

**CALIFORNIA PLAN CHECK GUIDE
FOR RETAIL FOOD FACILITIES**

**California Conference of Directors
of Environmental Health**

September 2008 (Revised)

PREFACE

The California Plan Check Guide for Retail Food Facilities is an outline of requirements for plan preparation before the submission to the local health agency. The requirements are provided to assist in meeting applicable health and safety requirements. The Guide is intended to give basic information and not to supersede any state law, local ordinance or code. The Guide contains the requirements listed in various sections of the California Retail Food Code (CRFC), gathered in this one document for easy reference during plan check activities.

Code numbers in the document reference the section of CRFC where the requirement is derived from. Recommendations contained within the Guide are not requirements in state law or regulation. They are included for clarification and to give examples for meeting the intent of the Cal Code. The recommendations may not be applicable in all circumstances. Other CCDEH Guidelines mentioned in this document are available on-line at www.ccdeh.com. Refer to the California Health and Safety Code, Division 104, Part 7, Section 113700 et. seq. (CRFC) for specific code requirements.

This guide only encompasses health aspects and should not be construed to encompass other agencies involved such as, the local planning and zoning department, the local building authority or local fire department. Owners and agents should be advised to contact the appropriate local agencies involved to obtain any required permits and/or to clarify other local codes.

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CALIFORNIA PLAN REVIEW GUIDE FOR RETAIL FOOD FACILITIES

Construction Plan Approval Procedures for Food Facilities

Pursuant to the California Health & Safety Code, Division 104 – Environmental Health Part 7, California Retail Food Code (CRFC), Section 114380, a plan approval must be obtained from the local health agency before constructing or remodeling any building for use as a food facility. Plans and specifications may also be required by the Enforcement Agency if the agency determines that they are necessary to assure compliance with the requirements of CRFC, including, but not limited to, a menu change or change in the facility’s method of operation. Remodel of a food facility means construction, building or repair that requires a permit from the local building authority. The following procedures are required to process and approve food facility plans as well as to obtain final approval to open for business:

- 1) The plans must include sufficient information to demonstrate compliance with the “Minimum Requirements for Food Facility Plans.” [See page 6]

- 2) The plans may be prepared by an architect, drafter, designer, contractor or owner. All plans must be drawn in a precise, detailed and professional manner. Inadequate plans will be rejected.

- 3) A minimum of two (2) sets of detailed plans and specifications must be submitted, a food facility plan review application form completed and required plan check fees paid. Check with the local health agency for specific local requirements.

- 4) Check with the local agency for approval notification. A stamped approved set of plans must be maintained at the construction site until the final inspection has been made.

5) Before beginning construction, approvals must be obtained from the local health agency, local building authority and other appropriate agencies. Building permits for food facilities are not to be issued until plan approval has been obtained from the local health agency.

6) If any changes on the approved plans are desired, revised plans shall be submitted for review and approval prior to construction.

7) All construction and equipment installation shall be subject to field inspection. The food facility shall not operate until final approval is obtained from the local health agency and a valid Health Permit is issued. Contact the local health agency for inspection appointments.

I. Minimum Requirements for Food Facility Plans:

Plans should be complete, easily readable, and drawn to scale. It is recommended that ¼"=1' be used for the floor plan for ease of reviewing and ensuring adequate space is available for the proposed equipment. The plans should include the following:

- 1) Name and address of the food facility; the name, mailing address and telephone number of owner, contractor and/or contact person.
- 2) Vicinity map.
- 3) Floor plan of entire facility.
- 4) Floor plan showing equipment layout. [See Appendix A]
- 5) Complete equipment checklist, including the methods of installation. [See Appendix B]
- 6) Equipment manufacturer specification sheets and/or elevations.
- 7) Plumbing layout.
- 8) Electrical layout. This should include the lighting schedules to ensure that adequate illumination is provided.
- 9) Mechanical exhaust ventilation and make-up air systems. [See Appendix C]
- 10) A site plan including proposed waste storage receptacle location.
- 11) Room finish schedule for floors, base, walls and ceiling that indicates the type of material, the color and the surface finish for each room or area. Give specific brand names. Samples or specifications of proposed finish materials may be required. [See Appendix D]

II. Field Construction Inspection Procedure:

1) Preliminary construction inspection:

Contact the health agency to request a preliminary construction inspection prior to installation of equipment.

2) Final construction inspection:

Upon completion of construction, including finishing work, contact the health department to arrange for a final construction inspection. Approved materials and good workmanship are significant factors in the evaluation and final field approval of food facility construction and equipment installation. A final inspection should be requested no less than five (5) working days prior to the proposed opening of the establishment. Final construction must be approved by the health agency prior to opening for business or use of remodeled areas.

Some jurisdictions may require additional inspections.

