

## **FOOD FACILITY PLAN REQUIREMENTS**



### **DEPARTMENT OF ENVIRONMENTAL HEALTH CONSUMER PROTECTION DIVISION**

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County of Santa Clara

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## I. INTRODUCTION

- A. This construction guide is available to any person intending to construct or remodel a food establishment within Santa Clara County. It is intended to serve as a general overview of the requirements and should not be considered all-inclusive. Recommendations contained in 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 California Retail Food Code (CalCode). The recommendations may not be applicable in all circumstances. Refer to the California Health and Safety Code, Part 7, Chapter 1, Section 113700 et seq. (CalCode) for specific code requirements. Please contact this office if you require further information regarding your particular plan.
- B. This guide only encompasses health aspects and should not be construed to encompass requirements of other agencies involved such as, the local planning and zoning department, the local building authority, or local fire department. Owners and agents are advised to contact the appropriate local agencies to obtain any permits and/or to clarify other local codes.
- C. For more information concerning this document or to obtain supporting information please go to the following Internet web address at [www.ehinfo.org](http://www.ehinfo.org).
- D. The sample drawings in this guideline are not to scale and are not to be copied as approved documents.

## II. PLAN CHECK FEES - SEE THE ATTACHED PLAN CHECK FEE SCHEDULE

- A. A plan check fee and application form must be submitted at the time of submittal. <https://www.sccgov.org/sites/deh/Fees/Documents/DEHPermitFees.pdf>  
[https://www.sccgov.org/sites/cpd/Documents/CPD\\_Permit\\_Application.pdf](https://www.sccgov.org/sites/cpd/Documents/CPD_Permit_Application.pdf)
- B. A remodel is an alteration to the structure, equipment, or menu<sup>1</sup> of an existing food establishment currently under permit.

## III. PLAN SUBMITTAL

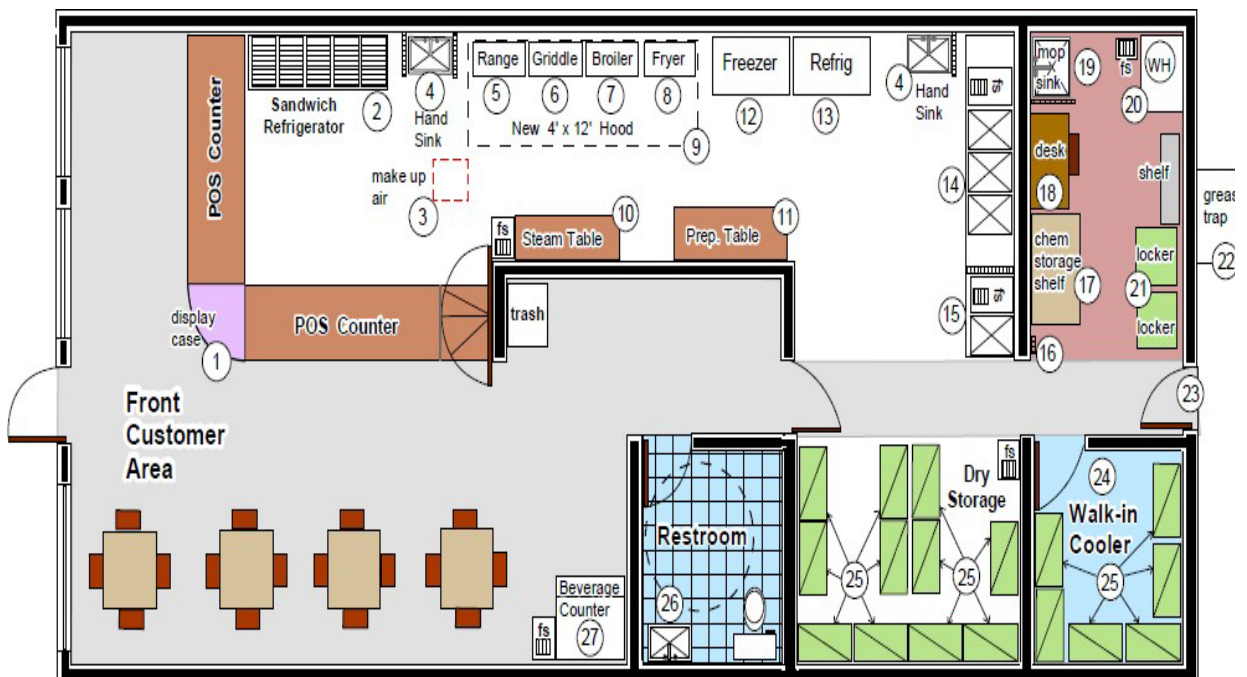
- A. Before constructing or altering any building for use as a food establishment, a single set of detailed plans and specifications must be submitted to the Santa Clara County Department of Environmental Health for written approval. Submittals may be made in person at our office or digitally by emailing the packet to [dehplanchek@deh.sccgov.org](mailto:dehplanchek@deh.sccgov.org).
- B. An architect, draftsman, contractor, or owner may prepare the plans. All plans must be drawn in a concise, detailed and professional manner. Inadequate plans will be rejected. All plans must be accompanied by a food construction plan application form and the required plan check fee.
- C. If the plans can be approved after our first review, you will be notified to submit additional sets of drawings for stamping. After we have stamped all the required sets, you will be asked to arrange to pick up the approved drawings and must do so in a timely manner. We will not release our approval letter or any set of approved drawings unless we have received and stamped the required drawing sets.
- D. If our initial review shows that additional information is required or if changes must be made, you will be sent a detailed letter that outlines the needed information or required corrections. **It is your responsibility to gather that information or make the required corrections to the drawings as quickly as possible.** Once completed, you may re-submit that information on a single set of drawings. If **that** review shows that the drawings now comply with our codes, you will be notified to submit additional sets of drawings for stamping. After we have stamped all sets, you will be asked to pick up the approved drawings and must do

