EQUIPMENT – GENERAL REQUIREMENTS

Standards

Equipment must be commercial-grade and comply with applicable NSF and Health & Safety Code standards. Underwriters Laboratories (UL Sanitation) and ETL Testing Laboratories listing are also acceptable if it demonstrates compliance with applicable ANSI standards. **Residential equipment is not allowed.** Equipment must be made of nontoxic, non-corrodible materials, and be constructed, installed and maintained to be easily cleanable and exclude vermin. The design and installation must also allow ease of cleaning under and around the equipment and adjacent surfaces.

Installation

Equipment is to be sealed to adjacent walls and equipment or suitably away from adjacent walls and equipment so as to facilitate cleaning of the equipment and surrounding surfaces. Provide at least 6-inches of space between the equipment and adjacent wall to allow for ease of inspection and cleaning (minimum 6-inches). These spacing requirements can be reduced if the equipment is on casters. If casters are used, allow enough space for ease of inspection.

Elevations

Equipment must be placed on easily cleanable casters (readily movable by one person), 6-inch or higher legs meeting NSF standards, or be completely sealed in position on a 4-inch or higher integrally coved base or curb.

Casters are the recommended means of insuring sanitation for cooking and many other types of equipment. Casters less than 6-inches in height can only be used if the equipment is readily movable by one person. With gas-fired equipment, casters require the use of appropriate heavy-duty quick-disconnect gas lines (with safety tether). Some fire departments do not allow cooking equipment to be placed on casters. Check with the local fire department for further information.

Tabletop mounted equipment must be on at least 4-inch high legs, be readily movable (i.e., maximum weight of 80 pounds), or be sealed to the surface in an approved manner.

Acceptability of Intended Use

Equipment listed by NSF may not be suitable for the intended use. For example, some NSF listed hot dog warmers are not designed to protect the product from customer contamination. These units
are meant for serving by an employee rather than for customer self-service. Another example is merchandiser refrigerators, which are for use on display floors, not in kitchens.

**Always verify with EHD that equipment is acceptable for the intended use by submitting manufacturer’s equipment specification sheets.**

**Counters and Cabinets**

Counters and cabinets are considered pieces of equipment and must comply with applicable NSF and Health & Safety Code standards. They must be designed for durability, ease of cleaning, and to exclude vermin harborage. The most common construction materials are stainless steel or plastic-laminate. Laminated units must be fully plastic-laminated inside and out, including the underside of counter tops. It is recommended that cabinets with interior laminate finishes be a light-color to aid in monitoring for pests. Counters or cabinets constructed of painted or varnished wood are not approved for the food preparation areas. Such units must be placed on 6-inch or higher legs, casters, or an integrally coved 4-inch or higher base.

**Backflow Prevention for Carbonators**

The potable water supply connected to beverage machine carbonators must be protected by a listed, properly installed reduced pressure backflow prevention device.

**Copper and Copper Alloys**

Copper and copper alloys may not be in contact with low pH materials (e.g., carbonated water), except when used in the brewing of beer.

**Live Shellfish Tanks**

Tanks used to keep live molluscan shellfish intended for human consumption must be provided with an approved treatment and filtration system. This system must ensure the bacteriological quality of the water is kept within acceptable limits at all times (i.e., no detectable levels of coliform bacteria). The system must include the following:

- Filtration
- Treatment (e.g., UV light)
- Refrigeration (to keep the water below 45°F)
- Pump
- An operating plan that includes routine maintenance procedures and regular (at least monthly) independent testing of the water for coliform bacteria.
- Each species of molluscan shellfish must have its own separate tank and filtration/treatment system that is not interconnected with any other species of shellfish or other tank, including those used for fish.
- A HACCP plan shall be submitted.

**Built-in Temperature Measuring Devices**

Built-in or permanently affixed temperature measuring devices are required inside equipment used to hold hot or cold potentially hazardous foods. For a refrigeration unit, this device must be located in the warmest part of the unit.

**Produce Foggers/Misters**

Produce foggers/misters must be designed and installed so as to be easily cleaned and sanitized. New reservoirs for holding the water are prohibited as of July 2007.

**Energy Efficiency**

Energy costs are a major expense for most retail food operations. The following websites contain information that may help you reduce energy costs: [www.fishnick.com](http://www.fishnick.com)