III. Structural Requirements:

The plans must show and specify in detail the following:

1) Floors:

a) Floors in food establishments (except in sales and dining areas) shall be durable, smooth, nonabsorbent material that is easily cleanable (e.g., quarry tile, seamless epoxy poured floor, approved commercial grade vinyl, or other approved materials). Floor surfaces in all areas where food is prepared, packaged, dispensed, or stored in open containers, where any utensil is washed, where refuse or garbage is stored, where janitorial facilities are located, in all toilet and handwashing areas and in employee change and clothing storage areas, shall be an approved type that continues up the walls or toe-kicks at least four (4) inches, forming a 3/8 inch minimum radius cove as an integral unit. [CRFC 114268]

b) Floor drains are required in floors that are water-flushed for cleaning and/or where pressure spray methods for cleaning equipment are used. Where floor drains are utilized, the floor surfaces shall be sloped 1:50 (1/4 inch per foot) to the floor drains. [CRFC 114269]

2) Walls and Ceilings:

a) Walls and ceilings of all rooms shall be durable, smooth, nonabsorbent and easily cleanable (e.g., gloss or semi-gloss enamel paint, epoxy paint, FRP (Fiberglass Reinforced Panel), stainless steel, ceramic tile or other approved materials and finishes). Exposed brick, concrete block, rough concrete, rough plaster or textured gypsum board is not acceptable. Acoustical ceiling tile may be used if it meets the requirements of Section 114271 and is installed not less than six (6) feet above the floor. A sample may be required for review. [CRFC 114271]

b) Conduits of all types shall be installed within walls as practicable. When otherwise installed, they shall be mounted or enclosed so as to facilitate cleaning. [CRFC 114271(d)]

c) Attachments to walls and ceilings, such as light fixtures, mechanical room ventilation system components, vent covers, wall-mounted fans, decorative items, and other attachments shall be easily cleanable. [CRFC 114271(e)]

d) These requirements **do not apply** in any of the following areas:

- a. Walls and ceilings of bar areas in which alcoholic beverages are sold or served directly to the consumers, except wall areas adjacent to bar sinks and areas where food is prepared.
- b. Areas where food is stored only in unopened bottles, cans, cartons, sacks, or other original shipping containers.
- c. Dining and sales areas.
- d. Offices.
- e. Restrooms that are used exclusively by consumers, except that the walls and ceilings in the restrooms shall be of a nonabsorbent and washable surface. [CRFC 114271(a)]

3) Insect Control Devices, Design and Installation

a) Insect control devices that are used to electrocute or stun flying insects shall be designed to retain the insect within the device. [CRFC 114259.3(a)]

b) Insect control devices shall be installed so that the devices are not located over a food or utensil handling area and dead insects and insect fragments are prevented from being impelled onto or falling on non-prepackaged food, clean equipment, utensils, linens, and unwrapped single-use articles. [CRFC 114259.3(b)]

4) Food Protection Equipment:

Food on display shall be protected from contamination by the use of packaging, counter, service line, or sneeze guards that intercept a direct line between the customer's mouth and the food being displayed, containers with tight-fitting securely attached lids, display cases, mechanical dispensers, or other effective means. [CRFC 114060]

6) Food Storage:

a) Adequate and suitable space shall be provided for the storage of food. [CRFC 114047] There is no standard formula for determining what is adequate and/or suitable space for food storage. Storage space must be determined based on the food service activity to be conducted, the type of food that is to be prepared or served, and the length of time between deliveries. For example, a facility that has daily deliveries will not require as much on-site food storage space as a facility that receives deliveries once a week, while a hot dog stand will not require as much storage space as a full-service restaurant.

b) Shelving shall meet or be equivalent to approved applicable sanitation standards for food equipment. Unless shelving is sealed to the floor, the lowest shelf should be at least six (6) inches above the floor with a clear unobstructed area below for ease of cleaning.

7) Other Required Storage Facilities:

a) Adequate and suitable space shall be provided for the separate storage of clean and soiled linens. Linens shall be stored in clean, nonabsorbent receptacles or clean, washable laundry bags. [CRFC 114185.4]

b) A room, area or cabinet separated from any food preparation or storage area, or warewashing or storage area, shall be provided for the storage of cleaning equipment and supplies. [CRFC 114281]

8) Refuse Disposal Facilities:

a) Each facility shall be provided with any facilities and equipment necessary to store or dispose of all waste material. Waste receptacles shall be provided for use by consumers and in each area of the facility or premises where refuse is generated. Garbage and waste grease shall be disposed into durable, cleanable, leak-proof, rodent proof containers with close-fitting lids. An area designated for refuse, recyclables, returnables, or a redeeming machine for recyclables or returnables shall be located in a designated area that it is separate from food, equipment, utensils, linens, and single-service and single-use articles. [CRFC 114244, 114245 to 114245.8, 114257, 114175]

b) A designated area shall be provided for the storage and washing of these containers. Suitable cleaning implements and supplies such as high-pressure pumps, hot water, steam, and detergent shall be provided as necessary for effective cleaning of receptacles and waste handling units for refuse, recyclables, and returnables. [CRFC 114245.6 & 114245.7]

c) If located within the facility, refuse disposal, recyclable storage and returnables storage rooms and areas shall meet the requirements for floors, walls, ceilings, and vermin exclusion as specified in this part: [CRFC 114245.3 & 114268]

d) Receptacles and waste handling units for refuse, recyclables, and returnables shall not be located so as to create a public health hazard or nuisance, or interfere with the cleaning of adjacent space. [CRFC 114245(b)]

e) Floors that are water-flushed for cleaning and in areas where pressure spray methods for cleaning equipment are used must be sloped 1:50 to the floor drain(s) discharging to the sanitary sewer. Where washdown facilities are provided, liquid waste shall be disposed of to floor drains going to an approved sewage disposal system. [CRFC 114245.4, 114268, 114269, 114279]