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<sup>1</sup> A menu change is defined as a modification of a food facility's menu that would require a change in the food facility's food preparation methods, storage equipment, or storage capacity previously approved by the local enforcement agency. These changes may include, but are not limited to, the addition of potentially hazardous foods to a menu, installation of new food preparation or storage equipment, or increasing storage capacity.

so in a timely manner. We will not release our approval letter or any set of approved drawings unless we have received and stamped the required drawing sets.

- E. One copy of the approved drawings will be kept on file with this department until construction has been completed. An additional copy of the approved drawings must be kept on the job site until final approval. A construction card, attached to the job copy, specifies the required inspections.
- F. All approved drawings will expire by limitation and will become null and void if the construction, reconstruction, alteration, or other work authorized by the approval is not commenced within 180 days from the date of approval.
- G. Any changes to the approved drawings will require that revised drawings be submitted for review and approval before construction. **This includes any change to the drawings as a result of reviews by other jurisdictions.**
- H. All construction and equipment installation shall be subject to field inspection. The food facility shall not open for business until final approval is obtained from the Department of Environmental Health and a valid environmental health permit is issued.
- I. Plans shall be drawn to a recommended scale of ¼ inch = 1 foot and shall include:
  - 1. A "Vicinity Map" showing the building location with at least two major cross streets.
  - 2. A floor plan of the entire facility.
  - 3. A floor plan showing equipment layout, including elevation drawings of equipment. Equipment on the layout drawing shall be numbered to coincide with the numbers on the required equipment schedule. See sample below:



