

# **PLAN CHECK GUIDE**

## **FOR**

### **RETAIL FOOD FACILITIES**

**San Joaquin County  
Environmental Health Department**

1868 East Hazelton Avenue  
Stockton, CA 95205-6232  
(209) 468-3420

**Website:** [www.sjgov.org/ehd](http://www.sjgov.org/ehd)

**PAGES:** 4, 5, 18, 19, & 21 TO BE COMPLETED IN DETAIL.

**NOTE:** Appendix C (Pages 18 & 19) applies to facilities required to install an exhaust ventilation system.

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# 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 San Joaquin County Environmental Health Department (EHD) before constructing or remodeling any building for use as a food facility. Remodel of a food facility means construction, building, enlarging, altering, converting or repairing 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. Plans may be prepared by an architect, draftsman, designer, contractor, or owner. All plans must be drawn in a concise, detailed, and professional manner. Inadequate plans will be rejected.
3. A minimum of three (3) sets of detailed plans and specifications must be submitted and a food construction plan application form completed and required plan check fees of \$366 (three-hour minimum). All overtime review shall be charged the hourly rate calculated at one and one half times, with a one hour minimum (\$183 per hour).
4. Upon approval, two (2) sets of plans are to be submitted to the building department, and the third set will be kept on file by the EHD until construction has been completed. An approved set of plans must be maintained at the construction site until the final inspection has been made.
5. Before commencing construction, approvals must be obtained from the EHD, 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 department.
6. If any changes on the approved plans are desired, revised plans shall be submitted for review and approval prior to construction. Additional fees shall be required for review of revised plans at a charge of \$122 per hour (one-hour minimum).
7. All construction and equipment installation shall be subject to a field inspection. The food facility shall not open for business until final approval is obtained from the EHD and a valid Health Permit is issued. Call (209) 468-3420 for inspections or appointment(s).
8. Approval of the plans shall become null and void if the work authorized is not commenced within 180 days from the date of approval, or if the work authorized by such plans is abandoned. In order to renew action on a permit after expiration, the permittee will pay a full plan check fee.

Please provide all information requested; an incomplete application may delay approval

<input type="checkbox"/> <b>FACILITY INFORMATION</b>	
Name of Facility:	
Street Address:	
City:	Zip Code:
<input type="checkbox"/> <b>FORMER NAME OF FACILITY</b>	
<input type="checkbox"/> <b>BUSINESS OWNER INFORMATION</b>	
Business Owner Name:	
Home Address:	
Mailing Address:	
Telephone Number:	
<input type="checkbox"/> <b>PROPERTY OWNER INFORMATION</b>	
Property Owner Name:	
Home Address:	
Mailing Address:	
Telephone Number:	
<input type="checkbox"/> <b>CONTRACTOR INFORMATION</b>	
Name of General Contractor:	
Mailing Address:	
Telephone Number:	
Contact Person on Site:	
Site Phone Number:	
<input type="checkbox"/> <b>UTILITIES</b>	
Source of Facility Water Supply:	
Backflow Protection:	
System to be used for Liquid Waste Disposal (Sewage):	
Solid Waste Disposal to be provided:	
Grease Interceptor:	
<input type="checkbox"/> <b>FOOD INFORMATION</b>	
List food(s) to be served and/or provide menu:	
<input type="checkbox"/> <b>OPERATIONAL INFORMATION</b>	
Anticipated Business Hours:	<b>Open:</b> _____ <b>Close:</b> _____
Anticipated Number of Employees:	

Type of Food Facility Proposed: \_\_\_\_\_

Choose one of the below

	<b><u>Food Establishment</u></b>	<b><u>Annual Permit Fee</u></b>
16.23	1 - 20 Seating Capacity	\$300
16.24	21 - 50 Seating Capacity	\$300
16.25	51 - 100 Seating Capacity	\$323
16.26	101 + Seating Capacity	\$347
16.28	Licensed Healthcare Facility	\$289
	<b><u>Food Processing Establishment without Seating Capacity</u></b>	
16.12	1 - 500 Total Square Feet	\$300
16.13	501 - 1,100 Total Square Feet	\$300
16.14	1,001 + Total Square Feet	\$323
	<b><u>Grocery Store</u></b>	
16.20	< 25 Total Square Feet (Incidental Foods)	\$87
16.16	< 1,000 Total Square Feet	\$208
16.17	> 1,000 Total Square Feet (Food Prep Area)	\$243
16.19	> 1,000 Total Square Feet (W/Multiple Depts.)	\$404
16.15	< 2,000 Total Square Feet (Prepackaged Only)	\$203
16.18	> 2,000 Total Square Feet (W/Prepackaged Only)	\$231
16.80	Commissary (Storage, Major Cleaning - MFPU)	\$260
16.81	Commissary (Storage, Minor Cleaning - Vehicle/Cart)	\$203
16.90	Satellite Food Distribution Facility	\$145
16.60	Ice Plant	\$173
16.07	Produce Stand	\$173
16.21	Bar without Food Preparation	\$231

Additional Information Regarding this Facility: \_\_\_\_\_

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## I. Minimum Requirements for Food Facility Plans

Plans shall be drawn to scale. The recommended scale is ¼ inch = 1 foot and shall include the following:

- A. Name and address of the food facility; the name, mailing address and telephone number of owner, contractor, and contact person.
- B. Vicinity Map
- C. Floor plan of entire facility.
- D. Floor plan showing equipment layout including: (See Appendix A)
  - 1. Complete equipment checklist, including the methods of installation. (See Appendix B)
  - 2. Equipment manufacturer specification sheets and/or elevations.
- E. Plumbing layout.
- F. Electrical layout.
- G. Exhaust hood ventilation and make-up air systems. Complete the attached worksheet for each hood. (See Appendix C)
- H. A site plan including proposed waste storage receptacle location.
- I. 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

- A. **Preliminary Construction Inspection:**

Preliminary construction inspection prior to installation of equipment is available upon request. Contact this department to request preliminary construction inspection. Our current hourly rate will be charged for this inspection.
- B. **Final Construction Inspection:**

Upon completion of construction, including finishing work, contact the Environmental 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. Final construction must be approved by this agency prior to opening for business or use of remodeled areas.

