

FRESNO COUNTY HUMAN SERVICES SYSTEM
ENVIRONMENTAL HEALTH SYSTEM
P.O. Box 11867
Fresno, CA 93775
Telephone (209) 445-3392

CONSTRUCTION REQUIREMENTS FOR RETAIL FOOD ESTABLISHMENTS

BEFORE CONSTRUCTING, ENLARGING, REMODELING OR CONVERTING ANY BUILDING FOR USE AS A RETAIL FOOD ESTABLISHMENT, AT LEAST TWO SETS OF COMPLETE PLANS MUST BE SUBMITTED TO THIS DEPARTMENT FOR REVIEW AND APPROVAL. PLANS MUST ALSO BE SUBMITTED TO THE LOCAL BUILDING DEPARTMENT.

Plans should be drawn to scale, e.g. 1/4"-1', and must include:

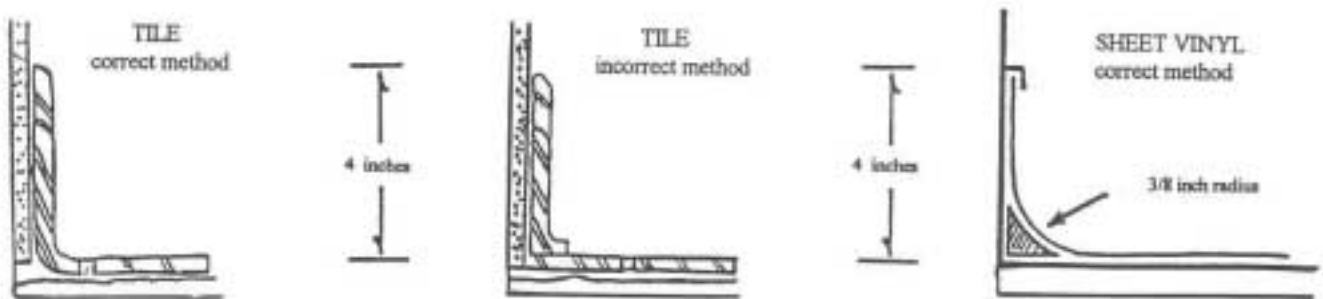
1. Plot plan.
2. Complete floor plan.
 - a. Equipment schedule indicating manufacturer and model.
 - b. Plumbing: hot and cold water, waste, type of fixtures, size and rating of water heater (BTU or KW).
 - c. Lighting.
3. Exhaust ventilation plans.
 - a. For ventilation hoods include hood and duct sizes; exhaust air (CFM); number, size and rating (CFM or FPM) of filters; make-up air (CFM).
4. Finish schedules for floors, walls and ceilings indicating the type of material, surface finish, color and type of base at the floor-wall juncture.

PLANS THAT ARE INCOMPLETE AND PLANS REQUIRING A MULTITUDE OF CHANGES WILL BE RETURNED FOR REVISION BEFORE APPROVAL. AFTER THE PLANS HAVE BEEN APPROVED, ONE SET WILL BE RETAINED BY THIS DEPARTMENT UNTIL CONSTRUCTION HAS BEEN COMPLETED. THE OTHER SET(S) WILL BE RETURNED TO THE PERSON SUBMITTING THE PLANS. THE APPROVED PLANS MUST BE KEPT ON THE JOB SITE UNTIL THE FINAL INSPECTION HAS BEEN MADE. ANY REVISIONS MUST BE RESUBMITTED FOR APPROVAL.

ALL CONSTRUCTION AND EQUIPMENT INSTALLATIONS ARE SUBJECT TO ON-SITE INSPECTIONS. PLEASE CALL (209) 445-3392 IF YOU HAVE ANY QUESTIONS DURING THE COURSE OF CONSTRUCTION OR NEED TO ARRANGE FOR AN INSPECTION. A FINAL INSPECTION IS REQUIRED PRIOR TO BEGINNING OPERATION. PLEASE CALL AT LEAST THREE WORKING DAYS IN ADVANCE TO ARRANGE FOR THE INSPECTION.

FOOD ESTABLISHMENT REQUIREMENTS

FLOORS: The floor surfaces in all areas in which food or beverage is prepared, packaged, or stored, where utensils are washed, where garbage is stored, where janitorial facilities are located, in toilet and handwashing areas, and in employee change and storage areas must be of such construction and material as to be smooth, nonabsorbent and easily cleaned. The floor surfaces in these areas must extend up the wall at least four inches (Building departments may require 5 inch coved bases in restrooms) and be coved at the juncture of the floor and wall with a $\frac{3}{8}$ inch minimum radius coving, except in areas where food is stored only in unopened bottles, cans, cartons, sacks or other original shipping containers. **Top set base does not meet this requirement.**



Floor drains are required in floors that are cleaned by flushing with water and in areas where pressure spray methods are used for cleaning equipment. In areas where floor drains are installed, the floors must be sloped 1:50 to the floor drains.