4. An equipment schedule showing make and model number. See sample below that corresponds to sample drawing from item 3.

ITEM NO.	DESCRIPTION	BASE	MANUFACTURER & MODEL ###	WATER HOT COLD	WASTE	REMARKS
1	DISPLAY CASE	ON CASTERS	DISPCS #45B	N/A	SELF-CONTAINED	CONDENSATE EVAPORATOR
2	SANDWICH REFRIGERATOR	CASTERS	LETTOM INC #VBV2	N/A	SELF-CONTAINED	CONDENSATE EVAPORATOR
3	MAKE-UP AIR	ON ROOF				
4	HAND WASH SINK	WALL MOUNTED	WASH CO #XYZ	½" ½"	DIRECT	SOAP & PAPER TOWELS
5	RANGE	6" LEGS	WOODCO #2B	N/A	N/A	
6	GRIDDLE	6" LEGS	COOKUP #3XB	N/A	N/A	
7	BROILER	6" LEGS	BROILCO #B35	N/A	N/A	
8	FRYER	CASTERS	KRISPYCO #582L	N/A	N/A	
9	HOOD		FIREFLY #BUZZ	N/A	N/A	GREASE FILTERS
10	STEAM TABLE	6" LEGS	HOTFDCO #259B	N/A	FLOOR SINK	
11	PREPARATION TABLE	6" LEGS	AMERICAN STEEL #72	N/A	N/A	
12	FREEZER	CASTERS	ICE-KOLD #FZ94	N/A	SELF-CONTAINED	CONDENSATE EVAPORATOR
13	REFRIGERATOR	CASTERS	ICE-KOLD #RF94	N/A	SELF-CONTAINED	CONDENSATE EVAPORATOR
14	WAREWASHING SINK	20" LEGS	BUM EQUIP. #3-18-LR	½" ½"	FLOOR SINK	DUAL DRAINBOARDS
15	FOOD PREP SINK	20" LEGS	BUM EQUIP. #1-18-R	½" ½"	FLOOR SINK	DRAINBOARD
16	MOP/BROOM RACK	WALL MOUNTED				
17	CHEMICAL STORAGE SHELF	72" POSTS	SHELF CO. INC	N/A	N/A	
18	DESK	30" LEGS				
19	MOP SINK	20" LEGS	BUM EQUIP. #1-UTILXB	½" ½"	DIRECT	WITH VACUUM BREAKER
20	WATER HEATER	6" STAND	HTWTR-50B		FLOOR SINK	40,000 BTU'S
21	EMPLOYEE LOCKERS	6" LEGS		N/A	N/A	6 LOCKERS
22	GREASE TRAP	UNDERGROUND	GRTP-500ZC	N/A	DIRECT	OUTSIDE
23	AIR CURTAIN	ABOVE REAR DOOR	NOFLY CO #55GH	N/A	N/A	
24	STORAGE SHELVING	72" POSTS	SHELF CO. INC.	N/A	N/A	
25	WALK-IN COOLER	FLOOR MOUNTED	ICE-KOLD #WKIN58	N/A	FLOOR SINK	
26	HAND WASH SINK	WALL MOUNTED	PORCWSH #45XP	½" ½"	DIRECT	SOAP & PAPER TOWELS
27	SODA MACHINE	ON BEVERAGE COUNTER	BEVERGEUP #6BC	½"	FLOOR SINK	FOR CUSTOMER SELF-SERVICE

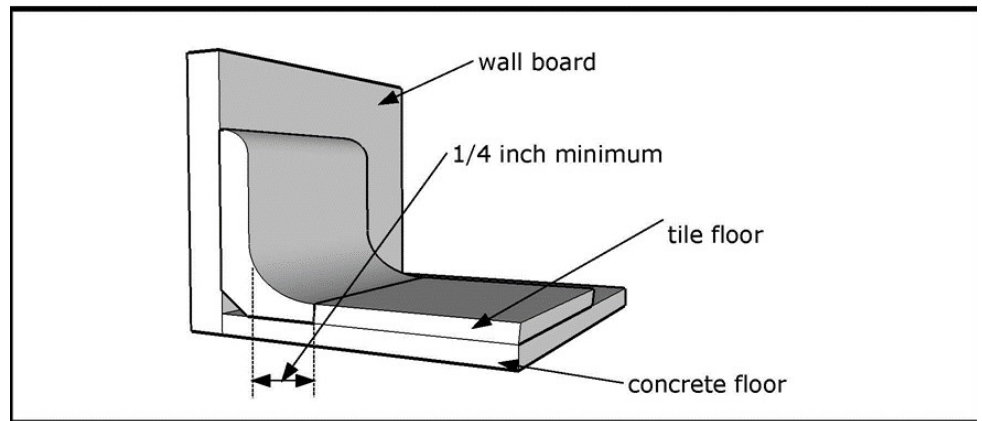
5. Manufacturer's specification sheets that are numbered to coincide with the equipment schedule.
6. A separate floor plan showing plumbing and electrical details including lighting (Remodel plans shall identify all existing structures, spaces, and equipment).
7. A finish schedule for walls, ceiling and floors indicating the type of material, surface finish, and the color. Samples of the proposed finish materials may be required. Give specific brand names and manufacturer's specification numbers.
8. Exhaust ventilation plans, showing calculations and duct sizes. Makeup air plans. Submit cut sheets of proposed blowers, motors, and number and size of filters proposed for the exhaust and makeup air systems.
9. A site plan showing the waste storage (garbage) receptacle location.

