

## SINKS / DISHMACHINES

### Food Preparation Sink

A separate stainless steel sink must be provided in establishments where food preparation occurs or could occur (e.g., washing or trimming produce, soaking food, washing meat, thawing food under running water, etc.). The sink must have at least one compartment and either an integral stainless steel drain-board or be part of an integral stainless steel worktable. This sink is to be situated in a manner protected from potential sources of cross-contamination. For example, the food preparation sink must not be located next to the janitorial sink unless separated by an approved waterproof partition. Other requirements include:

- Food preparation sinks must drain to the sanitary sewer via an indirect waste receptacle (i.e., floor sink or funnel drain).
- When a food preparation sink is installed adjacent to a wall, a stainless steel, FRP, or ceramic tile backsplash, extending up the wall at least 8 feet from the top of the cove base, is to be installed.
- Additional food preparation sinks may be required depending on the type of operation. For example, the use of different food preparation sinks may be required for produce and raw meat items; a separate food preparation sink just for raw seafood is required in a sushi bar.
- Separate areas within a large facility are required to have their own food preparation sink(s).
- Preparing meat or produce items "off-site" does not preclude the requirement for a food preparation sink if these items are handled at a facility.
- Food preparation sinks are not to be used for hand washing, utensil washing, the disposal of mop water or other wastes, or any other unapproved purpose.
- A minimum of 18"x 18" x 12" deep with an integral drain board or adjacent table at least 18"x18" in length and width.

### Utensil Washing Sink

The proper washing of utensils consists of a three-step process. After scraping off food debris, the utensils are cleaned in warm, soapy water; then rinsed clean of soap; and finally, the utensils are sanitized by soaking in warm sanitizer solution. After the sanitizing step, the utensils are then air-dried. Where any utensils are used (e.g., customer multi-use, kitchen, serving, beverage machine heads or taps, etc.) a stainless steel 3-compartment sink with dual integral drain-boards is required. Each sink compartment accommodates one of the washing steps described above. Even facilities that only make coffee (coffee pot) or sell unpackaged jerky (serving tongs) or make ice (scoop) have utensils that need to be regularly washed in a sanitary manner. In these

establishments, a 3-compartment sink is also required. Please note that plastic NSF-listed utensil sinks are not allowed. Other requirements include:

- For most establishments, the minimum size of each compartment is to be at least 17-inches x 17-inches x 12-inches deep; however, the sink and drain-boards must be sized to accommodate the largest utensil at the facility.
- The minimum size of a compartment in a bar sink is 10-inches x 14-inches x 10-inches deep with minimum 18-inch long drain-boards. Plastic bar sinks are not allowed.
- For facilities using equipment intended to be cleaned in place, a detailed plan for the proper cleaning of this equipment must be provided for EHD review and approval.
- Utensil sinks must drain to the sanitary sewer via an indirect waste receptacle (i.e., floor sink or funnel drain).
- When a utensil sink is installed next to a wall, a stainless steel, FRP, or ceramic tile backsplash, extending up the wall at least 8-feet from the top of the cove base, is required
- Each compartment is to be provided with hot and cold water via a premixing faucet. The faucet must be long enough to reach each compartment.
- A bar sink may require a fourth compartment or “quick” funnel drain for the disposal of ice waste.
- Each drain-board is to be at least as big as the largest sink compartment.
- Separate areas within a large facility may be required to have their own 3-compartment utensil sink(s).
- Utensil washing sinks are not to be used for hand washing, food preparation, the disposal of mop water or other wastes, or any other unapproved purpose.

## Hand Washing Sink

Proper hand washing is a critical component of safe food handling. Improper hand washing is one of the leading causes of food-borne illness outbreaks. Select sink locations that encourage hand washing by being readily accessible and conveniently located. The ability of customers to witness hand washing (e.g., in front areas) can promote a positive sanitation image for a facility. Other requirements include:

- Hand washing sinks (lavatory) must be provided in each area where food is handled or prepared, and in each utensil washing area. They must be sufficient in number and conveniently located so as to readily facilitate hand washing. Depending on the size and layout, some rooms or areas may need multiple hand washing sinks to realistically encourage good hand washing habits. As a general rule hand washing sinks should be no more than 15-20 feet travel distance from a workstation in the same room or area.
- Soap and sanitary towels must be provided in permanently installed, enclosed, single-service dispensers located by each hand washing sink.
- Separate hand washing sinks must be installed within each area where food is prepared (e.g., deli, meat department, bakery, etc.) and each satellite area of a restaurant (e.g., sushi bar, oyster bar, bar, serving line, wait station, utensil washing, etc.).

