



Community Services Department
Environmental Health Division
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FOOD ESTABLISHMENT CONSTRUCTION GUIDELINES

I. Introduction

These construction guidelines are available to any person intending to construct or remodel a food establishment in Sutter County. It is intended to serve as a general overview of the requirements and should not be considered all inclusive. Please contact this agency at the telephone number above if you require further information regarding your particular plan.

II. Plans and Fees

A. Plans are required for the following:	<u>Fee (eff. 3/14/11)</u>
1. New Construction of a restaurant, retail market, bar, bakery, or MFPU	\$940.00
2. New Construction of a <u>prepackaged</u> food facility, produce stand, vehicle, or bed and breakfast facility	\$564.00
3. Remodel of a food facility, major equipment changes, or changes to finish materials	\$470.00
<i>(Remodel is considered an alteration or change in operation to an <u>already existing</u> food facility that is currently permitted by Sutter County Environmental Health)</i>	
4. Minor remodels such as a beverage station, hood system, salad bar, or minor equipment changes	\$235.00
5. Miscellaneous reviews, i.e. equipment evaluations	\$94.00/hour

B. Plan check fees must be paid at time of plan submittal.

III. Plan Submittal

- A. Before constructing, enlarging, altering or converting any building for use as a food facility, THREE (3) copies of detailed plans and specifications must be submitted to and approved by Sutter County Environmental Health.
- B. Plans may be prepared by an architect, draftsman, contractor, or owner. All plans must be drawn in a professional manner encompassing all applicable requirements of this construction guide.
- C. After plans have been approved and stamped by Sutter County Environmental Health, one copy will be available for the person submitting the plans to pick up, one for the appropriate Building Department, and the third copy will be kept by this agency. The owner copy shall be kept no more than 30 days by Sutter County Environmental Health. A copy of the stamped, approved plans must be kept on the job site until the health permit has been issued.

- D. Plans shall be drawn to scale, i.e., 1/4" = 1'0" using non-erasable ink or print (no pencil), and shall include:
1. A site plan showing the proposed rubbish and food waste storage receptacle location.
 2. Complete floor plan indicating location of the following:
 - a. Food preparation and storage areas
 - b. Utensil washing and storage areas
 - c. Employee garment storage area
 - d. Mop sink and cleaning supply storage area
 - e. Bathrooms
 - f. Water heater
 - g. Floor sinks and floor drains
 - h. Electrical outlets, panels and lights
 3. Complete equipment layout, including elevations of equipment and equipment specifications. Manufacturers' cutsheets should be provided. Must indicate the method of drainage for plumbing fixtures and condensate lines from equipment.
 4. Complete exhaust ventilation plans including the source of make-up air. Complete and return the "Cooking Ventilation Hood System" sheet (EH-F-5). Provide specifications and elevations for hood and equipment under the hood.
 5. Finish schedule for walls, ceiling and floors that indicated the type of material, surface finish and color. Also, indicate the type of integral coved base at the floor/wall juncture. Samples of proposed finish materials should be submitted with the plans.
 6. A statement of the proposed customer seating capacity, or square footage, and number of employees.
 7. Location of the manager's or chef's office. Spaces such as change rooms or food storage rooms cannot be used for office space.
 8. Location of smoking and non-smoking seating areas if required.
 9. Method of sewage disposal and water service for the establishment.
 10. Remodel plans shall identify all proposed changes to existing structures, spaces or equipment.
- E. Upon receipt of the plans, Environmental Health has 20 working days to approve or deny the plans. If the plans are denied, you will be advised as to the details which must be provided before the plans can be approved.
- F. If any changes to the approved plans are proposed, they must be received and reapproved by this Agency.
- G. Approved materials and good workmanship are significant factors in the evaluation and final field approval of food facility construction and equipment installation.
- H. All equipment design, construction and installation are subject to approval by this agency. National Sanitation Foundation (NSF) standards are used as a guide for equipment evaluation and approval except where strict compliance with NSF standards is a specific requirement.