#### IV. GENERAL CONSTRUCTION AND EQUIPMENT REQUIREMENTS

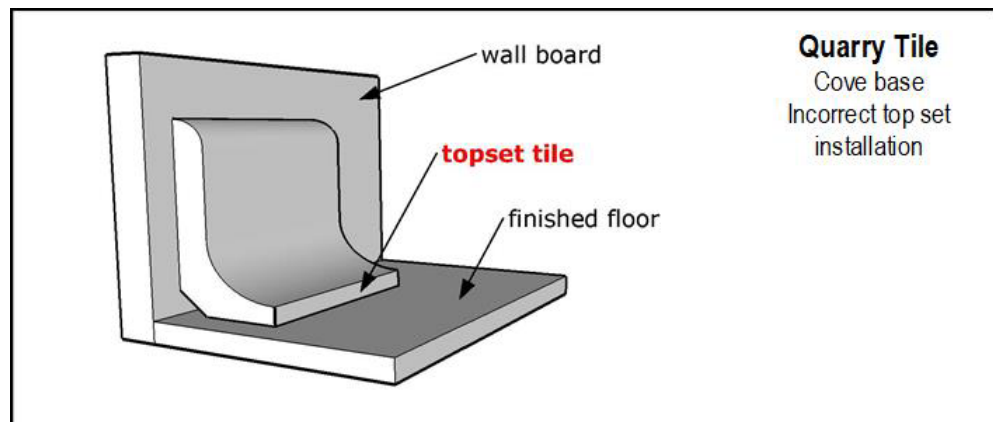
The plans shall show and specify, in detail, the following:

##### A. FLOORS (CalCode 114268)

1. Floors in food establishments (except in sales and dining areas) shall be durable, smooth, nonabsorbent and easily cleanable. Floor surfaces in all areas where food is prepared, packaged, or stored, where any utensil is washed, where refuse or garbage is stored, where janitorial facilities are located, in all toilets and hand washing areas, shall be an approved type. Examples of approved floors include quarry tile, commercial grade sheet vinyl and/or seamless epoxy floors. Refer to Approval Floor Materials handout for more details.
2. 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 and toe-kicks of floor-mounted counters/cabinets at least 4 inches, except in areas where food is stored only in unopened bottles, cans, cartons, sacks, or other original shipping containers.



3. Topset rubber or tile base is not approved except in customer areas. Topset stainless steel cove base is acceptable only at self-service beverage and customer side of buffet counters.



4. 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 to the floor drains.
5. Samples for finishes that are known to vary with regards to thickness and texture,

such as epoxy, sheet vinyl, and porcelain tiles may be required.

