste connection. The installation of a grease trap must allow for adequate clearance, at least six inches, between it and adjacent equipment or walls so as to facilitate cleaning of the area. In addition, the location of the grease trap must allow for easy servicing and maintenance of the unit itself.

Hand Washing Facilities

Conveniently located hand washing facilities are required for all food service areas. Hand washing sinks in toilet rooms are not approved as a means of meeting this requirement. The use of a sink other than a specific hand wash sink, i.e. utility sink, janitorial sink, garbage grinder sink, for meeting hand washing facility requirements may be considered upon review of the operation and facility design and approval by the food protection services plan review unit.

Food Preparation

A separate food preparation sink plumbed with an indirect waste connection to the plumbing system is required when menu or food preparation practices dictate the need for such equipment. Typically, full service restaurants, salad bar, and seafood operations require food preparation sinks.

Installation Location Criteria

Food preparation sinks as well as other food contact surfaces must be protected from potential sources of contamination. Example: A minimum separation space of two feet is required between a food preparation sink and adjacent hand wash or utensil sink. An approved physical barrier may be considered as an alternative means of protection.

Garbage Grinders

Food establishments installing garbage grinders in accordance with the Streets Department requirements must comply with Plumbing Code and Health Code requirements. Due to physical plumbing requirements for the installation of commercial grinders their installation is normally limited to being provided in a separate dedicated sink or as part of an automated dishwashing system; i.e., scrap sink or scraping trough. When appropriate, the separate grinder sink may be approved for use to meet hand washing facility requirements. When the primary purpose of a grinder is for waste from food preparation, installation of a garbage grinder as an integral component of the food preparation equipment will be evaluated upon specific request. Garbage grinder installation requires a direct connection to the plumbing system and must not be connected to a grease trap.

Mop Waste

Adequate approved facilities for discharging mop water is required. A floor mounted basin is recommended for ease of use; however, janitor's closets and utility sinks are also commonly used facilities. Discharge of cleaning waste to City streets or sewer inlets is prohibited.

Exterior Refuse Storage

Exterior refuse storage areas when permitted by licensure are required to have facilities for cleaning and maintaining the area in a sanitary condition. All new facilities must have this area properly sloped to a drain which is installed in accordance with the Philadelphia Plumbing Code.

Water Requirements

Sufficient hot water to meet the peak demands of the establishment operation must be provided. A guide to determining peak demand may include totaling the following typical usage:

1. Utensil sink capacity of two compartments.
231 cubic inches = one gallon
2. Hand wash sinks = 6 gallon/hour
3. Mop sink = 10 gallons/hour
4. Dish machine = Rated use per hour

Hot water demand is normally calculated for a two hour time period, which would be compared to the hot water heater storage capacity and recovery rate over a two hour period of time.

Water Supply Protection

1. Approved backflow prevention devices must be installed on the building water main (i.e., RPZ, reduced pressure zone device, double check valve assembly).
2. Approved backflow prevention devices must be installed on all direct potable water connections to food service equipment (i.e. soda dispensing systems, coffee machines) and potential cross connections (i.e. hose bibbs).
3. The use of water line tapping devices to supply soda systems, ice machines, etc. is not approved. The establishment operator is responsible for having appropriate connections available with approved vacuum breakers for such installations.
4. Cross connections between potable and non-potable sources and submerged inlets must be eliminated.

Waste Water Drainage

1. All food preparation, processing, dispensing etc. equipment must be properly designed to have all liquid waste discharge to the plumbing system by an indirect waste connection.
2. Indirect waste drains must be properly air gapped, two times the pipe diameter minimum.
3. Indirect waste drains must be located to provide easy sight and cleaning access.
4. The indirect waste receptacles, hub drains, funnel drains, floor sinks, etc. must provide effective capture of the discharge.

Plumbing Code Notations

1. All drain lines must be properly trapped at the highest practical point of the discharge line.
2. All piping must be of approved materials; i.e. plastic piping is not approved.
3. All piping diameter size must be approved for the fixture. Example: Walk-in refrigeration unit evaporator pan has factory supplied 1/2 inch drain.
4. All indirect waste drain fixtures must be at least one inch above the floor level.
5. Floor drains are required in all rooms where floors are subjected to the flooding type cleaning or where normal operations release or discharge water or liquid waste on the floor. Floor drains are to have flooring sloped to the drain.

Sanitary Installation Practices

1. Traps must be located a sufficient height above the floor to facilitate cleaning.
2. Drain lines that run under equipment must be elevated off floor to promote cleaning access.
3. Drain lines that run along the wall must be spaced a minimum of one inch to provide cleaning access or a properly designed and sealed chase or enclosure should be used.
4. All wall, floor, ceiling penetrations must be properly sealed.
5. Sleeves are required when approved permanent sealing of lines running through building structures can not be done. Example: Soda supply lines passing through a wall between rooms must have a sleeve installed through which the lines will run.
5. A leak proof sanitary trough must be installed under any overhead soil line that is exposed within a food preparation area.