## III. Structural Requirements:

The plans must show and specify in detail the following:

- A. **Floors:**
  - 1. **CRFC 114268**
    - (a) Except in sales areas and as otherwise specified in subdivision (d), the floor surfaces in all areas in which food is prepared, prepackaged, or stored, where any utensil is washed, where refuse or garbage is stored, where janitorial facilities are located in all toilet and handwashing areas, except with respect to areas relating to guestroom accommodations and the private accommodations of owners and operators in restricted food service facilities, and in employee change and storage areas shall be smooth and of durable construction and nonabsorbent material that is easily cleanable.
    - (b) Floor surfaces shall be coved at the juncture of the floor and wall with a 3/8 inch minimum radius coving and shall extend up the wall at least 4 inches, except in areas where food is stored only in unopened bottles, cans, cartons, sacks, or other original shipping containers.
    - (c) Public or private schools constructed or remodeled after the effective date of this part shall comply with subdivision (b). Public and private schools constructed before the effective date of this part need not comply with subdivision (b), provided that the existing floor surfaces are maintained in good repair and in a sanitary condition. **(Vinyl or rubber top set base is not acceptable.)**

- 2. **CRFC 114268 (e)**  
Approved anti-slip floor finishes or materials are acceptable in areas where necessary for safety reasons, such as traffic areas.
- 3. **CRFC 114269**
  - (a) Upon new construction or extensive remodeling, floor drains shall be installed in floors that are water-flushed for cleaning and in areas where pressure spray methods for cleaning equipment are used. Floor surfaces in areas pursuant to this subdivision shall be sloped 1:50 (1/4 in/ft) to the floor drains.
  - (b) Upon new construction or extensive remodeling, floor sinks or equivalent devices shall be installed to receive discharges of water or other liquid waste from equipment.

**B. Walls and Ceilings:**

- 1. **CRFC 114271**
  - (a) Except as provided in subdivision (b), the walls and ceilings of all rooms shall be of a durable, smooth, nonabsorbent, and easily cleanable surface.
  - (b) This section shall not apply to any of the following areas:
    - (1) 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.
    - (2) Areas where food is stored only in unopened bottles, cans, cartons, sacks, or other original shipping containers.
    - (3) Dining and sales areas.
    - (4) Offices.
    - (5) Restrooms that are used exclusively by the patrons, except that the walls and ceilings in the restrooms shall be of a nonabsorbent and washable surface.
  - (c) Acoustical paneling may be utilized if it is installed not less than six feet above the floor. The paneling shall meet the other requirements of this section.
  - (d) 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.
  - (e) 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.

**C. Exterior Doors and Windows:**

- 1. **CRFC 114259**  
A food facility shall at all times be constructed, equipped, maintained, and operated as to prevent the entrance and harborage of animals, birds, and vermin, including, but not limited to, rodents and insects.
- 2. **CRFC 114259.2**  
Pass-through window service openings shall be limited to 216 square inches each. The service openings shall not be closer together than 18 inches. Each opening shall be provided with a solid or screened window, equipped with a self-closing device. Screening shall be at least 16 mesh per square inch. Pass-through windows of up to 432 square inches are approved if equipped with an air curtain device. The counter surface of the service openings shall be smooth and easily cleanable.

**D. Food Protection Equipment:**

Service of unpackaged food/utensils directly to or by the customer: (Refer to "CCDEH Buffet/Service Guidelines").

- 1. **CRFC 114060**  
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. The means and specifications of protection device must be diagramed and explained in detail. The EHD will evaluate and approve the device and means based upon the application and proper protection of the food.

**E. Dry Food and Beverage Storage:**

- CRFC 114047**
  - (a) Adequate and suitable space shall be provided for the storage of food.
  - (b) Except as specified in subdivisions (c) and (d), food shall be protected from contamination by storing the food in a clean, dry location, where it is not exposed to splash, dust, vermin, or other forms of contamination or adulteration, and at least six inches above the floor.

**F. Other Required Storage Facilities:**

- 1. **CRFC 114185.4**
  - (a) Adequate and suitable space shall be provided for the storage of clean linens.
  - (b) Soiled linens shall be kept in clean, nonabsorbent receptacles or clean, washable laundry bags and stored and transported to prevent contamination of food, clean equipment, clean utensils, and single-use articles.

**CRFC 114254.2 (a)**

Poisonous or toxic materials shall be stored or displayed so they can not contaminate food, equipment, utensils, linens, and single-use articles by separating the poisonous or toxic materials by spacing or partitioning and locating the poisonous or toxic materials in an area that is not above food, equipment, utensils, linens, and single-use articles.

**G. Refuse Disposal Facilities:**

- 1. **CRFC 114245**
  - (a) An area designated for refuse, recyclables, returnables, and a redeeming machine for recyclables or returnables shall be located so that it is separate from food, equipment, utensils, linens, and single-service and single-use articles and a public health hazard or nuisance is not created.