**B. WALLS AND CEILINGS (CalCode 114271)**

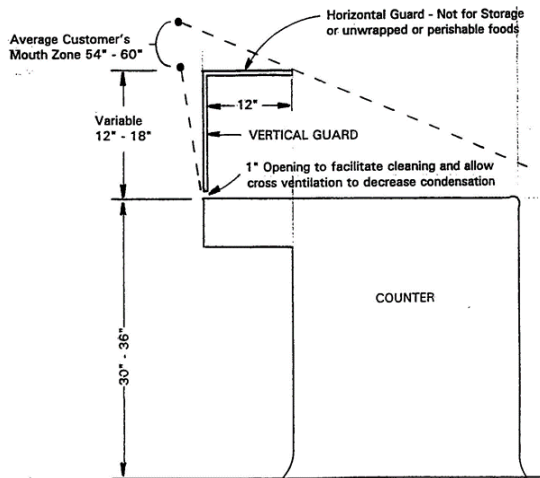
1. Walls and ceilings of all rooms, (except bars, dining areas, and rooms where food is stored in unopened bottles, cans, cartons, sacks, or other original shipping containers), shall be of a durable, smooth, nonabsorbent, and easily cleanable surface. It is recommended that the walls and ceilings in food preparation and dishwashing areas, and in walk in refrigeration units also be light colored.
2. Overhead pipes, conduits, ducts, beams, and other structures must be concealed above the finished ceiling. Brick, concrete block, open beams, rafter ceilings, rough plaster or textured gypsum board is not acceptable.
3. No exposed sewer lines shall be installed above food or beverage areas.
4. All walls and ceilings shall be smooth, without texture and easily cleanable; e.g. gypsum board or equivalent. Paint used on gypsum board or similar surfaces shall be gloss or semi-gloss enamel, epoxy paint, or equivalent.
5. The inside and outside of the casework and cabinetry must be smooth and easily cleanable; i.e. laminate or equivalent. Paint, varnish, lacquer, shellac, or polyurethane finished wood counters or cabinets are not approved.
6. Provide a durable, smooth and easily cleanable, noncorrosive and nonflammable material (i.e., stainless steel, ceramic tile) on wall surfaces behind the cookline, extending between the floor base and the bottom of the hood.
7. Walls behind all sinks and mechanical dishwashers and accompanying drainboards shall be finished with a wainscot of fiberglass reinforced plastic (FRP), stainless steel, ceramic tile, or equivalent. The approved wall finish material shall extend from the top of the cove base to a height of at least four (4) feet except behind upright mechanical dishwashers where the wainscot must extend to eight (8) feet from the finished floor. All wainscoting must extend a least 18 inches to the sides of sinks and mechanical dishwashers.
8. In restrooms, an approved wainscot shall extend from the top of the coved base to a height of at least four (4) feet behind all restroom fixtures.
9. Provide wall and cabinet details on the drawings.
10. Samples of materials may be required on a case-by-case basis based on the proposed materials. Refer to Approved Ceiling Materials handout.

**C. CONDUITS (CalCode 114271)**

1. All plumbing, electrical, and gas lines shall be concealed within the building walls, floors and ceiling or within approved conduit runs or chases.
2. Where conduit or pipelines enter a wall, ceiling or floor, the opening around the line(s) shall be tightly sealed.



**D. SERVICE OF UNPACKAGED FOODS DIRECTLY TO OR BY THE CUSTOMER (Refer to CCDEH Buffet Service Guidelines 2008)**



1. With the exception of produce displays in retail grocery stores, 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. Provide detailed drawings (scale 1 inch = 1 ft.) of all proposed sneeze guards, including a detail showing the 54-60 inch nose/mouth zone to the top of the display. See adjacent sample drawing.

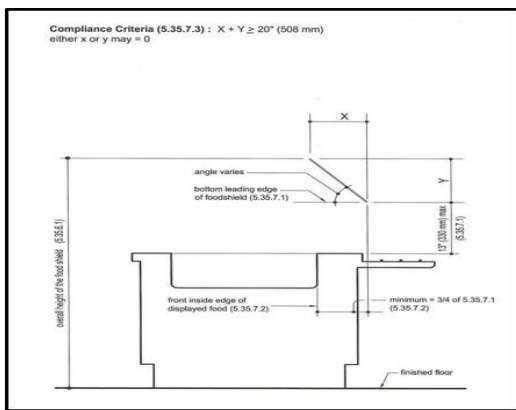


Fig. 6 NSF Example of a Self Service Sneeze Guard

2. Utensils, food preparation surfaces, and food preparation equipment which are located adjacent to customer accessible areas, must be protected by approved sneeze guards. See adjacent sample drawing.