- When a hand washing sink is installed adjacent to a wall, a stainless steel, FRP, or ceramic tile backsplash extending above the hand washing sink at least 3 feet, is to be provided if not an integral part of the sink.
- Each sink is to be provided with hot and cold water via a pre-mixing faucet.
- Hand washing sinks installed less than 2 feet from food or utensil related areas must be separated by an approved partition at least 6-inches in height.
- Hand washing sinks are not to be used for utensil washing, food preparation, the disposal of mop water or other wastes, or any other unapproved purpose.

## DISHMACHINES

### General

The following are general requirements for dish machines:

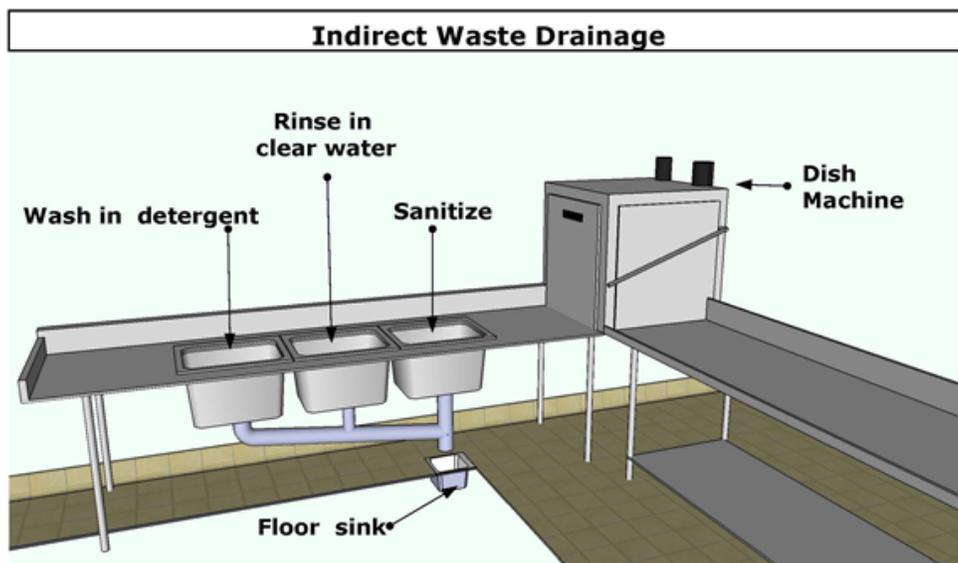
- Dish machines must be provided with thermometers and pressure gauges to indicate the temperature and water pressures of the wash, rinse, and sanitizing cycles if these have operating ranges specified by the manufacturer or listing agency.
- Dish machines that use the water supply pressure for the final rinse must have a pressure regulator.
- Dish machines with an "internal or built-in air-gap" may be directly connected to the sewer immediately downstream from a floor sink or floor drain, or they may be drained to an approved indirect waste receptacle (i.e., floor sink or funnel drain).
- Machines that are designed for a chemical sanitizer (e.g., chlorine rinse) must be capable of maintaining the rinse at the temperature and sanitizer level specified by the manufacturer. Dish machines using chlorine sanitizer must be able to maintain a level of free chlorine of at least 50 ppm in the sanitizer solution or the level specified by the manufacturer, whichever level is greater.
- Machines are to have two integral stainless steel drain-boards or dish tables, one for clean utensils and one for dirty utensils. These are to be sloped and drain to an approved waste receptor. For under-counter dish machines, there must be two comparable stainless steel drain boards adjacent to the machines (the drain-boards of an adjacent utensil sink may be used).
- Under-counter dish machines must be placed on 6-inch legs. Casters with flexible plumbing and electrical connections may be considered for approval if the unit is readily movable by one person. Plastic skids are not an acceptable substitute for legs or casters.
- Drain-boards must be large enough to adequately store all utensils above the floor at all times or additional approved shelving, racks, or dish tables must be provided in the dish machine area for this purpose. Drain boards must be of adequate size, design, and location so that clean and soiled utensils are kept segregated. Typically each drain board should be large enough to accommodate two 20-inch dish racks.