WALLS: The walls of all rooms, except for bars, dining areas and rooms where food is stored in unopened containers, must have a smooth, washable, nonabsorbent surface. The walls of food preparation areas, utensil washing areas, employee restrooms, and walk-in refrigerators and freezers must also be light-colored. Smooth plaster, drywall with sealed and taped joints, masonry walls with flush mortar joints, plastic laminated panels and fiberglass reinforced polyester panels (FRP) are acceptable wall materials. Plaster, drywall and masonry walls must be sealed with high gloss enamel, epoxy or other approved material.

Walls adjacent to bar sinks, food preparation sinks, utensil washing facilities and janitorial facilities should be constructed of moisture-resistant material such as water-resistant drywall, or be finished with moisture-proof panels such as FRP.

CEILINGS: The ceilings of all rooms, except for bars, dining areas and rooms where food is stored in unopened containers, must have a smooth, washable, nonabsorbent surface. The ceilings of food preparation areas, utensil washing areas, employee restrooms, and walk-in refrigerators and freezers must also be light-colored. Acoustical plaster is not acceptable. Acoustical tile will be accepted if it complies with the above requirements.

LIGHTING: Food preparation and utensil washing areas must be provided with at least 20 footcandles of light, measured 30 inches above the floor, with the exception of alcoholic beverage preparation areas and at bar sinks, where only 10 footcandles are required.

Food and utensil storage rooms, refrigerated storage, restrooms and dressing rooms must be provided with at least 10 footcandles of light. Light fixtures in food preparation, food storage and utensil washing areas must be of shatterproof construction or protected with shatterproof shields.

VENTILATION: Adequate ventilation must be provided throughout the establishment to remove gases, odors, steam, heat, grease, vapors and smoke, and to provide a reasonable condition of comfort for all employees.

Mechanical exhaust ventilation equipment is required at or above high temperature dishwashing machines and cooking equipment such as ranges, griddles, ovens, deep fat fryers, rotisseries and barbeques. A Type I hood is required above grease and smoke producing equipment such as deep fat fryers, ranges, griddles and barbeques. A Type II hood is required above high temperature dishwashing machines, pizza ovens and similar equipment which do not produce grease or smoke. All hoods must comply with the requirements of the Uniform Mechanical Code. Hoods are not required for steam tables, microwave ovens or small countertop convention ovens used for baking cookies or similar products.

Restrooms must be vented to the outside air by means of an openable screened window, an air shaft, or light-switch activated exhaust fan, consistent with the requirements of local building codes.

VERMIN EXCLUSION: Openable windows must be screened with 16 mesh screening. Food service pass-through windows should be limited to a maximum size of 216 square inches.

Exterior doors must be self-closing. Openings at the base and sides of all exterior doors must not exceed 1/4 inch. An air curtain with a door activated switch should be installed at each delivery door in food establishments that prepare food. Large cargo-type doors must not open directly into a food preparation area.

All exterior wall vents must be properly screened with 1/4 inch hardware cloth screening. All openings where pipes enter the structure must be tightly sealed. Spaces inside walls and other voids in the structure should be treated with boric acid powder or silica gel to prevent cockroach harborage.

OUTSIDE REFUSE AREA: The floor and walls where garbage bins, garbage cans and grease barrels are located must be smooth, impervious and easy to clean. All waste containers must be cleanable, leakproof and covered with close-fitting lids.

JANITORIAL FACILITIES: Janitorial facilities must be sufficiently separated from food preparation, food storage, utensil washing and utensil storage areas to prevent contamination of foods and utensils. A room, area or cabinet must be provided for the storage of cleaning equipment and supplies.

All food establishments must have either a one-compartment, nonporous janitorial sink, or a slab, basin or floor constructed of concrete or equivalent material which is curbed and

sloped to a drain. Such facilities must be provided with hot and cold water through a mixing type faucet which is protected by a backflow prevention device.

EMPLOYEE CHANGE AREA: A room, enclosure or designated area, separated from toilets, food storage, food preparation areas and utensil washing areas, must be provided where employees may change clothes and store personal effects. Lockers are acceptable in lieu of a change room in establishments with fewer than five employees on duty at any one time.

RESTROOMS: All food establishments must be equipped with toilet and handwashing facilities for use by employees. Establishments located in shopping centers or similar premises where restrooms are readily available for use by employees within 300 feet are exempt from this requirement.

Public restrooms are required in all food establishments with more than 20,000 square feet of floor space. Additionally, the Uniform Plumbing Code requires public restrooms in food establishments where facilities are provided for the consumption of food or beverages on the premises; this requirement is enforced by the local building department. Public restrooms must be situated so that patrons do not pass through food preparation, food storage or utensil washing areas.

All restrooms must be equipped with self-closing doors. A toilet tissue dispenser must be provided at each toilet. Handwashing facilities are required within or adjacent to toilet rooms and must be equipped with hot and cold water through a mixing type faucet. Soap and single-use towels or hot air blowers must be provided in dispensers at handwashing facilities.