- 2. **CRFC 114245.3**

If located within the food facility, a storage area for refuse, recyclables, and returnables shall meet the requirements for floors, walls, ceilings, and vermin exclusion as specified in this part.

- 3. **CRFC 114245.4**

If provided, an outdoor storage area or enclosure used for refuse, recyclables, and returnables shall be constructed of nonabsorbent material such as concrete or asphalt and shall be easily cleanable, durable, and sloped to drain.

- 4. **CRFC 114245.5**

Receptacles and waste handling units for refuse and recyclables shall 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 114244**

- (a) Each food facility shall be provided with any facilities and equipment necessary to store or dispose of all waste material.
- (b) Waste receptacles shall be provided for use by consumer.
- (c) A receptacle shall be provided in each area of the food facility or premises where refuse is generated or commonly discarded, or where recyclables or returnables are placed.

**H. Toilet Facilities:**

- 1. **CRFC 114250**

Clean toilet rooms in good repair shall be provided and conveniently located and accessible for use by employees during all hours of operation. The number of toilet facilities required shall be in accordance with applicable local building and plumbing ordinances. Toilet rooms shall not be used for the storage of food, equipment, or supplies. Toilet tissue shall be provided in a permanently installed dispenser at each toilet.

- 2. **CRFC 114250.1**
  - (a) Food facilities located within amusement parks, stadiums, arenas, food courts, fairgrounds, and similar premises shall not be required to provide toilet facilities for employee use within each food facility if approved toilet facilities are located within 200 feet in travel distance of each food facility and are readily available for use by employees. Food facilities subject to this section shall be provided with approved handwashing facilities for employee use.
  - (b) Notwithstanding subdivision (a), food facilities approved prior to the effective date of this part with toilet facilities within 300 feet are not required to meet the 200-foot requirement.
  
- 3. **CRFC 114276**
  - a) A permanent food facility shall provide clean toilet facilities in good repair for use by employees.
  - (b) (1) A permanent food facility shall provide clean toilet facilities in good repair for consumers, guests, or invitees when there is onsite consumption of foods or when the food facility was constructed after July 1, 1984, and has more than 20,000 square feet of floor space.
  - (2) Notwithstanding Section 113984.1, toilet facilities that are provided for use by consumers, guests, or invitees shall be in a location where consumers, guests, and invitees do not pass through food preparation, food storage, or utensil washing areas to reach the toilet facilities.
  - (3) For purposes of this section, a building subject to paragraph(1) that has 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.
  - (4) For purposes of this section, the gas pump area of a service station that is maintained in conjunction with a food facility shall not be considered as property used in connection with the food facility or be considered in determining the square footage of floor space of the food facility.
  - (c) (1) Toilet rooms shall be separated by well-fitted, self-closing doors that prevent the passage of flies, dust, or odors.
  - (2) Toilet room doors shall be kept closed except during cleaning and maintenance operations.
  - (d) Handwashing facilities, in good repair, shall be provided as specified in Sections 113953 and 113953.3.
  - (e) Any city, county, or city and county may enact ordinances that are more restrictive than this section.
  - (f) (1) Except as provided in paragraph (1) of subdivision (b), any building that is constructed before January 1, 2004, that has a food facility that provides space for the consumption of food on the premises shall either provide clean toilet facilities in good repair for patrons, guests, or invitees on property used in connection with, or in, the food facility or prominently post a sign within the food facility in a public area stating that toilet facilities are not provided.
  
- 4. **CRFC 113953**
  - (a) Handwashing facilities shall be provided within or adjacent to toilet rooms. The number of handwashing facilities required shall be in accordance with local building and plumbing codes.
  
- 5. **CRFC 114149**
  - (b) Toilet rooms shall be vented to the outside air by means of an openable, screened window, an air shaft, or a lightswitch - activated exhaust fan, consistent with the requirements of local building codes.

**I. Clothing Change Rooms and Areas:**

- 1. **CRFC 114256**
  - (a) Areas designated for employees to eat and drink shall be located so that food, equipment, linens, and single-use articles are protected from contamination.
  - (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.
  
- 2. **CRFC 114256.1**
  - (a) Lockers or other suitable facilities shall be provided and used for the orderly storage of employee clothing and other possessions.
  - (b) Dressing rooms or dressing areas shall be provided and used by employees if the employees regularly change their clothes in the facility.
  - (c) Restricted food service facilities and nonpermanent food facilities shall not be required to comply with subdivision (a), but no person shall store clothing or personal effects in any area used for the storage and preparation of food.

**J. Lighting:**

1. **CRFC 114252**

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

- (a) At least 10-foot candles at a distance of 30 inches above the floor, in walk-in refrigeration units and dry food storage areas.
- (b) At least 20-foot candles for the following:
  - (1) At a surface where food is provided for consumer self-service or where fresh produce or prepackaged foods are sold or offered for consumption.
  - (2) Inside equipment such as reach-in and under-counter refrigerators.
  - (3) At a distance of 30 inches above the floor in areas used for handwashing, warewashing, and equipment and utensil storage, and in toilet rooms.
- (c) At least 50-foot candles at a surface 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 and in other areas and rooms during periods of cleaning.