- Garbage disposals may be installed in drain boards if installed in the “dirty” utensil drain board and the drain board is large enough to accommodate the disposal cone in addition to the minimum drain-board size. Garbage disposals may not be installed under a required sink compartment.
- A 3-compartment sink with its own dual integral drain boards is also required in addition to any dish machine. A sink drain-board cannot be shared with a dish machine drain-board. Shared drain-boards may be considered on a case-by-case basis if additional space, such as stainless steel dish racks, dish tables, or slant shelves, is provided immediately adjacent to the dishwashing area.
- Water supply and waste lines must be adequately sized and consistent with manufacturer’s specifications.
- A pre-rinse unit or pre-rinse sink is required. It may be possible in some cases to use the utensil sink as the pre-rinse sink.
- Dish machines must operate within the parameters specified by the manufacturer or listing agency, including water pressure and water temperature. A data plate containing these parameters must be permanently affixed to the unit by the manufacturer.

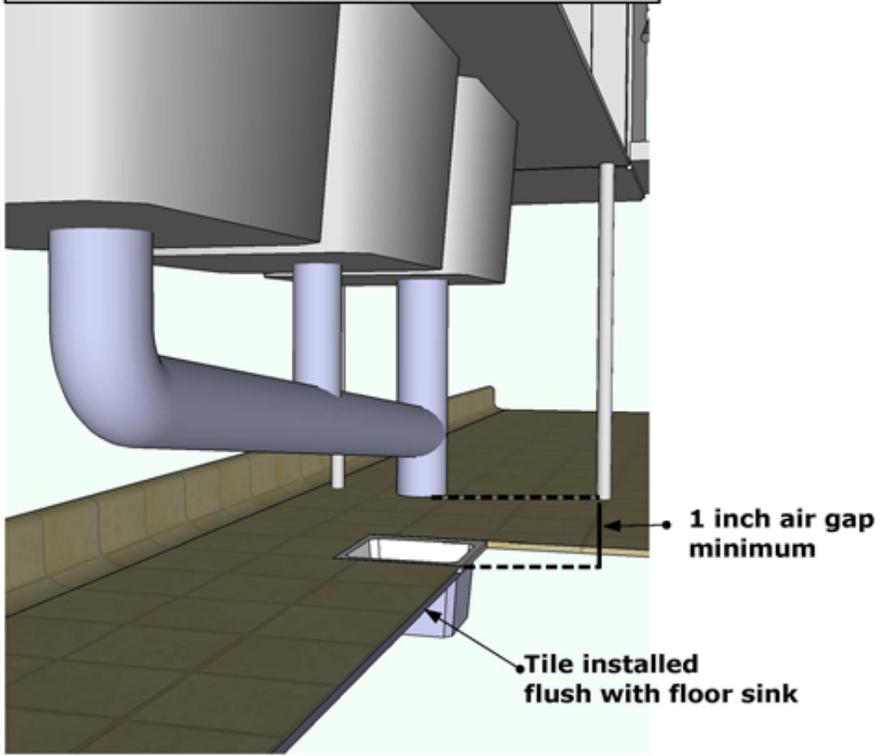
## High-temperature Dishwashing Machines

Dish machines that are designed for a hot water sanitizing rinse must be provided with a booster heater that is capable of maintaining a minimum final rinse water temperature of 180°F **at the manifold**. The machines (except for under counter units) must be provided with mechanical ventilation and make-up air. Except for conveyor-type dish machines provided with approved eyebrow hoods, hoods over these units must extend at least 12-inches beyond the edge of the machine so that opening the doors will not release steam or vapors into the facility.