f) The room or enclosure shall be well ventilated. [CRFC 114149(a)]

g) Hot and cold running water through a mixing valve protected with a backflow protection device shall be provided and located so that the room or enclosure can be cleaned. [CRFC 114245.7]

h) An out-door storage area or enclosure used for refuse, recyclables, and returnables should be constructed of nonabsorbent material such as concrete or asphalt and shall be easily cleanable, durable, and sloped to a drain. [CRFC 114245.4]

i) Receptacles and waste handling units for refuse and recyclables must be installed so that accumulation of debris and insect and rodent attraction and harborage are minimized and effective cleaning is facilitated around and, if the unit is not installed flush with the base pad, under the unit. [CRFC 114245.5]

j) Ground surfaces of concrete or asphalt and enclosure surfaces shall be constructed to be durable, easily cleanable and maintained in good repair. [CRFC 114245.1 & 114245.4]

9) Toilet Facilities:

a) In each permanent food facility, there shall be employee toilet facilities. The requirements on the number of toilets and handicapped facilities shall be in accordance with local building and plumbing ordinances. [CRFC 114250 & 114276(e)]

b) Toilet facilities, which are provided for use by patrons, shall be so situated that patrons do not pass through food preparation, food storage or utensil washing areas. [CRFC 114250 & 114276 (b)(2)]

c) The floors, walls and ceilings shall have surfaces that are smooth, durable, nonabsorbent and easily cleanable. Toilet rooms shall be provided with at least 20-foot candles of light. [CRFC 114252(b)(3), 114268(a) & 114271]

d) Handwashing facilities shall be provided within or adjacent to toilet rooms and shall be

equipped to provide warm (100°F) water under pressure for a minimum of 15 seconds through a mixing valve or combination faucet. The number of handwashing facilities required shall be in accordance with local building and plumbing codes. Handwashing cleanser and single-use sanitary towels in dispensers or hot air blowers shall be provided at or adjacent to handwashing facilities. [CRFC 113953, 113953.2, 114276]

e) Toilet tissue shall be provided in a permanently installed dispenser at each toilet. [CRFC 114250]

f) Toilet rooms shall be separated from other portions of the food establishment by well-fitted, self-closing doors that prevent passage of flies, dust or odors. [CRFC 114276(c)]

g) Public toilet facilities shall be provided in each permanent food facility when there is onsite consumption of food or when the food facility has more than 20,000 square feet of floor space. A food facility with more than 20,000 square feet of floor space shall provide at least one separate toilet facility for men and one separate toilet facility for women. [CRFC 114276]

h) Toilet rooms shall be vented to the outside air by means of an open-able screened window, an airshaft or a light switch-activated exhaust fan, consistent with the requirements of local building codes. [CRFC 114149(b)]

10) Designated Employee Areas:

a) Areas designated for employees to eat or drink (break rooms) shall be located so that food, equipment, linens, and single-use articles are protected from contamination. [CRFC 114256(a)]

b) Lockers or other suitable facilities shall be located in a designated room or area where contamination of food, equipment, utensils, linens, and single-use articles cannot occur. [CRFC 114256.1(b)]

11) Dressing Rooms and Lockers:

- a) Lockers or other suitable facilities, such as closets, shall be provided and used for the orderly storage of employee clothing and other possessions. [CRFC 114256.1(a)]
- b) Dressing rooms or dressing areas shall be provided and used by employees if the employees regularly change their clothes in the facility. [CRFC 114256.1(b)]
- c) Restricted food service facilities and nonpermanent food facilities are not required to provide lockers, etc., but no person may store clothing or other personal effects in any area used for the storage or preparation of food. [CRFC 114256.1(c)]

11) Exterior Doors and Windows:

- a) All exterior doors shall be well fitted and self-closing to effectively prevent the entrance of flies, rodents and vermin. [CRFC 114259]
- b) It is recommended that all windows that open into food preparation and storage areas, warewashing areas, and utensil storage areas be equipped with 16-mesh-per-inch (or smaller) screen material to prevent the entrance of flying insects if capable of being left open.

12) Pass-through Windows Service Openings:

- a) Pass-through window service openings shall be limited to 216 square inches each. Pass-through windows of up to 432 square inches are approved if equipped with an air curtain device. It is important to measure only the actual opening to determine compliance and not measure the entire window. [CRFC 114259.2]
- b) Each opening shall be provided with a solid or screened window, equipped with a self-closing device, or an automatic switch-activated air curtain which will should produce an air flow eight (8) inches thick at the discharge opening and with an air velocity of not less than

600 FPM (feet per minute) across the entire opening measured at a point three (3) feet below the air curtain. (Window openings must be closed when not in use.) [State of California, Food and Drug Circular 80-7] [CRFC 114259.2]

c) Screening, if used, should be at least 16-mesh-per-inch.

d) The minimum distance between the pass-through window openings shall not be less than eighteen (18) inches. [CRFC 114259.2]

e) The counter surface of the pass-through window must be smooth, and easily cleanable. The counter surface should be and free of channels and crevices. [CRFC 114259.2]

13) Delivery and Cargo Doors:

a) Overhead air curtains must be provided when delivery doors remain open for an extended period of time and when necessary to exclude insects, dust, dirt and fumes. [CRFC 114259]

b) An air curtain installed inside the building shall produce a downward and outward air flow not less than three (3) inches thick at the nozzle with an air velocity of not less than 1600 FPM (feet per minute) across the entire opening at a point three (3) feet above the floor. [State of California, Food and Drug Circular 80-7]

c) An air curtain installed outside the building shall produce air at the same velocity (1600 FPM) directed straight down across the entire door opening. The air curtain shall turn on automatically when the door is opened. [State of California, Food and Drug Circular 80-7]

d) Large cargo type doors shall not open directly into a food preparation area. Cargo type doors that open into any food warehouse of a food facility may only be open during deliveries. [CRFC 114266(a)]

NOTE: An overhead air curtain is not a substitute device to permit a door to remain open.