2. **CRFC 114252.1**

- (a) Except as specified in subdivision (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.
- (b) Shielded, coated, or otherwise shatter-resistant bulbs need not be used in areas used only for storing prepackaged food in unopened packages, if the integrity of the packages cannot be affected by broken glass falling onto them and the packages are capable of being cleaned of debris from broken bulbs before the packages are opened.
- (c) Infrared and other heat lamps shall 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.

**K. Water:**

1. **CRFC 114192**

- (a) An adequate, protected, pressurized, potable supply of hot water and cold water shall be provided. Hot water shall be supplied at a minimum temperature of at least 120°F measured from the faucet, unless otherwise specified in this part. The water supply shall be from a water system approved by the health officer or the local enforcement agency.
- (b) Any hose used for conveying potable water shall be constructed of nontoxic materials, shall be used for no other purpose, and shall be clearly labeled as to its use. The hose shall be stored and used so as to be kept free of contamination.
- (c) The potable water supply shall be protected with a backflow or back siphonage protection device when required by applicable plumbing codes. Exposed piping of a nonpotable water system shall be identified so that it is readily distinguishable from piping that carries potable water.

2. **CRFC 114195**

- (a) The water source and system shall be of sufficient capacity to meet the peak water demands of the food facility.
- (b) Hot water generation and distribution systems shall be sufficient to meet the peak hot water demands throughout the food facility.

**L. Backflow Protection:**

**CRFC 114192**

- (c) The potable water supply shall be protected with a backflow or back siphonage protection device when required by applicable plumbing codes. Exposed piping of a nonpotable water system shall be identified so that it is readily distinguishable from piping that carries potable water.

### M. Indirect Waste Receptors:

- 1. **CRFC 114193**
  - (a) All steam tables, ice machines and bins, food preparation sinks, warewashing sinks, display cases, walk-in refrigeration units, and other similar equipment that discharge liquid waste shall be drained by means of indirect waste pipes, and all wastes drained by them shall discharge through an airgap into a floor sink or other approved type of receptor.
  - (b) Drainage from reach-in refrigeration units shall be conducted in a sanitary manner to a floor sink or other approved devices by an indirect connection or to a properly installed and functioning evaporator.
  - (c) Indirect waste receptors shall be located to be readily accessible for inspection and cleaning.
  - (d) Warewashing machines may be connected directly to the sewer immediately downstream from a floor drain, or they may be drained through an approved indirect connection.
  - (e) Warewashing sinks in use on January 1, 1996, that are directly plumbed may be continued in use. This section does not require warewashing sinks to be indirectly plumbed when the local building official determines that the sink should be directly plumbed.
- 2. **CRFC 114193.1**

An air gap between the water supply inlet and the flood level rim of the plumbing fixture, equipment, or nonfood equipment shall be at least twice the diameter of the water supply inlet and may not be less than one inch.

### N. Sewage Disposal, Grease Traps and Interceptors:

- 1. **CRFC 114197**

Liquid waste shall be disposed of through the approved plumbing system and shall discharge into the public sewerage or into an approved private sewage disposal system.
- 2. **CRFC 114201**
  - (a) If provided, a grease trap or grease interceptor shall not be located in a food or utensil handling area unless specifically approved by the enforcement agency.
  - (b) Grease traps and grease interceptors shall be easily accessible for servicing.
  - (c) Notwithstanding subdivision (a), those food facilities approved with a grease trap or grease interceptor that are in operation before the effective date of this part are not required to comply with this section.

**NOTE:** Check with local health, building, sanitary or public works agencies for information or regulations regarding special sewerage, grease trap and interceptor requirements.

## IV. Ventilation:

- 1. Mechanical exhaust ventilation systems and make-up air systems shall conform to the provisions of the California Mechanical Code.  
**CRFC 114149**
  - (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.
  - (b) Toilet rooms shall be vented to the outside air by means of an openable, screened window, an air shaft, or a light-switch-activated exhaust fan, consistent with the requirements of local building codes.

### A. Exhaust Hoods and Ducts:

- 1. **CRFC 114149.1**
  - (a) Mechanical exhaust ventilation equipment shall be provided over all cooking equipment as required to effectively remove cooking odors, smoke, steam, grease, heat, and vapors. All mechanical exhaust ventilation equipment shall be installed and maintained in accordance with the California Mechanical Code, except that for units subject to Part 2 (commencing with Section 18000) of Division 13, an alternative code adopted pursuant to Section 18028 shall govern the construction standards.
  - (b) Restricted food service facilities shall be exempt from subdivision (a), but shall still provide ventilation to remove gases, odors, steam, heat, grease, vapors and smoke from the food facility. In the event that the enforcement officer determines that the ventilation must be mechanical in nature, the ventilation shall be accomplished by methods approved by the enforcement agency.
  - (c) This section shall not apply to cooking equipment when the equipment has been submitted to the local enforcement agency for evaluation, and the local enforcement agency has found that the equipment does not produce toxic gases, smoke, grease, vapors, or heat when operated under conditions recommended by the manufacturer. The local enforcement agency may recognize a testing organization to perform any necessary evaluations.
  - (d) Makeup air shall be provided at the rate of that exhausted.

- 2. **CRFC 114149.2**
  - (a) Every hood shall be installed to provide for thorough cleaning of all interior and exterior surfaces, including, but not limited to, the hood, filters, piping, lights, troughs, hangers, flanges, and exhaust ducts.
  - (b) Exhaust ventilation hood systems in food preparation and warewashing areas, including components such as hoods, fans, guards, and ducting, shall be designed to prevent grease or condensation from draining or dripping onto food, equipment, utensils, linens, and single-use articles.
  - (c) 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.
  - (d) Every joint and seam shall be substantially tight. No solder shall be used, except for sealing a joint or seam.
  - (e) When grease gutters are provided they shall drain to a collecting receptacle fabricated, designed, and installed to be readily accessible for cleaning.
  - (f) Exhaust hood ducting shall meet the following requirements:
    - (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.
    - (4) Intake and exhaust air ducts shall be cleaned and filters changed so they are not a source of contamination by dust, dirt, and other materials.