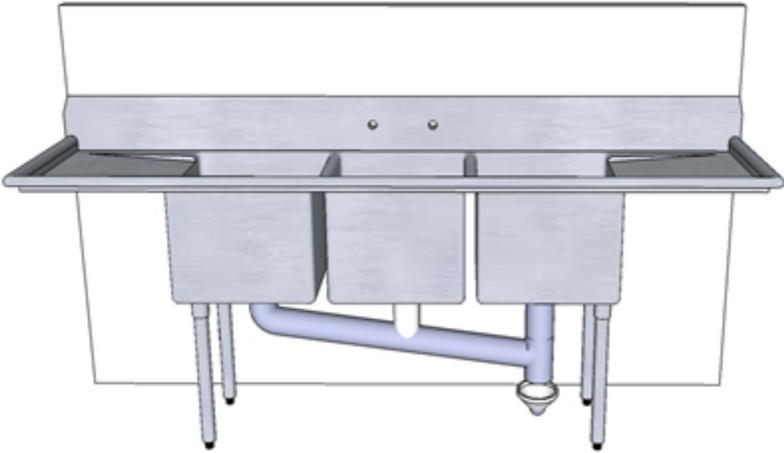
## INDIRECT WASTE DRAINAGE



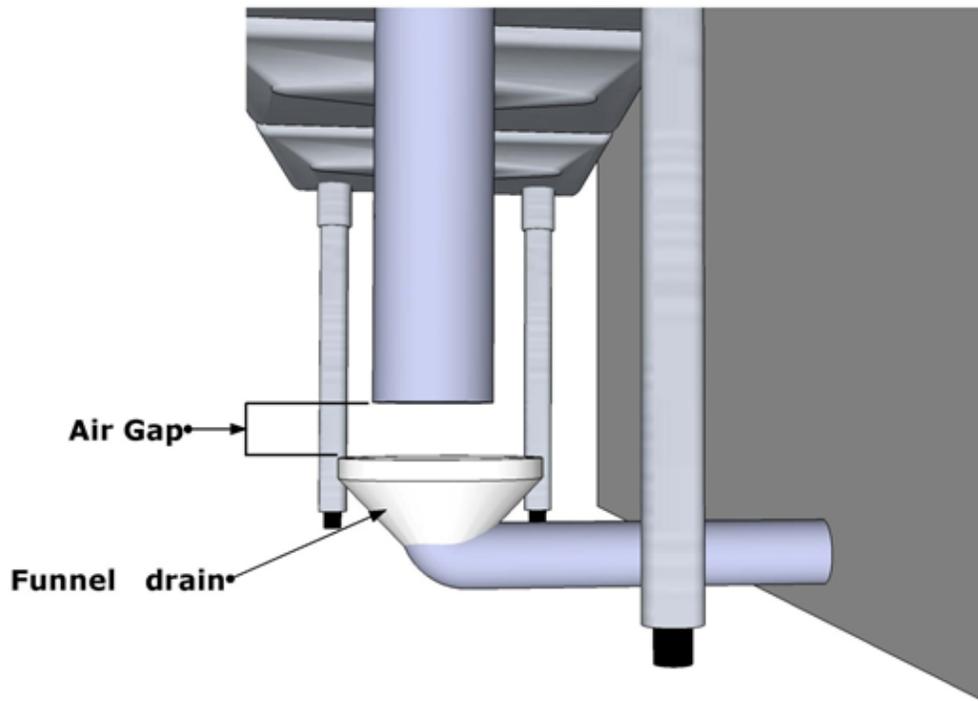
**Detail of discharge pipe above floor sink**



**Front view of funnel drain installation for a 3-compartment sink**



**Side view of an indirect connection using a funnel drain**



To prevent sewage contamination, condensate and liquid waste from food preparation equipment and sinks, utensil sinks, dishwashers, dipper wells, drainable steam tables, ice machines, beverage machines, refrigeration condensers, and similar equipment must be drained by readily accessible indirect drainage into a floor sink or funnel drain. Other requirements include:

- Unless otherwise required by the local building department, floor sinks must be installed flush with the floor surface. If raised above the floor, a smooth, easily cleanable, continuous coved base must be provided around the floor sink, extending integrally from the floor up to the lip of the sink with a minimum 3/8-inch radius at the floor sink/floor juncture. Seamless poured epoxy floor material (not paint) may be used for this purpose.
- Runs of piping outside of walls, floor, and ceilings must comply with the section addressing conduit and piping.
- Floor sinks and funnel drains must be located so that they are readily accessible for inspection and cleaning. When located under equipment, they must be located under the front edge or accessible side edge of the equipment (e.g., half-exposed). The minimum distance between the floor sink and overlying equipment is to be at least 6-inches. Readily accessible means direct access without the need to move equipment or remove a panel, door, or similar obstruction.
- Overflow from indirect waste receptacles must be prevented from flowing into inaccessible areas (e.g., cabinets, under display cases, etc.).