3. Approved flooring, cove base, walls, and ceilings are required in these areas.

**E. STORAGE (CalCode Section 114047)**

1. Adequate and suitable floor space and shelving shall be provided for the storage of food, beverages, and all food related products.

2. The quantity of dry storage shall comply with either of the following:

- a. If a storage room is proposed, it shall be at least 25% of the food and utensil handling areas (all areas except customer areas), or 100 square feet, whichever is greater.
- b. Provide a minimum of 96 linear feet of approved (NSF or equivalent), free standing backup dry storage shelving with minimum 18-inch depth. The shelving units may be up to five tiers and must be located in an easily accessible area inside the food facility.

3. Each department in a market which handles unpackaged foods, e.g., deli, meat, fish, bakery etc., and additional operations in restaurants, e.g., sushi bars, oyster bars, etc., must have additional, designated dry storage.



4. Working storage (wall mounted shelves or cabinets over and under food handling equipment which are located in and used in conjunction with food preparation areas) shall not be used in calculating dry food back up storage.
5. All shelving shall be durable, smooth, and easily cleanable. Shelving units must be ANSI certified, NSF or equivalent. Wood shelving is not approved. The lowest shelf shall be at least six (6) inches above the floor, with a clear unobstructed area below.
6. Food and food related products may not be stored in attics or unfinished basements, areas that are difficult to access, and may not be stored in remote areas outside of the facility (e.g. trailers, cargo containers, sheds, etc.).
7. Shelving may not be stored directly in front of electrical panels, large fire prevention system components, or similar wall-mounted equipment. This type of equipment must be identified on the plans, and provisions must be made to compensate for the space required for such installations.
8. A room, area or cabinet separated from any food preparation or storage area, or utensil washing or storage area, must be provided for the storage of all cleaning equipment, supplies and poisonous substances (e.g., mops, buckets, brooms, cleaning compounds, detergents or any other injurious or poisonous materials). [CalCode 114254 & 114254.2]

**F. GARBAGE AND TRASH STORAGE AREA (CalCode 114244 and 114245)**

1. An area shall be provided for the storage and cleaning of garbage and trash containers.
2. 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. The room shall be well ventilated.
3. 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. Outdoor trash storage areas should not be located in close proximity to delivery doors.
4. 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. Off-premises-based cleaning services may be used if on-premises cleaning implements and supplies are not provided.
5. Refer to a separate handout for trash compactors.

**G. RESTROOMS (CalCode Section 114250 and 114276)**

1. Toilet facilities shall be provided within each food establishment, convenient for the employee. The number of toilet facilities shall be in accordance with the local building and plumbing codes.
2. Food facilities located with 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.

3. 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.
4. The floors, walls, and ceilings shall have surfaces that are durable, smooth (non-textured), nonabsorbent, and easily cleanable. An approved wainscot shall extend from the top of the coved base to a height of at least four (4) feet behind all restroom fixtures.
5. Handwashing facilities shall be provided within or immediately adjacent to the toilet rooms. The handwashing facility shall be provided with hot and cold running water from a mixing type faucet. Handwashing soap and single-use towels shall be provided in permanently installed (enclosed type) dispensers adjacent to each handwashing facility. Bulb-style soap dispensers are not acceptable at handwashing stations.
6. Toilet tissue shall be provided in a permanently installed dispenser at each toilet.
7. The restrooms shall be provided with self-closing, tight fitting doors.
8. 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.

#### **H. LOCKERS AND EMPLOYEE CHANGE ROOMS: (CalCode 114256)**

1. Lockers or other suitable facilities shall be provided and used for the orderly storage of employee clothing and other possessions. At least one locker per employee per shift should be provided. Dressing rooms or areas shall be provided and used by employees if the employees regularly change their clothes in the facility.
2. 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. Areas designated for employees to eat and drink shall be located so that food, equipment, linens, and single-use articles are protected from contamination.