## V. Equipment Requirements:

### A. Equipment and Utensils

- 1. **CRFC 114130**
  - (a) Equipment and utensils shall be designed and constructed to be durable and to retain their characteristic qualities under normal use conditions.
  - (b) Except as specified in subdivision (c), all new and replacement food-related and utensil-related equipment shall be certified or classified for sanitation by an American National Standards Institute (ANSI) accredited certification program. In the absence of an applicable ANSI certified sanitation standard, food-related, and utensil-related equipment shall be evaluated for approval by the enforcement agency.
  - (c) Restricted food service facilities need not comply with subdivision (b), depending on the extent of the food service activities, and if the enforcement officer determines that the equipment meets the characteristics of subdivision (a).
  - (d) All new and replacement electrical appliances shall meet applicable Underwriters Laboratories standards for electrical equipment as determined by an ANSI accredited certification program.
- 2. **CRFC 114130.1**

Materials that are used in the construction of utensils and food-contact surfaces of equipment shall not allow the migration of deleterious substances or impart colors, odors, or tastes to food and under normal use conditions shall be safe, durable, corrosion-resistant, and nonabsorbent, sufficient in weight and thickness to withstand repeated warewashing, finished to have a smooth, easily cleanable surface, and resistant to pitting, chipping, crazing, scratching, scoring, distortion, and decomposition.
- 3. **CRFC 114130.3**
  - (a) Multiuse food-contact surfaces shall be all of the following:
    - (1) Smooth.
    - (2) Free of breaks, open seams, cracks, chips, inclusions, pits, and similar imperfections.
    - (3) Free of sharp internal angles, corners, and crevices.
    - (4) Finished to have smooth welds and joints.
    - (5) Except as specified in subdivision (b), accessible for cleaning and inspection by one of the following methods:
      - (A) Without being disassembled.
      - (B) By disassembling without the use of tools.
      - (C) By easy disassembling with the use of handheld tools commonly available to maintenance and cleaning personnel such as screwdrivers, pliers, open-end wrenches, and Allen wrenches.
- 4. **CRFC 114169**
  - (a) Equipment that is fixed because it is not easily movable shall be installed so that it is:
    - (1) Spaced to allow access for cleaning along the sides, behind, and above the equipment.
    - (2) Spaced from adjoining equipment, walls, and ceilings a distance of not more than one millimeter or one thirty-second inch.
    - (3) Sealed to adjoining equipment or walls, if the equipment is exposed to spillage or seepage.
  - (b) Except as specified in subdivisions (c) and (d), 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.

- (c) Notwithstanding subdivision (b), this section shall not apply to display shelving units, display refrigeration units, and display freezer units located in the consumer shopping areas of a food facility if the floor under the units is maintained clean.
- (d) Table-mounted equipment that is not easily movable shall be installed to allow cleaning of the equipment and areas underneath and around the equipment by being sealed to the table or elevated on legs that provide at least a four-inch clearance between the table and the equipment.

**B. Food Preparation Sink:**

1. **CRFC 114163**

- (a) Except as specified in subdivision (b), a food preparation sink shall be provided in permanent food facilities for the washing, rinsing, soaking, thawing, or similar preparation of foods.
  - (1) 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.
  - (2) The food preparation sink shall be located in the food preparation area, provided exclusively for food preparation, and accessible at all times.
  - (3) The sink shall be equipped with an adequate supply of hot and cold running water through a mixing valve.
- (b) (1) Food facilities that were approved for operation without a food preparation sink prior to the effective date of this part need not provide a food preparation sink unless the food facility makes a menu change or changes their method of operation.
  - (2) The enforcement officer may approve other methods where the installation of a food preparation sink would not be readily feasible.

**C. Hand Washing Sinks:**

1. **CRFC 113953**

- (a) Handwashing facilities shall be provided within or adjacent to toilet rooms. The number of handwashing facilities required shall be in accordance with local building and plumbing codes.
- (b) (1) Except as otherwise provided in Section 114358, food facilities constructed or extensively remodeled after January 1, 1996, that handle non-prepackaged food, shall provide facilities exclusively for handwashing in food preparation areas and in warewashing areas that are not located within or immediately adjacent to food preparation areas. Handwashing facilities shall be sufficient in number and conveniently located so as to be accessible at all times for use by food employees.
  - (2) 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, the corners of the 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.
- (c) Handwashing facilities shall be equipped to provide warm water under pressure for a minimum of 15 seconds through a mixing valve or combination faucet.
- (d) An automatic handwashing facility may be installed and used in accordance with the manufacturer's instructions.
- (e) Notwithstanding subdivision (b), the enforcement agency may allow handwashing facilities other than those required by this section when it deems that the alternate facilities are adequate.

2. **CRFC 113953.2**

A handwashing facility shall be provided with the following in dispensers at, or adjacent to, each handwashing facility:

- (a) Handwashing cleanser.
- (b) Sanitary single-use towels or a heated-air hand drying device.