KITCHEN HANDWASHING FACILITIES: A handwashing sink is required within or adjacent to each kitchen and must be equipped with hot and cold water through a mixing type faucet. Soap and single use towels must be provided in dispensers. Utensil and food preparation sinks may not be used to satisfy this requirement.

FOOD AND UTENSIL STORAGE: Adequate space must be provided for the storage of food, utensils and food packaging materials. Shelves must be of smooth, cleanable construction; smooth metal, plastic or smooth sealed wood are acceptable materials. Shelves installed on a wall must have at least a one inch open space between the back edge of the shelf and the wall surface or be sealed to the wall with non-hardening silicone sealant. All shelves must be at least six inches above the floor. Shelves located below a counter or work surface should be set back at least two inches from the drip line of the surface above.

An adequate amount of refrigerated storage space must be provided within each food establishment. Each refrigerator must maintain a temperature of 41°F or below and contain an accurate thermometer.

FOOD PROTECTION: Salad bars and buffets must be protected by sneeze guards. The guards must be designed to intercept a direct line between the customer's mouth zone (54-60 inches from the floor) and the food being displayed. Facilities must be provided for maintaining potentially hazardous foods at or below 45°F, or at or above 140°F, while being displayed for customer self-service.

Displays of bulk dry foods, e.g. granola or candy, are exempt from the sneeze guard requirement if foods are dispensed from mechanical dispensers or containers with tight-fitting, securely attached lids. A utensil with a handle must be provided for each self-service container.

UTENSIL WASHING FACILITIES: All food establishments which prepare food or beverages or use multiservice utensils must have at least a three-compartment metal sink with two integral metal drainboards. The sink compartments and drainboards must be large enough to accommodate the largest utensil or piece of equipment to be cleaned in the sink. All liquid waste must be drained through an air gap to a floor sink unless the building department requires a direct connection.

All dishwashing machines must have two metal drainboards which are sloped and drained to approved waste receptors. Except for undercounter machines, one drainboard must be attached at the point of entry for soiled items and one at the point of exit for cleaned and sanitized items. Where an undercounter machine is used, there must be one drainboard for soiled items and one for cleaned and sanitized items adjacent to the machine. Sink drainboards may be used to satisfy this requirement.

FOOD PREPARATION SINKS: A separate sink is required for food preparation activities such as washing vegetables. All liquid waste must be drained through an air gap to a floor sink.

DIPPER WELLS: Dipper wells with running water are required at ice cream and other frozen dessert scooping operations. All liquid waste must be drained through an air gap to a floor sink.

EQUIPMENT AND EQUIPMENT INSTALLATION: All equipment including dishwashing machines, utensil sinks and food preparation sinks must meet or be equivalent to National Sanitation Foundation (NSF) standards.

All floor mounted equipment must be either on casters, light enough to be easily moved by one person, installed on six inch or longer round metal legs, or be sealed to a four inch or higher raised curb. If on a curb, the equipment should overhang the base at least two inches, but not more than the height of the curb. Gaps and spaces between the equipment base and the top of the island must be sealed with silicone sealant. All equipment on counters, tables and shelves must be either easily moved, sealed to the surface, or installed on four inch or longer round metal legs.



All stationary equipment must be sealed to the walls or be moved away from the walls at

least six inches for every four linear feet of equipment length. Equipment must be spaced at least six inches apart from each other or be sealed together.

Possible sources of contamination such as mop sinks, hand sinks, and soiled utensil drainboards must be at least 12 inches from open food or clean utensil drainboards. A stainless steel or plexi-glass partition can be installed to prevent contamination.

WATER SUPPLY: An adequate, potable supply of hot and cold water must be provided to all sinks. General purpose hot water must be at least 120°F.

FLOOR SINKS: Wet steam tables, ice machines and bins, refrigerators, steam kettles, dipper wells, food preparation sinks, three-compartment utensil sinks, and similar types of equipment must drain to floor sinks. Refrigeration equipment with evaporators are exempt from this requirement. Floor sinks must be located so that they are readily accessible for inspection, cleaning and repair. Waste lines must not cross any aisle, traffic area or door opening.

CONDUITS: All plumbing, electrical and gas lines should be installed within walls if possible. If not installed in walls, all lines should be at least ½ inch away from the walls or ceiling and six inches off the floor. Where conduit or pipe lines enter a wall, ceiling or floor, the opening around the line must be tightly sealed. Conduits and pipe lines must not be installed across any aisle, traffic area or door opening. Clusters of conduit or pipe lines should be encased in a sealed enclosure.

OPEN-AIR BARBEQUE FACILITIES: Open-air barbeque facilities are allowed if operated on the same premises as, and in conjunction with, a food establishment. The facility must be located in an area reasonably protected from dust. All utensils and equipment must be nontoxic and easily cleaned and no foods other than those cooked on the barbeque may be prepared or stored out of doors. The facility must be equipped with an impervious, easily cleaned floor surface that extends a minimum of five feet from the barbeque on all open sides. Approved toilet and handwashing facilities must be available within 200 feet.

CONSTRUC.WPD