IV. Field Construction Inspections

- A. It is advised that you contact Sutter County Environmental Health at regular intervals to schedule construction progress inspections, or when questions about health requirements arise.
- B. You must contact Environmental Health to schedule an inspection when construction is approximately 75% to 80% completed, with finish plumbing, ventilation, and rough equipment installed. Requests should be made at least two (2) working days in advance.
- C. Upon completion of 100% of the construction, including all finishing work, and with operating utilities, you must call Environmental Health to arrange for a final construction inspection. You will not be issued a health permit until the establishment passes a final inspection. In no case should a final inspection be requested less than two working days prior to the proposed opening of the establishment. Final construction must be approved by this Agency prior to opening for business or use of remodeled areas.

V. General Construction and Equipment Requirements

- A. The plans shall show and specify in detail the following:
 - 1. Floors
 - a. Floors in food facilities (requirements are less stringent for customer dining areas) shall be smooth and impervious to water, grease and acid, and of easily cleanable construction. Floor surfaces in all areas where food is prepared, packaged, or stored in opened containers, where any utensil is washed or stored, where refuse or garbage is stored, where janitorial facilities are located, in all toilet and handwashing areas, in walk-in refrigeration units, bar areas, and in employee change and garment storage areas, shall continue up the wall or toe kicks, at least four (4) inches, in a seamless manner, forming a 3/8 inch minimum radius cove as an integral unit. Topset base is not acceptable, except in dining areas.
 - b. In areas where food is stored only in unopened boxes, cans, cartons, sacks or other original shipping containers, integral coving is not required. Topset base is not approved in these areas.
 - c. Floor drains are required in floors that are water flushed for cleaning, where pressure spray methods for cleaning equipment are used, and where non-skid agents are used on floors. Where floor drains are utilized, the floor surface shall be sloped 1:50 to the floor drains.
 - d. High pressure hot water cleaning systems are required in addition to floor drains if the degree of roughness of the non-skid agent is deemed excessive upon evaluation by this agency.
 - e. Flooring under equipment and on the coved bases shall be completely smooth. Non-skid floor surfaces shall be restricted to traffic areas only.

2. Walls

- a. Walls in all areas mentioned in V (1) a above shall be smooth, non-absorbent, and have an easily cleanable finish. Walls in food preparation, walk-in, and dishwashing areas shall also be light colored. Note: Brick, concrete block, rough concrete, or rough plaster textures are not approved for use. Exemption: Walls in bar areas, except by bar sinks, and in areas listed in V (1) b above, need not be smooth and easily cleanable. Walls next to bar sinks must be smooth, washable and light colored at least 3' on each side of the sink. This includes the back bar surface, if the bar sink is placed against the bar.
- b. Material other than smooth plaster or putty coat plaster, drywall with sealed and taped joints, or smooth, sanded plywood with properly sealed joints require submission of a sample.
- c. All surfaces shall be sealed with a gloss or semi gloss enamel, epoxy, varnish or other approved sealer.
- d. Other wall surface materials are subject to evaluation and compliance with the same or similar requirements prior to installation.
- e. Wall surface requirements in customer dining and closed food storage or display areas are less stringent.

3. Ceilings

- a. Ceilings in all areas mentioned in V (1) a above shall be smooth, non-absorbent, and have an easily cleanable finish. Exemption: Ceiling surfaces in bar area and in area mentioned in V (1) b above need not be smooth or easily cleanable. Ceilings in food preparation, utensil washing, and walk-ins must also be light colored.
- b. Acoustical tiles may be approved if it complies with the preceding requirements and if a sample is submitted and approved by this agency.
- c. Acoustical plaster is not an acceptable ceiling finish in areas mentioned in V (1) a above.

4. Conduit

- a. All plumbing, electrical, and gas lines shall be concealed within the building structure to as great an extent as possible. Where this is not possible, all runs shall be at least ½" off the wall and ceiling and at least 6" off the floor as measured from the edge of the conduit closest to the floor, wall or ceiling. All spacers must be durable, non-absorbent and cleanable.
- b. Where conduit or pipe lines enter a wall, ceiling or floor, the opening around the line shall be tightly sealed.
- c. Conduit or pipe lines shall not be installed across any aisle, traffic area or door opening at or near the floor surface.
- d. Multiple runs or clusters of conduit or pipe lines shall be furred in, encased in an approved runway or other sealed enclosure approved by this agency.