14) Lighting:

a) In every room and area in which any food is prepared, manufactured, processed or packaged, or in which utensils are cleaned, sufficient natural or artificial lighting shall be provided to produce the following light intensity:

(1) 10-footcandles – Walk-in refrigeration units and dry storage areas

(2) 20-footcandles – (a) at a surface where food is provided for consumer self-service, or where fresh produce or prepackaged foods are sold or offered for consumption, (b) Inside equipment such as reach-in and under-counter refrigerators, (c) at a distance of 30 inches above the floor in areas used for handwashing, warewashing, and equipment and utensil storage, and in toilet rooms.

(3) 50-footcandles – (a) where a food employee is working with food or working with utensils or equipment such as knives, slicers, grinders, or saws where employee safety is a factor, (b) in all areas and rooms during periods of cleaning. [CRFC 114252]

NOTE: In essence, the food facility must be capable of providing 50-footcandles of light in all areas while cleaning, although the light intensity may be lowered at other times as specified above.

b) Light bulbs shall be shielded, coated, or otherwise shatter-resistant in areas where there is non-prepackaged ready-to-eat food, clean equipment, utensils, and linens, or unwrapped single-use articles. [CRFC 114252.1(a)]

c) Shielded, coated, or otherwise shatter-proof bulbs are not required in areas used only for storing prepackaged food in unopened packages, if the integrity of the packages cannot be affected by broken glass falling into them and the packages are capable of being cleaned of debris from broken bulbs before the packages are opened. [CRFC 114252.1(b)]

d) Infrared and other heat lamps must be protected against breakage by a shield surrounding and extending beyond the bulb so that only the face of the bulb is exposed, or by using approved coated shatter-resistant bulbs. [CRFC 114252.1(c)]

15) Water:

a) An adequate, protected, pressurized, potable supply of hot water and cold water shall be provided. The water supply shall be from a water system approved by the health officer or the local enforcement agency. Hot water must be supplied at a minimum temperature of 120°F as measured from the faucet. [CRFC 114192(a)]

b) Hoses for conveying potable water must be constructed of non-toxic materials, must not be used for any other purpose, and must be clearly labeled as to its use. [CRFC 114192(b)]

c) The potable water supply must be protected with a backflow or back-siphoning protection devices when required by applicable plumbing codes. [CRFC 114192(c)]

d) Where water is used only for handwashing, only warm water must be supplied (100°F). [CRFC 114192.1(d)]

e) The water source and system shall be of sufficient capacity to meet the peak demands of the food facility. [CRFC 114195(a)]

f) Hot water generation and distribution systems shall be sufficient to meet the peak hot water demands throughout the food facility. [CRFC 114195(b)] To size a water heater, the peak hourly demands for all sinks, dishwashing machines, and other equipment that uses hot water in the facility are added together to determine the minimum required hourly recovery rate. (Refer to CCDEH Guidelines, “CCDEH Gas and Water Heater charts.)

16) Backflow Protection:

a) An approved backflow prevention device shall be properly installed upstream of any potential hazard between the potable water system and a source of contamination (e.g., all threaded water outlets, mop sinks, sprayers, dishwashers, etc.). [*California Plumbing Code (CPC)*] An air-gap used as a backflow prevention method, between the water supply inlet and the flood level rim of any plumbing fixture, equipment, or non-food equipment, must be at least twice the diameter of

the water supply inlet and may not be less than one-inch. [CRFC 114193.1]

17) Indirect Waste Receptors:

- a) All steam tables, ice machines and bins, food preparation sinks, warewashing sinks, and other similar equipment with drain lines shall discharge their liquid waste by means of indirect waste pipes. Condensate and liquid waste from food preparation equipment and sinks, utensil sinks, dishwashers, dipper wells, steam tables, ice machines, beverage dispensers, refrigeration condensers and similar equipment must be drained by indirect drainage into a floor sink or other approved waste receptor. Common waste receptors include funnel drains for slow-draining walk-in refrigerators, and mop sinks used to catch water heater wastewater. Warewashing sinks may be directly plumbed to the sewer line if required by local building officials. This is usually required when the sanitary sewer also serves as the greasy waste sewer. [CRFC 114193(a)]
- b) The floor sink or other approved indirect waste receptors should be located to be readily accessible for inspection and cleaning. [CRFC 114193(c)]
- c) In general, floor sinks should be installed flush with the floor to prevent tripping hazards and prevent harborage of dirt and debris, however some jurisdictions may require floor sinks above grade. Check with local Building and Safety officials.