**D. Janitorial Facilities:**

1. **CRFC 114279**

- (a) At least one curbed cleaning facility or janitorial sink equipped with a drain shall be provided and conveniently located for the cleaning of mops or similar wet floor cleaning tools and for the disposal of mop water and similar liquid waste.
- (b) Restricted food service facilities shall be exempt from subdivision (a) if hot water is available for janitorial purposes and wastewater from janitorial activities is disposed of through an approved sewage disposal system.

- 2. **CRFC 114279**  
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.

**E. Manual and Machine Warewashing:**

- 1. **CRFC 114095**  
All food facilities in which food is prepared or in which multiservice utensils and equipment are used shall provide manual methods to effectively clean and sanitize utensils as specified in Section 114099.
- 2. **CRFC 114099**
  - (a) Manual warewashing sinks, except as specified in subdivision (c), shall have at least three compartments with two integral metal drainboards for manually washing, rinsing, and sanitizing equipment and utensils.
  - (b) Sink compartments shall be large enough to accommodate immersion of the largest equipment and utensils. If equipment or utensils are not designed to be washed in a warewashing sink, alternate approved methods as specified in Section 114099.3 shall be followed.
  - (c) A two-compartment sink that is in use on January 1, 1996, need not be replaced when used as specified in Section 114099.3. The enforcement officer shall approve the continued use of a two-compartment sink even upon replacement if the installation of a three-compartment sink would not be readily achievable and where other approved sanitation methods are used.
- 3. **CRFC 114101**
  - (a) Mechanical machine warewashing shall be accomplished by using an approved machine installed and operated in accordance with the manufacturer's specifications.
  - (b) Soiled items to be cleaned in a warewashing machine shall be loaded in racks, trays, or baskets or onto conveyors in a position that exposes the items to the unobstructed spray during all cycles and allows the items to drain.
  - (c) The velocity, quantity, and distribution of the washwater, type, and concentration of detergent used therein, and the time the utensils are exposed to the water shall be sufficient to clean the utensils.
  - (d) Restricted food service facilities need not comply with Section 114130 if the domestic or commercial dishwasher utilized for warewashing is capable of providing heat to the surface of the utensils of a temperature of at least 160°F.
- 4. **CRFC 114103**
  - (a) Except as provided in subdivisions (b) and (c), all warewashing equipment shall be provided with two integral metal drainboards of adequate size and construction. One drainboard shall be attached at the point of entry for soiled equipment and utensils and one shall be attached at the point of exit for cleaned and sanitized equipment and utensils.
  - (b) Where an undercounter warewashing machine is used, there shall be two metal drainboards, one for soiled equipment and utensils, and one for clean equipment and utensils, located adjacent to the machine. This requirement may be satisfied by using the drainboards that are part of the manual warewashing sinks if the facilities are located adjacent to the machine.
  - (c) Pot and pan washers shall be equipped with drainboards as required in subdivision (a), or shall be equipped with approved alternative equipment that provides adequate and suitable space for soiled and clean equipment and utensils.
  - (d) Drainboards, utensil racks, or tables large enough to accommodate all soiled and cleaned items that may accumulate during hours of operation shall be provided for necessary utensil holding before cleaning and after sanitizing.
  - (e) Sinks and drainboards of warewashing equipment shall be sloped and drained to an approved liquid waste receptor.