5. Exhaust Hoods and Ducts

- a. Mechanical exhaust ventilation shall be required at or above all cooking equipment such as ranges, griddles, ovens, deep fat fryers, barbecues and rotisseries to effectively remove cooking odors, smoke, steam, grease and vapors.
- b. All hoods, ducts, and exhaust outlets shall be installed in accordance with Chapter 5 of the current edition of the Uniform Mechanical Code as adopted by the local building department.
- c. All joints and seams shall be tight or soldered for ease of cleaning. Riveted seams are not acceptable.
- d. Food heating or warming devices, cheese melters, etc., that are installed above other equipment beneath an exhaust hood may create an air flow obstruction to proper ventilation of the basic equipment for which the hood ventilation system is designed. The design, construction and installation of such warming devices under a hood are subject to evaluation and approval by this agency prior to installation.

e. Canopy-Type Hoods

Canopy-type hoods shall not be more than seven feet above the floor and shall not be more than 4 feet above the cooking surface. The hood shall overhang or extend a horizontal distance not less than six (6) inches beyond the outer edges of the cooking surfaces, on all open sides. It shall have grease troughs or drip pans that are easily cleanable.

f. Noncanopy-Type (Ventilator) Hoods

Noncanopy-Type hoods will be approved providing they are constructed to be easily cleanable, they comply with the minimum exhaust air velocity requirements, and comply with manufacturers' specifications. Shielding at the ends of the hood may be necessary to prevent interference from cross drafts.

g. Make-Up Air

Make-up air shall be provided at least equal to that amount which is mechanically exhausted. Windows and doors shall not be used for the purpose of providing make-up air.

h. Fire Extinguishing Systems

Fire extinguishing systems may be required by local fire department codes. They shall be installed so as to allow easy cleanability of the hood and duct systems, and whenever possible, shall not be installed above food or utensil handling areas.

6. Refrigeration

- a. All refrigeration units shall be adequate in capacity to the needs of the proposed operation and shall comply with the following requirements:
 - 1) Be capable of operating so as to maintain the refrigerated foods at or below 41 degrees F at all times.
 - 2) Be specifically constructed for commercial use (domestic model refrigeration units will not be accepted).
 - 3) Be provided with an accurate, readily visible thermometer.
 - 4) Have commercial-grade metal or plastic shelves which allow for air circulation.
 - 5) Open into an approved food preparation area of the building.
 - 6) Have smooth, non-absorbent and easily cleanable surfaces. All joints must be sealed.
 - 7) Condensate waste from reach-in refrigeration units must be drained indirectly to sewage disposal system via an air gap or an approved evaporator unit.
 - 8) Cooling coils and related electrical, drainage and refrigerant lines shall be installed in a safe and easily cleanable manner. Drainage and refrigerant lines shall be constructed of non-toxic materials or properly insulated and covered with an approved, easily cleanable and non-toxic material.
 - 9) Merchandisers are approved for prepackaged non-potentially hazardous food only. Merchandisers include beer boxes, and soda reach-ins.
- b. Walk-In Refrigeration Units shall also:
 - 1) Have an integrally coved base with a radius of at least 3/8 inch at the floor/wall juncture; the floor material shall extend up to a height of at least four (4) inches on the walls. Samples of flooring materials must be submitted for approval by this agency prior to installation.
 - 2) Have commercial metal or plastic shelving that is at least six (6) inches off the floor with NSF type easily cleanable, smooth, round, metal legs, or cantilevered from the wall, for ease of cleaning. Small, easily movable, castered dollies may be used in place of a lower shelf inside a walk-in refrigeration unit. Shelving must allow for air circulation.
 - 3) Have condensate waste drained indirectly to the sewage disposal system via an air gap. Floor drains and floor sinks are not to be located inside the walk-in refrigeration unit.

7. Ice Machines

All ice machines shall be located within the building in an easily cleanable, well ventilated area, and shall be drained indirectly to the sewer via an air gap. Wall, floor and ceilings shall comply with applicable sections.