#### **I. EXTERIOR DOORS AND WINDOWS: (CalCode Section 114259)**

1. Each permanent food facility shall be fully enclosed in a building consisting of permanent floors, walls, and an overhead structure that meet the minimum standards. All exterior doors shall be well fitted and self-closing to effectively prevent the entrance of flies, rodents, and vermin.
2. Bi-folding doors and windows, roll-up doors, Nana Wall Systems, and sliding windows located between the building exterior and dining areas are not permitted, except when all food and beverage handling/storage areas are fully enclosed. Alcohol bars may be located in an open dining area, provided that no food preparation occurs within the bar.
3. All openable windows, such as restroom windows, shall be screened with not less than 16-mesh screening.

4. Walk-in refrigeration and freezer units and dry goods storage rooms must open directly into the food facility.
5. All exterior roll-up and double doors that open directly into a food and/or utensil handling area shall be equipped with an approved microswitch activated air curtain to operate automatically when the door is opened. The air curtain(s) must be at least the same width as the door opening.
6. 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. An air curtain installed outside the building shall produce air at the same velocity (1600 FPM) directed straight down across the entire door opening. [State of California, Food and Drug Circular 80-7]

**J. PASS THROUGH WINDOWS: (CalCode 114259.2)**

1. 1. Pass-through window service openings shall be limited to 216 square inches each. Multiple window 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.
2. Air curtains at pass-through windows must be microswitch activated to operate automatically whenever the window is opened. The air curtain should produce an air flow eight (8) inches thick at the discharge opening 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.) [CCDEH]

**K. LIGHTING (CalCode 114252)**

1. Except in areas containing only prepackaged foods, shatter-resistant covers shall be installed over all lights.
2. All food preparation areas, dishwashing areas, and bar (except where alcoholic beverage utensils are washed), shall be provided with at least 20 foot-candles of light, as measured 30 inches above the floor.
3. Food and utensil storage rooms, refrigerated storage areas, toilet rooms, and dressing rooms shall be provided with at least 10 foot-candles of light.
4. Where food is prepared, 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.

**L. WATER (CalCode 114192)**

1. An adequate, protected, pressurized, potable supply of hot water at least 120 degrees Fahrenheit and cold water shall be provided. Indicate the water heater capacity (gallons), BTU's or kW's, and the recovery rate.  
[https://www.sccgov.org/sites/cpd/programs/pcp/Documents/PC\\_Water\\_Heaters.pdf](https://www.sccgov.org/sites/cpd/programs/pcp/Documents/PC_Water_Heaters.pdf)
2. The potable water supply shall be from an approved water system.

**M. FLOOR SINKS (CalCode 114193 and CPC 704.3)**



1. All condensate and similar liquid waste, e.g., espresso machines, soda and beer dispensers, and some coffee units, walk-in refrigerators/freezers, food preparation sinks, steam tables, ice machines, shall be drained by means of indirect waste pipes into a floor sink. Floor sinks shall be installed in compliance with local plumbing ordinances and shall be easily accessible. See adjacent sample drawing.

2. Warewashing sinks and warewashing machines shall drain to floor sinks unless the local building department requires a direct connection. When plumbed direct, connections to sewer must meet plumbing code requirements. See sample drawing below of Indirect Waste Drainage.



3. Floor sinks shall be located within 15 feet of the wastewater producing equipment, or closer depending on the height of the equipment drain outlet. For ice machines, proofers, or baking ovens with drains located in close proximity to the floor, the floor sink should be located immediately adjacent to the equipment.
4. Drain lines shall slope to floor sinks at a minimum 1:50 (1/4-inch per foot) slope while maintaining a minimum six (6) inch clearance from the finished floor. There must be a minimum one-inch air gap between the drain pipe opening and the flood rim of the floor sink.
5. Floor sinks must be located to be easily visible for inspection and easily accessible for cleaning. Floor sinks may not be located inside of cabinets and may not be located in rooms or parts of the building that are generally not in use.