- “Cut-outs” may be allowed for indirect waste receptacles if the “cut-out” is at the front or accessible side edge, and separated (walled off) from the rest of the counter/cabinet, and the toe kick surrounding the waste receptacle is integrally coved in an approved manner.
- Floor sinks located in traffic areas must be covered with an approved grate.
- Floor drains are not to be used in lieu of floor sinks.
- Discharge pipes must terminate at least one inch above the rim of the indirect waste receptacle (air gap).
- Contact the local building department regarding the location of indirect waste receptacles in relation to grease traps or grease interceptors.
- Obtain local building department approval for installation of funnel drains.
- Pumps may not be used for condensate or other indirect waste drainage.

## Dipper Wells

A cold running water dipper well must be provided if scoops or other utensils are used for serving potentially hazardous food (e.g., ice cream, rice, mashed potatoes, beans, etc.), and the utensil will be intermittently stored in water or at room temperature without cleaning and sanitizing between each use. Dipper wells must be installed near where the utensil will be used. Dipper wells must drain to the sanitary sewer via a readily accessible indirect waste receptacle (i.e., floor sink or funnel drain). The dipper well faucet must terminate at least one inch above the rim of the dipper well.

## WASTE DISPOSAL

### General

General requirements for waste disposal include:

- An area must be provided for storage of all anticipated wastes (e.g., garbage, rubbish, cardboard, grease cast off materials). The area is to have finishes comparable to food preparation areas (e.g., smooth, durable and easily cleanable).
- Outside trash storage areas are to be located as far as possible from delivery and customer-entry doors.
- Adequate watertight, nonabsorbent, rodent-proof containers with tight-fitting lids are to be provided for garbage disposal.

### Interior Refuse Disposal Rooms

Requirements for interior refuse disposal areas include:

- Floors are to be smooth, durable, grease-resistant, nonabsorbent, coved, easily cleanable, and sloped to a floor drain. The drain must discharge to the sanitary sewer.
- Walls and ceiling are to be durable, easily cleanable, impervious to grease and moisture, and capable of withstanding impacts.
- This area is to be well ventilated.

- A hot and cold running water supply is to be provided through a pre-mixing valve or combination faucet protected against backflow.
- A drain to the sanitary sewer must be provided.

### **Exterior Refuse Disposal Areas**

Floor and other surfaces within an exterior refuse disposal area must be durable and easily cleanable. For newly constructed exterior disposal areas or existing disposal areas serving a food facility for the first time, a hot and cold water supply and drain to the sanitary sewer is required unless prohibited by the local sewer authority. Covered trash enclosures may also be required by the local sewer authority.

Note: No waste of any kind may discharge to the ground surface or storm water drainage system. Substantial fines can result from these types of violations.

### **Refuse Can Washing**

A suitable facility for washing garbage cans or other refuse containers is required if these types of containers are cleaned on site.

## **WATER SUPPLY AND SEWAGE DISPOSAL**

All liquid waste must be discharged to a public sewer system or an approved septic system. Liquid waste drainage to the sewer system or septic tank must be gravity; pumps for this use are not allowed. An approved, adequate, protected, pressurized, potable supply of hot and cold water is to be provided at all times.

## **GREASE TRAPS AND GREASE INTERCEPTORS**

Contact the local building department or sewer agency for requirements as to the sizing, installation, and location of grease traps and grease interceptors. Grease traps and grease interceptors must be readily accessible for inspection and cleaning. When installed inside the building, the top of the grease trap must be flush with the surrounding floor and not pose a tripping hazard.

Note: If at all possible, it is recommended grease traps or interceptors are located somewhere outside the food facility and away from public traffic for easy access to pump and repair.