18) Sewage Disposal, Grease Traps and Interceptors:

NOTE: The California Plumbing Code now refers to “grease traps” as Hydro-mechanical Grease Interceptors. “Grease interceptors” are now referred to as Gravity Grease Interceptors.

- a) All liquid waste, including “gray water” and “black water” generated by a food establishment, shall be disposed of through the approved plumbing system and must discharge into a public sewerage or into an approved private sewage disposal system. [CRFC 114197]
- b) Sizing of hydro-mechanical grease interceptors and gravity grease interceptors is now based on Drainage Fixture Values assigned by the California Plumbing Code (Table 7-3).

IV. Ventilation:

- a) All areas of a food facility shall have sufficient ventilation to facilitate proper food storage and to provide a reasonable condition of comfort for each employee, consistent with the job performed by the employee. [CRFC 114149(a)]

- b) Toilet rooms shall be vented to the outside air by means an openable, screened window, an airshaft, or a light-switch activated exhaust fan, consistent with the requirements of local building codes. [CRFC 114149(b)]

- c) Mechanical exhaust ventilation shall be provided over all cooking equipment as required to effectively remove cooking odors, steam, heat, grease, smoke, and vapors. Mechanical ventilation shall be installed and maintained in accordance with the California Mechanical Code. Makeup air shall be provided at the rate exhausted. [CRFC 114149.1(a)]

Ventilation Hood Systems:

- a) Every hood shall be installed to provide for thorough cleaning of all interior and exterior surfaces. [CRFC 114149.2]

- b) Exhaust ventilation systems in food preparation and warewashing areas shall be design to prevent grease or condensation from draining or dripping onto food, equipment, utensils, single use articles, and linens. [CRFC 114149.2]

Heating, Ventilating, Air Conditioning System Vents:

- a) Heating, ventilating, and air conditioning systems shall be designed and installed so that make-up air intake and exhaust vents do not cause contamination of food, food-contact surfaces, equipment, or utensils and do not create air currents that cause difficulty in maintaining the required temperatures of potentially hazardous foods. [CRFC 114149.3]

b) Filters or other grease extracting equipment shall be designed to be readily removable for cleaning and replacement if not designed to be cleaned in place. [CRFC 114149.3c]

c) Every joint and seam shall be substantially tight. No solder shall be used, except for sealing a joint or seam. [CRFC 114149.3d]

d) When grease gutters are provided they shall drain to a collecting receptacle fabricated, designed, and installed to be readily accessible for cleaning. [CRFC 114149.3 e]

e) Exhaust hood ducting shall meet the following requirements [CRFC 114149.3f]:

(1) All seams in the duct shall be completely tight to prevent the accumulation of grease.

(2) The ducts shall have sufficient clean-outs to make the ducts readily accessible for cleaning.

(3) All ducts in the exhaust system shall be properly sloped.

Refer to California Mechanical Code Chapter on Commercial Kitchen Ventilation Systems. Refer to CCDEH Guidelines; Recommended Formulas for Mechanical Ventilation for Specific Equipment, Ventilation long, and Ventilation short.

V. Equipment Requirements:

a) All new and replacement equipment shall meet or be equivalent to applicable sanitation standards. Equipment design, construction and installation are subject to approval by the enforcement officer. [CRFC 114130]

b) All utensils, display cases, windows, counters, shelves, tables, refrigeration units, sinks, dishwashing machines and other equipment or utensils used in the

preparation, sale, service and display of food shall be made of nontoxic, corrosion resistant, nonabsorbent materials and shall be constructed, installed and maintained to be easily cleaned. [CRFC 114130.4]

c) Equipment shall be installed so as to facilitate cleaning under and around the equipment, and of all the adjacent surfaces. Equipment should be sealed to adjacent walls and equipment. Floor-mounted equipment that is not easily movable shall be sealed to the floor or elevated on legs that provide at least a six-inch clearance between the floor and the equipment. [CRFC 114130.4, 114169]

1) Refrigeration:

a) All reach-in and walk-in refrigeration and freezer units shall be adequate in capacity and usage to meet the needs of the proposed operation and shall: [CRFC 114153, 114130]

b) Have shelving that is nonabsorbent, corrosion resistant, easily cleanable and shall meet or be equivalent to applicable ANSI standards. Wood is not acceptable. [CRFC 114130.1, 114130.4]

c) Be provided with an accurate, readily visible thermometer. [CRFC 114157, 114159]

d) Drain condensate and other liquid waste in a sanitary manner to a floor sink or other approved receptor that is properly connected to the drainage system. Condensate from reach-in refrigerators and freezers may be drained to a properly installed and functioning evaporator. [CRFC 114193]

e) Open into an approved area of the food facility. [CRFC 114049, 114266]

f) Walk-in refrigeration and storage freezer units shall also:

(1) Be designed to be closeable, sealed to the floor, or be constructed integral with the floor. Coved bases shall be provided at the intersection of interior floors and walls. [CRFC 114259, 114268(b)]

(2) Be flashed or sealed to walls and/or ceiling as needed to prevent rodent and vermin harborage or inaccessible areas. [CRFC 114259, 114169]

(3) Have floor drains and floor sinks located outside units, when they are required. [CRFC 114193, 114269, 113715]

2) Sinks:

a) When a sink is installed next to a wall, the integral metal backsplash shall be sealed to the wall. [CRFC 114169]

b) Hot and cold water under pressure shall be provided through a mixing valve to each compartment of the following sinks:

(1) Warewashing Sinks:

Where multi-service kitchen utensils (i.e., pots, pans, etc.) are used, a minimum three (3) compartment stainless steel sink with dual integral stainless steel drainboards shall be provided. [CRFC 114099(a)]

The sink must be capable of accommodating the largest utensil to be washed and the drainboards shall be as large as the largest sink compartment. A compartment size of approximately 18 x 18 x 12 inches deep will generally be adequate for most utensils. [CRFC 114099(b)]

(2) **Food Preparation Sink:**

Food facilities needing a separate sink for food preparation such as, but not limited to, thawing, washing, or soaking shall have a food preparation sink that drains by means of an indirect connection. The food preparation sink shall have a minimum dimension of 18 inches by 18 inches in length and width and 12 inches in depth with an integral drainboard or adjacent table at least 18 inches by 18 inches in length and width. [CRFC 114193(a) & 114153(b)(2), 114163]

(3) **Handwashing Sinks:**

Handwashing sinks shall be provided in each food preparation area (i.e., deli, meat, bakery, sushi bar, oyster bar, etc.). The handwashing facility shall be separated from the warewashing sink by a metal splashguard with a height of at least 6 inches that extends from the back edge of the drainboard to the front edge of the drainboard, with the corners of the splashguard barrier to be rounded. No splashguard is required if the distance between the handwashing sink and the warewashing sink drainboards is 24 inches or more. [CRFC 113953]

Handwash sinks must be provided in or adjacent to toilet rooms.
[CRFC 113953(a)]

Soap and single-use sanitary towels shall be provided in dispensers at the handwashing sinks [CRFC 113953.2]

Handwashing sinks shall have such water provided from a combination faucet, or water from a premixing faucet which supplies warm water for a minimum of fifteen (15) seconds while both hands are free for washing. [CRFC 113953]

(4) **Janitorial Sink:**

Permanent food facilities shall be equipped with at least one of the following to be used exclusively for general cleaning purposes and for the disposal of mop bucket waste and other liquid waste:

- A curbed cleaning facility
- A janitorial sink [CRFC 114279(a)]

The sink shall be located so as not to contaminate any food preparation areas, food storage areas, utensils or equipment. [CRFC 114190, 113980]

The mixing valve faucet shall be equipped with a backflow prevention device. [CRFC 114190]

(5) **Dishwashing and Glass Washing Machines:**

An area should be provided for scraping utensils and equipment, as circumstances require. An overhead pre-rinse sprayer with scupper tray, sink or garbage disposal will satisfy this requirement. [CRFC 114099.1(a)(b)]

Dishwashing machines may be connected directly to the sewer immediately downstream from a floor drain or they may be drained through an approved indirect connection. [CRFC 114193(d)]

Spray type dishwashing and glass washing machines, which are designed for a hot water bactericidal rinse, shall be capable of achieving a utensil surface temperature of 160°F as measured by an irreversible registering temperature indicator. These machines

normally require an approved Type II exhaust hood. [CRFC 114099.6(b), 114149.2(b)]

Spray type dishwashing and glass washing machines that are designed for a chemical bactericidal rinse shall be capable of operating in accordance with its approved applicable sanitation listing. The manufacturer's data plate shall be affixed to the machine, easily accessible and readable [CRFC 114101(a), 114101.1]

Dishwashing machines must have two (2) integral stainless steel drainboards or dish-tables*, one for soiled utensils and one for clean utensils. The drainboards shall be sloped and drained to an approved waste receptor. [CRFC 114103(a)]

For glass washing machines and under-counter dishwashing machines, there shall be two (2) metal drainboards, one for soiled utensils and one for clean utensils, located adjacent to the machine. One drainboard shall be attached at the point of entry for soiled items and one shall be attached at the point of exit for cleaned and sanitized items. The drainboards shall be sloped and drained to an approved waste receptor. [CRFC 114103(a)]

Drainboards or dish-tables shall be large enough to adequately store all utensils above the floor at all times or additional approved shelving, racks or dish-tables shall be provided in the dishwashing area for this purpose. [CRFC 114178, 114103]

A minimum of a three (3) compartment stainless steel sink with dual integral metal drainboards is required in addition to any dishwashing machine. The drainboards shall be of sufficient size to accommodate the largest utensil. [CRFC 114095, 114099]