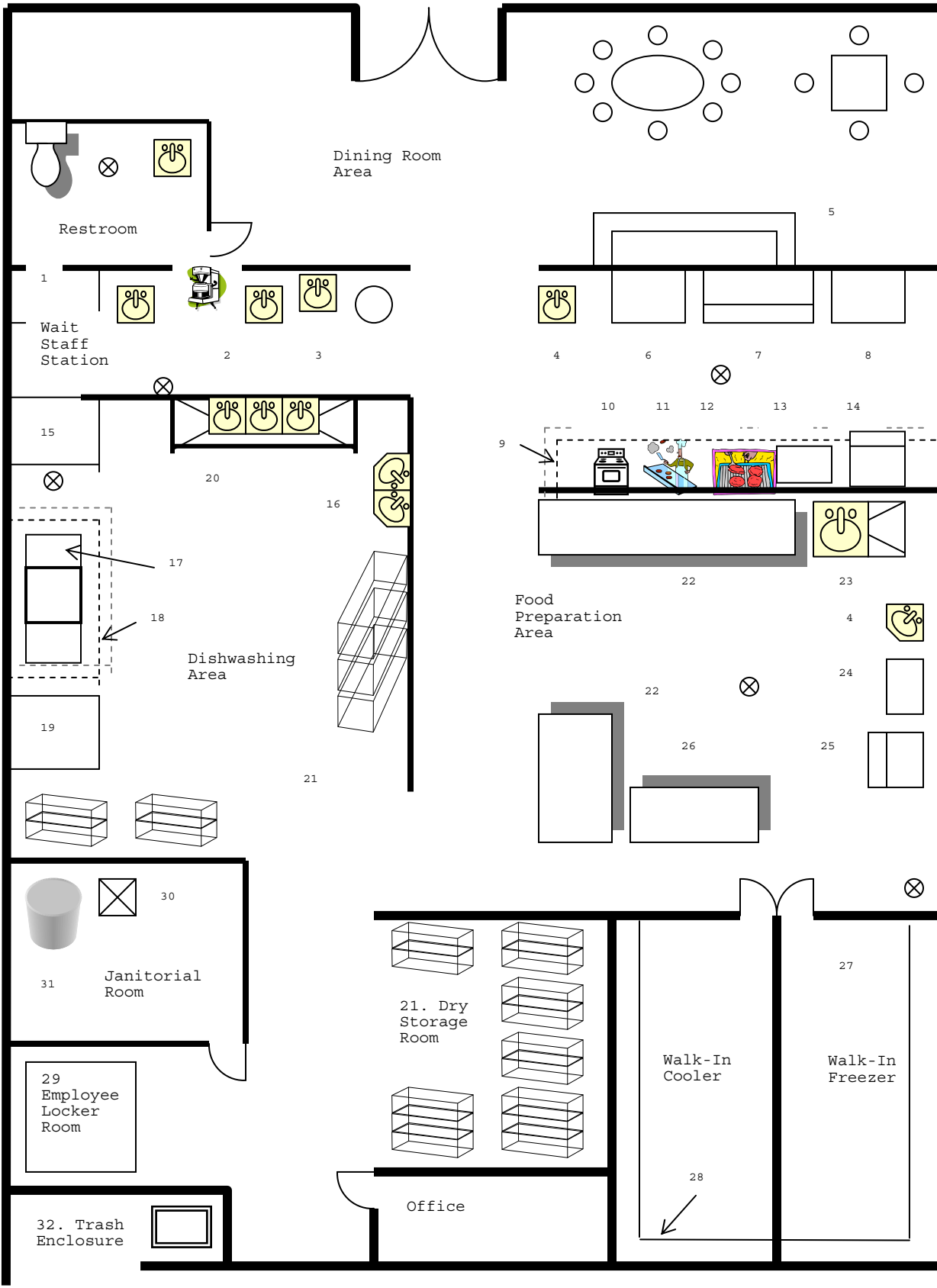
## APPENDIX NOTE

The following appendices are for the sole purpose of illustration (**except the Exhaust Ventilation and Hot Water Demand worksheet which are to be filled out, completed and submitted with the plans**) to help the owner or agent understand the minimum requirements needed for the submission of plans for review and approval.

These samples are not to scale and are not to be copied as approved documents.

# APPENDIX A

(This is an example. Each piece of equipment is numbered to correspond with the equipment checklist in Appendix B. Not to scale.)



## APPENDIX B

ITEM#	ITEM	MANUFACTURER	MODEL NUMBER	NSF	SPECIALLY FABRICATED	OTHER DOCUMENTATION	READILY MOVEABLE BY ONE PERSON (WHEN FULL)	CASTERS (C) AND/OR FLEXIBLE CONNECTORS (F)	SEALED TO FLOOR	DISTANCE FROM FLOOR	SEALED TO BACK WALL	DISTANCE FROM BACK WALL
1	ICE MAKER			X						6"		6"
2	COFFEE MAKER			X			X					
3	COUNTER W/WATER & ICE BASIN				X				X		X	
4	EMPLOYEE HAND SINK			X						30"	X	
5	SALAD BAR				X				X		X	
6	WORK TABLE S/S			X			X					
7	REFRIGERATED PREP UNIT			X			X	C				
8	REACH IN FREEZER			X						6"		6"
9	EXHAUST HOOD (TYPE 1)			X	X						X	
10	CONVECTION OVEN/STAND			X						36"		6"
11	6 BURNER RANGE/OVEN			X			X	CF				
12	GRILL			X			X	CF				
13	FRYER DUMP STATION S/S			X	X					36"		
14	DEEP FAT FRYER			X						6"		6"
15	SULLED DISH TABLE S/S			X	X					36"	X	
16	SCRAP SINK W/PRE-RINSE & GARBAGE DISPOSAL			X	X					6"	X	
17	HIGH TEMP DISHWASHER			X						10"		6"
18	VAPOR HOOD (TYPE II)			X	X						X	
19	CLEAN DISH TABLE S/S			X	X					36"	X	
20	3-COMPARTMENT POT SINK			X						22"	X	
21	STORAGE SHELVING			X						6"		1"
22	WORKTABLES S/S			X	X		X			6"		
23	FOOD PREP SINK			X	X					22"	X	
24	WORKTABLES S/S			X	X					6"	X	
25	REACH IN FREEZER			X						6"		6"
26	REFRIGERATED PREP UNIT			X						6"		
27	WALK IN COOLER			X					X		X	
28	WALK IN COOLER SHELVING S/S			X	X					6"		1"
29	EMPLOYEE LOCKERS									6"	X	
30	MOP SINK								X		X	
31	WATER HEATER			X					X			6"
32	GARBAGE DUMPSTER						X					

# APPENDIX C

## MECHANICAL EXHAUST VENTILATION SYSTEM PLAN CHECK DATA

Name of Establishment: \_\_\_\_\_

Job Site Address: \_\_\_\_\_

Plan Submitted by: \_\_\_\_\_ Phone: ( ) \_\_\_\_\_

Mailing Address: \_\_\_\_\_  
Street Address City Zip Code

1. Submit three (3) sets of plans, drawn to scale (e.g., 1/4 inch per foot), including:
  - a. Front and side elevations for each system with exhaust and make-up air duct details.
  - b. Floor plan showing hood, make-up air registers and cooking equipment or dishwasher with manufacturer's specification sheets.
2. Submit a separate data sheet for each hood within the establishment. Identify each hood by number.
3. For clarification of requirements, refer to the Uniform Mechanical Code, Chapter 5 and Chapter 20, "Commercial Hoods and Kitchen Ventilation."