8. Floor Sinks

- a. All condensate liquid waste from food preparation equipment, sinks, and dish machines shall be drained by means of indirect waste pipes into an open floor sink or other approved type receptor.
- b. Floor sinks shall be installed flush with the floor surface.
- c. Horizontal runs of drain lines shall be at least ½" from the wall and six (6) inches off the floor and shall terminate at least one (1) inch above the overflow rim of the floor sink.
- d. Floor sinks shall be located so that they are readily accessible for inspection, cleaning and repair. The floor sink must be located within 15 feet of the drain opening of the equipment served.
- e. Waste lines may not cross any aisle, traffic area or door opening.
- f. Floor sinks or floor drains are not permitted inside walk-in refrigeration units, closets, cupboards or cabinets.
- g. ½" exposed or even with a front edge of freestanding equipment.

9. Kitchen Utensil Sink/Eating and Drinking Utensil Sink

- a. Where multi-service kitchen utensils (i.e., pots, pans, scoops, knives, tongs, etc.), and multi-service eating and drinking utensils are washed by hand, are utilized, there shall be provided a three-compartment stainless steel sink with dual, integrally installed metal drainboards.
- b. A separate, approved three-compartment sink must be installed within each department in a grocery store which handles unpackaged foods, i.e., deli, meat, bakery, etc., and satellite food service facilities in restaurants, i.e., sushi bars, oyster bars, etc.
- c. The minimum compartment size shall be at least 18" x 18" x 12" deep with minimum 18" x 18" drainboards, however, the sink must otherwise be capable of accommodating the largest utensil to be washed, and the drainboards shall be as large as the largest sink compartment.
- d. When a sink is installed next to a wall, a metal "backsplash" extending up the wall at least eight (8) inches shall be formed as an integral part of the sink, and sealed to the wall.
- e. The sink must drain to the sewage disposal system via an air gap indirectly.

10. Automatic Dish Machines

- a. All automatic dish machines must be approved by the National Sanitation Foundation or comply with State requirements equivalent to Standard No. 3 of the National Sanitation Foundation.
- b. All spray type dish machines which are designed for a hot water sanitizing rinse shall be provided with a booster heater that meets the requirements of Standard No. 5 of the National Sanitation Foundation, or be connected to an approved recirculating water system which is capable of maintaining the rinse water at not less than 180 degrees F. Such dish machines must be provided with mechanical ventilation and make-up air. Any hood above a high temperature dish machine must extend at least 12" beyond the edge of the machine on all open sides, and be high enough above the machine so that opening the doors will not interfere with exhaust ventilation of the steam.
- c. All dish machines must be provided with thermometers and pressure gauges to indicate the proper water flow pressures and temperatures. Appropriate valves for testing the accuracy of the gauges and thermometers shall also be properly installed.

11. Garbage Disposal

Garbage disposal may be installed in drainboards if the drainboard is large enough to accommodate the disposal cone in addition to the minimum required drainboard size. Garbage disposal may not be installed under a required sink compartment unless an additional compartment is provided for the disposal.

12. Janitorial Sink

- a. Each food establishment must be provided with one of the following:
 - 1) A one-compartment wall mounted or free-standing janitorial sink. Concrete tubs are not acceptable.
 - 2) A curbed area that is properly sloped to a drain. All curbed area surfaces shall be of smooth, impervious and easily cleanable construction. Where floor mats are used, a curbed area with drain is required.
- b. Janitorial facilities shall be supplied with hot and cold running water through a premixing faucet. An approved method of backflow prevention is required on the faucet.
- c. Free-standing janitorial sinks must be provided with NSF type easily cleanable legs. Legs with "L" angles will not be accepted.

13. Handwashing Sinks

- a. Lavatory sinks shall be provided in the food preparation areas.
- b. Soap and sanitary towels shall be provided in single-service dispensers at the lavatory sinks.
- c. A separate, approved handsink must be installed within each department in a grocery store which handles unpackaged food, i.e., deli, meat, bakery, etc., and satellite food service facilities in restaurants, i.e., sushi bars, oyster bars, etc.

14. General Purpose Hot Water

- a. Provide a commercial-grade water heater which is capable of constantly supplying hot water at a temperature of at least 120 degrees F to all sinks, hand lavatories and other cleanup facilities. In sizing the water heater, the peak hourly demands for all sinks, etc., are added together to determine the minimum required recovery rate.
- b. A water heater should not be purchased until this agency determines that it complies with the requirement of 14 a above.