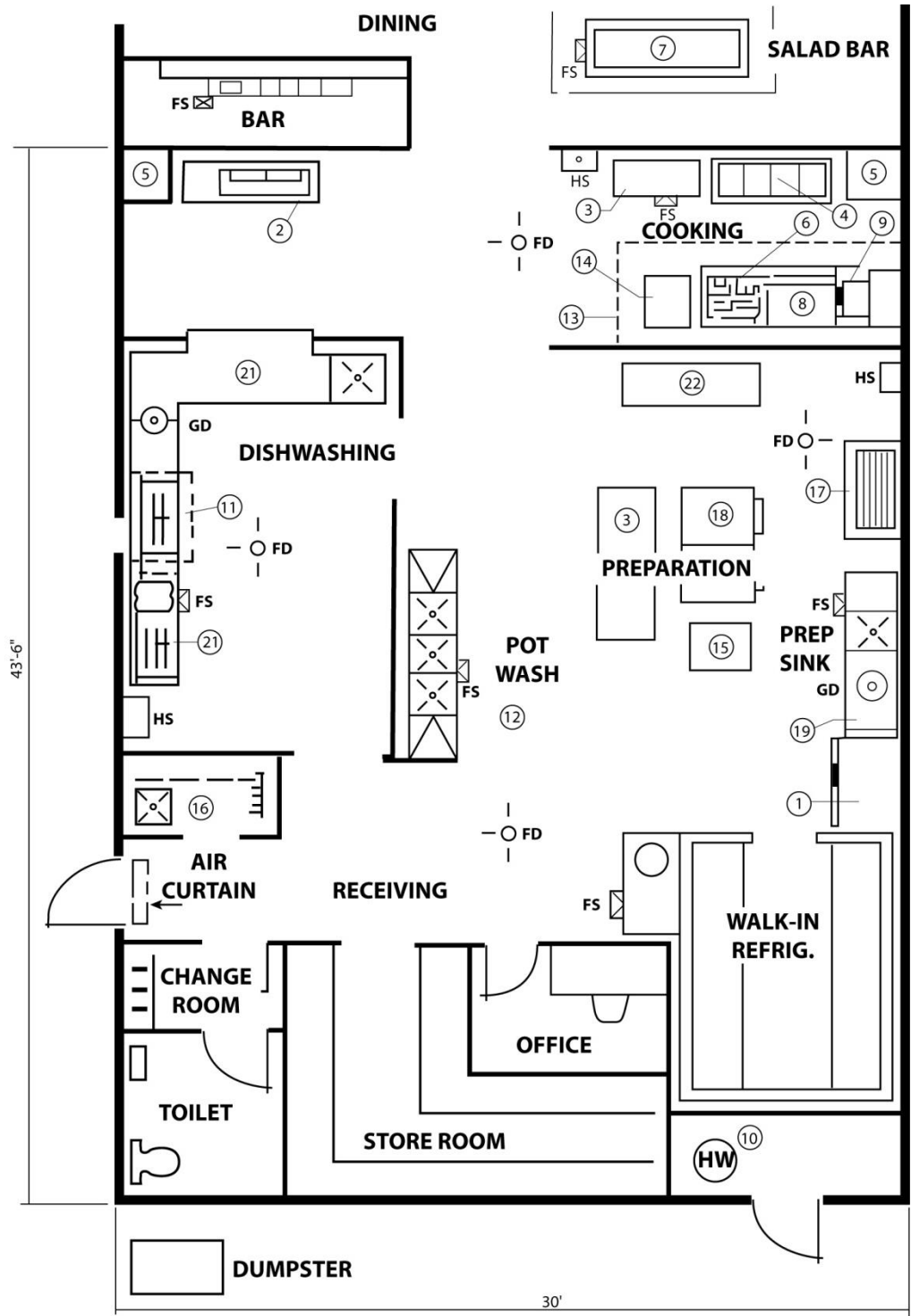
When a dish-table is installed next to a wall, the integral metal backsplash shall be sealed to the wall. [CRFC 114103(d), 114169(a)(3)]

*Dish-tables are extended drainboards or tables used for the purpose of sorting soiled or clean dishes.

(6) **Dipper Well:**

A cold running water dipper well shall be provided if scoops or other reusable serving utensils are stored in water. The dipper well shall be drained by means of an indirect connection. [CRFC 114119(d), 114193(a)]

APPENDIX A - SAMPLE FLOOR PLAN



SCALE: 1/4"=1'-0"

NOTE: FLOOR TO SLOPE TO FDS

Notes: This is not intended as a model layout but ONLY to illustrate procedure for submitting plans and data. Each piece of equipment is numbered to correspond to the listing in the Equipment Schedule in Appendix 2. Floor Drain: FD; Floor Sinks: FS; Handsinks: HS; hash lines indicate exhaust hoods are over equipment. **Scale has been reduced for illustration only.**

APPENDIX B - SAMPLE EQUIPMENT LIST

SAMPLE EQUIPMENT SCHEDULE							
EQUIPMENT No.	*EQUIPMENT MAKE AND MODEL	GAS CONNECTION	ELECTRICAL	HOT WATER	COLD WATER	WASTE WATER	COMMENTS
1	Reach-in Refrigerator BEST: Side Model EHS		110V 20A			FS	
2	Food Preparation Table ACME: Model DLM		110V 20A				Self-contained
3	Work Table, Stainless Steel Top – ACME, Custom						Made to dimensions supplies by General Contractor
4	Steam Table Super, MD0315	¾"			½"	FS	Anti-siphon Valve
5	Proofing Cabinet Meier, P-C		110V 20A				
6	Heavy Duty Range ACME, Model I.A.N.	¾"					
7	Salad Bar Custom by General Contractor				½"	FS	Anti-siphon Valve
8	Deep Fat Fryer BEST, Type L	½"					
9	Steam Cooker BEST, SC5				½"	FS	Anti-siphon Valve
10	Hot Water Heater Mills G-BT155	¾"		1"	1"		155,000 BTU
11	Dish machine and Hood Warford., QF-1		220V	1"	1"	FS	High-temperature warewasher hood
12	Utensil Sink ACME, 18" x 18" x 18" F			½"	½"	2"	
13	Hood Custom by General Contractor						See mechanical drawing, detail
14	Bake Oven Meier, O/B	¾"					
15	Bakers Table Custom by CONRAD						
16	Janitor Sink ACME, STD			½"	½"	2"	Floor Mop Sink
17	Ice Machine Frozen CDW56				½"	1"	
18	Freezer Forte: Side Model F		110V				Self-contained