**HOOD:** (Check applicable categories)

- Type I (Is a kitchen hood for collecting and removing grease and smoke)
- Type II (Is a general kitchen hood for collecting and removing steam, vapor, heat, or odors)
- Canopy\*
- Compensating\*
- Non-canopy
- U. L. Listed Grease Extractor
- Other (describe) \_\_\_\_\_

Size: Length \_\_\_\_\_ ft. x Width \_\_\_\_\_ ft. (inside dimensions)

Type of metal: \_\_\_\_\_ Gauge \_\_\_\_\_

Distance from lip of hood to: cooking surface \_\_\_\_\_ in., floor \_\_\_\_\_ in.

Formula used for determining air flow:  $Q =$  \_\_\_\_\_ or  
Alternate formula = \_\_\_\_\_  
Total CFM = \_\_\_\_\_

\* Provide six (6) inch overhang beyond cooking equipment on all open sides.

**NOTE:** No exposed horizontal piping within the hood canopy.

## APPENDIX C

### EXHAUST DUCT:

Duct Size \_\_\_\_\_  
Square feet of duct area \_\_\_\_\_  
Number of ducts \_\_\_\_\_ (1 outlet per 12 feet or fraction thereof)  
Type of Metal \_\_\_\_\_ Gauge \_\_\_\_\_  
Exhaust duct velocity \_\_\_\_\_ FPM (CFM divided by sq. ft. of duct)  
(Recommended 1800 FPM)

### GREASE FILTERS or EXTRACTORS:

Manufacturer \_\_\_\_\_ Model \_\_\_\_\_  
Type (with handles) \_\_\_\_\_  
Rating: \_\_\_\_\_ CFM at \_\_\_\_\_ sp (static pressure)  
Dimensions: \_\_\_\_\_ inches x \_\_\_\_\_ inches  
Functional surface area per filter \_\_\_\_\_ sq. ft.  
Number of filters to be used: \_\_\_\_\_  
Total filter area \_\_\_\_\_ sq. ft.  
Number of spacers \_\_\_\_\_ size of spacers: \_\_\_\_\_ in. x \_\_\_\_\_ in.  
Minimum distance between lowest edge of grease filters and cooking surface: \_\_\_\_\_ in..

### STATIC PRESSURE:

Filters	_____	sp
Entrance loss	+ _____	sp
Duct Length	+ _____	sp
Elbows	+ _____	sp
Loss to outside Atmosphere	+ _____	sp
	= _____	Total sp

### EXHAUST FAN/BLOWER:

Manufacturer \_\_\_\_\_ Model No. \_\_\_\_\_  
Exhaust \_\_\_\_\_ CFM at \_\_\_\_\_ sp.  
Blower RPM \_\_\_\_\_ Horsepower \_\_\_\_\_

### MAKE-UP AIR:

Fan Manufacturer \_\_\_\_\_  
Model Number \_\_\_\_\_  
CFM \_\_\_\_\_ at \_\_\_\_\_ sp.  
Duct size \_\_\_\_\_ Square feet of duct area \_\_\_\_\_  
Number of ducts \_\_\_\_\_ Duct velocity \_\_\_\_\_  
Type of opening \_\_\_\_\_ Opening size \_\_\_\_\_  
Number of openings \_\_\_\_\_ CFM per opening \_\_\_\_\_  
Electrical interlocking switch with exhaust fan \_\_\_\_\_



## APPENDIX D

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

<b>ROOM FINISH SCHEDULE</b>					
ROOM OR AREA	FLOOR	FLOOR BASE OR COVE	WALLS	CEILING	REMARKS
<b>A. DINING AREA</b>					
<b>B. WAITRESS STATION</b>					
<b>C. KITCHEN AREA</b>					
<b>D. DISHWASHING AREA</b>					
<b>E. JANITORIAL STATION</b>					
<b>F. EMPLOYEE LOCKER ROOM</b>					
<b>G. RESTROOM</b>					
<b>H. STOREROOM</b>					
<b>I. OFFICE</b>					
<b>J. TRASH ENCLOSURE</b>					

**(Salad Bar sneeze guards: Refer to the CCDEH Buffet/Service Guidelines.)**

## APPENDIX E

### HOT WATER DEMANDS

FIXTURES	NO. OF UNITS	X	GPH	=	TOTAL GPH
		X		=	
		X		=	
		X		=	
		X		=	
		X		=	
		X		=	
		X		=	
		X		=	
		X		=	
		X		=	
		X		=	
		X		=	
		X		=	
		X		=	
		X		=	

I. Calculating the BTU (British Thermal Units) for kitchen gas water heater:

$$\underline{\hspace{2cm}} \text{ GPH} \times \underline{60} \text{ degrees rise} \times 11^* = \underline{\hspace{2cm}} \text{ BTU}$$

$$\frac{*8.33 \text{ lbs./gal. of water}}{0.75 \text{ (thermal efficiency of gas)}} = 11.1 \text{ (rounded off = 11)}$$

The gas hot water heater with at least a rating of                      BTU

II. Calculating the KW (kilowatt) requirement for kitchen electric water heater:

$$\frac{\text{Total GPH}}{\text{gal/KWH}} = \frac{\text{GPH}}{\text{gal/KWH}} = \underline{\hspace{2cm}} \text{ KW}^*$$

$$*KW = \frac{\text{GPH} \times \text{°RISE} \times 8.33}{.98 \times 3412 \text{ BTU}} \text{ KW}$$

Please make the necessary changes or alterations, as indicated above, for the minimum supply of hot water for the food establishment. The recovery rate of the properly sized water heater must meet the peak demands of the total GPH.