15. Dipper Well

- a. A running water dipper well must be provided if scoops are used for serving potentially hazardous food, and the scoop will be intermittently stored at room temperature without cleaning between use. Typical application is for ice cream and mashed potatoes.
- b. The dipper well shall be indirectly drained to the sewage disposal system via an air gap.

16. Window Screens

All openable windows, such as restroom windows, shall be screened with not less than 16 mesh screening.

17. Service of Unpackaged Foods Directly to or by the customer.

Displays and service of unpackaged foods shall be shielded so as to intercept a direct line between the customer's mouth and the food being displayed, or shall be dispensed from approved self-service containers. All sneeze guards must have Environmental Health approval prior to installation.

18. Shelving Requirements

- a. In the following areas, shelving shall be commercial food-grade metal, plastic, or wood which is laminated:
 - 1)Kitchen
 - 2)Utensil washing and storage
 - 3)Open food storage (includes food containers with lids which have been opened and resealed)
 - 4) Janitorial

- b. In other areas, shelving shall be either as in 18a above or commercial cabinet grade hardwood with no gaps or seams and constructed so as to comply with the California Health & Safety Code. The material shall be completely sealed with Environmental Health approved epoxy, varnish, etc. Paint shall not be considered an approved sealing material.
- c. Shelves installed on a wall shall have at least one (1) inch of open space between the back edge of the shelf and the wall surface, otherwise, the back edge of the shelf and the wall surface, otherwise, the back edge of the shelf shall be sealed to the wall with silicone sealant or equivalent. The lowest shelf shall be at least six (6) inches above the floor, with a clear unobstructed area below or be the upper surface of a completely sealed continuously covered base with a minimum height of four (4) inches. All shelves located below a counter or work surface shall be set back at least two (2) inches from the drip line of the surface above. If shelves are supported by legs on the floor, the legs shall be NSF type, easily cleanable legs, with ends sealed.

19. Backup Dry Food and Beverage Storage Guidelines

- a. Adequate and suitable floor space shall be provided for the storage of food, beverages and related products. In addition to working storage and refrigeration storage, additional backup dry food storage shall be provided. Working storage is considered to be cabinets over and under food handling equipment and wall mounted shelves which are located in and used in conjunction with food preparation areas.
 - 1) Each department in a grocery store which handles unpackaged foods, (i.e., deli, meat, bakery, etc.), and satellite food service facilities in restaurants, (i.e., sushi bars, oyster bars, etc.), must provide its own backup dry food storage space.
 - 2) Within bars/taverns, a segregated room or area shall be dedicated for backup beverage and bar/supply storage. When a bar is located within a restaurant, the backup storage requirements for the bar must be provided in addition to the required backup dry food storage.
 - 3) Within produce departments of grocery stores or produce stores (produce only), a segregated room shall be dedicated for backup storage of food and packaging supplies.
- b. A shelving unit shall be a minimum 18 inches in depth and three tiers high.
- c. Electrical panels, large fire prevention system components or similar wall-mounted equipment shall not be installed in food storage rooms unless adequate approved provision is made to compensate for the space required for the installation.

20. Restrooms

- a. Toilet facilities, convenient for the employees, shall be provided within each food establishment. The number of toilet facilities shall be in accordance with local building and plumbing ordinances.
- b. Toilet facilities shall be so situated that patrons do not pass through food preparation, food storage, or utensil washing areas when they are allowed access to the toilet facilities.
- c. Handwashing lavatories shall be provided within or immediately adjacent to the toilet rooms. The lavatory shall be provided with hot and cold running water from a mixing-type faucet. Soap and sanitary towels in single-service permanently installed dispensers shall be provided at the

lavatory sink. Signs instructing employees to wash their hands after using toilet facilities must be posted.

- d. Toilet tissue shall be provided in a permanently installed dispenser at each toilet.
- e. The restrooms shall be provided with tight-fitting, self-closing doors.
- f. All toilet rooms shall be provided with ventilation approved by this agency. If adequate ventilation cannot be provided by an openable, screened window, mechanical ventilation will be required.