***ABOVE EQUIPMENT LISTINGS ARE FICTITIOUS**

APPENDIX B - EQUIPMENT LIST

Facility Name:							
	Equipment Make and Model	Gas Connection	Electrical	Hot Water	Cold Water	Waste Water	Comments
1							
2							
3							
4							
5							
6							
7							
8							
9							
10							
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29							
30							

Download “[Mechanical Exhaust Ventilation Systems For Retail Food Facilities; Design, Calculations, and Operational Guidelines](#)”

APPENDIX D - SAMPLE FINISH SCHEDULE

THIS IS A SAMPLE ONLY: Specific brand names and colors for materials should be specified to insure acceptability

SAMPLE FINISH SCHEDULE

	FLOOR	FLOOR BASE OR COVE	WALLS	CEILING
FOOD PREPARATION	QUARRY TILE	QUARRY TILE, UP WALL 4 INCHES 3/8" RADIUS COVE	F.R.P.	WASHABLE NON-ABSORBENT LAY-IN CEILING PANELS
DISHWASHING	QUARRY TILE	QUARRY TILE, AS ABOVE	F.R.P.	WASHABLE NON-ABSORBENT LAY-IN CEILING PANELS
STOREROOM	COMMERCIAL GRADE SHEET VINYL	CONTINUOUS WITH FLOOR UP WALL 4 INCHES 3/8" RADIUS COVE	DRYWALL WITH GLOSS ENAMEL	WASHABLE NON-ABSORBENT LAY-IN CEILING PANELS
WAITRESS SERVICE STATION	QUARRY TILE	QUARRY TILE, AS ABOVE	GREENBOARD, 4 FT. CERAMIC WAINSCOT, LIGHT COLORED	WASHABLE NON-ABSORBENT LAY-IN CEILING PANELS
BAR	QUARRY TILE	QUARRY TILE, AS ABOVE	F.R.P.	WASHABLE NON-ABSORBENT LAY-IN CEILING PANELS
SALAD BAR	QUARRY TILE: EXTENDS 36" BEYOND TABLE ON ALL SIDES	QUARRY TILE, AS ABOVE	N.A.	LAY-IN PANELS
RESTROOMS	CERAMIC TILE	CONTINUOUS WITH FLOOR UP WALL 4 INCHES 3/8" RADIUS COVE	GREENBOARD, 4 FT. CERAMIC WAINSCOT	WATER-RESISTANT DRYWALL, WHITE ENAMEL
CLEANING EQUIPMENT/ MOP EQUIPMENT	QUARRY TILE	CONTINUOUS WITH FLOOR UP WALL 4 INCHES 3/8" RADIUS COVE	F.R.P.	WASHABLE NON-ABSORBENT LAY-IN CEILING PANELS
DRESSING ROOM(S)	CERAMIC TILE	CONTINUOUS WITH FLOOR UP WALL 4 INCHES 3/8" RADIUS COVE	DRYWALL WITH WHITE ENAMEL	LIGHT-COLORED ENAMEL PAINTED DRYWALL
WALK-IN REFRIGERATOR	*SEALED SMOOTH CONCRETE	PREFABRICATED STAINLESS STEEL WALL 4 INCHES 3/8" RADIUS SANITARY COVE	PREFABRICATE D STAINLESS STEEL	PREFABRICATED STAINLESS STEEL

*Smooth concrete is sealed to be grease resistant with an approved sealer.

APPENDIX D - FINISH SCHEDULE

THIS IS A SAMPLE ONLY: Specific brand names and colors for materials should be specified to insure acceptability

SAMPLE FINISH SCHEDULE

	FLOOR	FLOOR BASE OR COVE	WALLS	CEILING
FOOD PREPARATION				
DISHWASHING				
STOREROOM				
WAITRESS SERVICE STATION				
BAR				
SALAD BAR				
RESTROOMS				
CLEANING EQUIPMENT/ MOP EQUIPMENT				
DRESSING ROOM(S)				
WALK-IN REFRIGERATOR				

*Smooth concrete is sealed to be grease resistant with an approved sealer.

APPENDIX E - APPROVED FLOOR SURFACING MATERIALS

APPROVED FLOOR SURFACING MATERIALS*

- Commercial Vinyl Tiles, Sheet Vinyl
- Quarry Tile
- Ceramic Tile
- Altro Flooring
- Troweled Epoxy
- Smooth concrete with 100% solids epoxy

The Shasta County Environmental Health Division may approve alternative floor surfacing materials upon assurance that the floor will be smooth, durable, easily cleanable and non-porous.

Note: Floor surfaces must be coved at the juncture of the floor and wall with a 10 millimeter (3/8 inch) minimum radius coving and shall extend up the wall at least 10 centimeters (4 inches) except in areas where food is stored only in unopened bottles, cans, cartons, sacks, or other original shipping containers.

* In all areas of establishment where food is prepared, packaged, or stored, where any utensil is washed, where refuse or garbage is stored, where janitorial facilities are located and in all toilet and hand washing areas.