21. Clothing Change Room/Designated Area

a. Change room

- 1) A room or enclosure, at least 4' x 5', separated from toilets, food storage, or food preparation areas, shall be provided where employees may change and store their outer garments and personal belongings. A larger change room or an additional room may be required, depending upon the total number of employees.
- 2) The clothing change/storage room may not be used as an office.
- 3) No telephone jacks, computer jacks, water heaters or other appurtenances will be accepted in this room.

b. Designated Areas

- 1) A designated area may be substituted for a change room. The designated area must be segregated from toilet rooms, food preparation areas, food storage areas and utensil washing areas.
- 2) Within the designated area provide a shelf and coat hooks or a shelf and pole.

22. Pass-Through Windows

- a. When food is passed through a window to a customer on the outside of the building, the size of the window opening may not exceed 432 square inches.
- b. The minimum distance between the openings may not be less than 18 inches.
- c. The counter surface of the pass-through window must be smooth, free of channels and crevices, and be easily cleanable.
- d. All openings must be equipped with a sliding closure device (e.g., glass, screen). This device must be kept closed except when food is being passed to the customer.

23. Delivery Doors

- a. All delivery doors leading to the outside shall open outward, be self-closing and shall be provided with an overhead air curtain. The air curtain, when installed inside the building, must produce a downward-outward air flow not less than three inches thick at the nozzle and with an air velocity of not less than 1600 feet per minute across the entire opening at a point three feet above the floor. The air curtain shall turn on automatically when the door is opened. When installed outside the building, the same velocity of air must be directed straight down over the entire door opening.
- b. Large cargo-type doors shall not open directly into a food preparation area.
- c. An air curtain is not a substitute device to permit a door to remain open.
- d. If a screen door is used, the outer door must open outward, and one of the doors must be self-closing.

24. Customer Entrance Doors

- a. All entrance doors leading to the outside shall open outward, be self-closing and be provided with overhead air curtains or other effective means to prevent the entrance of flies. Refrigerated, positive pressure air conditioning with all doors self-closing is another acceptable method except at delivery doors. The air curtains must produce a downward-outward air flow not less than eight inches thick at the discharge opening and an air velocity of not less than 600 feet per minute across the entire opening three feet above the floor. The air curtain shall turn on automatically when the door is opened.
- b. An air curtain is not a substitute device to permit a door to remain open.

25. Garbage and Trash Area

- a. An area shall be provided for storage of garbage and trash containers.
- b. Outside trash storage areas should be situated as far away from delivery doors as possible.

26. Lighting

- a. All food preparation areas, all dishwashing and utensil washing areas, (except where alcoholic beverage utensils are washed), shall be provided with at least 20 foot candles of light, 30 inches above the floor.
- b. Food and utensil storage rooms, areas where alcoholic beverages are prepared, and where alcoholic beverage utensils are washed, refrigeration storage, toilet rooms, and dressing rooms shall be provided with at least 10 foot candles of light.
- c. Light fixtures in areas where food is prepared, where open food is stored, and where utensils are cleaned, shall be of shatterproof construction, or shall be protected with shatterproof shields.

27. Equipment

- a. All show and display cases, counters, shelves, tables, refrigeration equipment, sinks and other equipment used in connection with the preparation, service and display of food, shall be made of non-toxic materials and so constructed and installed as to be easily cleanable. National Sanitation Foundation standards shall apply where applicable.
- b. All equipment shall be placed on minimum six (6) inch high, NSF type, easily cleanable legs or on a four (4) inch continuously coved base, or on approved casters, or cantilevered from the wall in an approved manner.
- c. Self-service machines which dispense bulk ice and soda must be equipped with push buttons for operating. A customer's glass cannot be used to dispense soda and ice. The self-service machine must drain indirectly to the sewage disposal system via an air gap.

28. Water Supply and Sewage Disposal

- a. All liquid waste, including sewage, generated by a food establishment, shall be disposed of in an approved manner into either a public sewer system or to an approved private on-site sewage disposal system.
- b. An adequate, protected, pressurized, potable supply of hot water at least 120 degrees F, and cold water shall be provided. The water supply shall be from a water system approved by Environmental Health or the State Department of Health Services.
- c. On-site sewage disposal systems will require grease interceptors at remodel or new construction.
- d. An approved sewage disposal system and water supply is required prior to plan approval. It is recommended that an evaluation as to the availability of an adequate sewage disposal system and water supply be completed prior to beginning preparation of food facility plans.