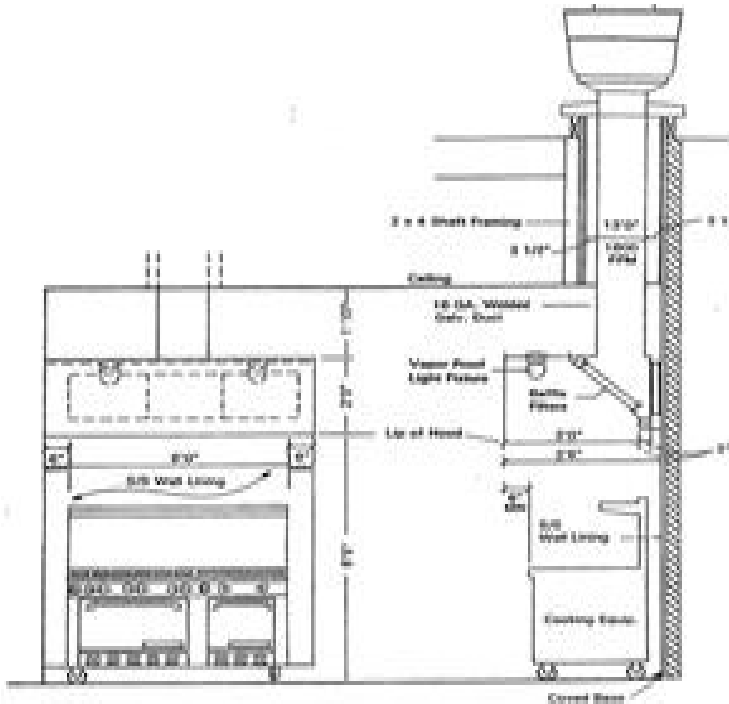
6. Floor sinks shall be installed half exposed under cabinets or low standing equipment. Toe kicks of cabinets should be extended around the sides and back of the floor sink to prevent wastewater spills entering behind the floor sink. In jurisdictions that require raised floor sinks, it may be permissible to install floor sinks less than half exposed to prevent a tripping hazard.

**N. GREASE TRAPS AND INTERCEPTORS (CalCode 114201)**

The Health and Safety Code - HSC DIVISION 104 - ENVIRONMENTAL HEALTH PART 7- CALIFORNIA RETAIL FOOD CODE CHAPTER 7 - Water, Plumbing, and Waste, ARTICLE 2 - Liquid Waste, Section 114201 states that a grease trap or grease interceptor shall not be located in a food or utensil handling area unless specifically approved by the enforcement agency.

1. All grease retention devices must be located outside the facility unless specific written approval is granted by this department.
    - a. Justification must be provided with the written request identifying why locating the grease retention device outside is not possible.
    - b. Cleaning schedules and cleaning procedures must be submitted to show that of contamination to the food operation and the surrounding equipment is mitigated.
  2. Each grease removal device must be clearly identified on plans submitted to this department for review and approval prior to installation and must comply with the current edition of the California Plumbing Code.
  3. The local plumbing official and Water Pollution Control Plant must also approve the location, sizing, and installation of grease traps or grease interceptor(s).
  4. Each grease removal device must be readily accessible for servicing. When the only feasible installation location is within the food facility, the grease trap or grease interceptor must be designed to minimize pump-out frequency.
- O.** To minimize risk of adulterating food, any grease trap or grease interceptor proposed to be installed in a food or utensil handling or storage area should have a pump out connection that is readily accessible to the pumper truck/hauling company in a non-food or utensil handling area and as near an accessible exterior door as possible.
- P.** Unless adequate space is provided between the grease retention device and the wall for cleaning purposes, the grease control device must be flush mounted in the floor.
  - a. Flush-mounted devices may be installed in vaults provided the vault is constructed to be watertight and of such construction so as not to create a nuisance.
- Q.** Multiple grease traps or grease interceptors may be approved on a case-by-case basis.
- R.** Revisions to approved plans, caused by changes in the size or location of the grease trap or grease interceptor, must be resubmitted to this department for review and approval.

**O. MECHANICAL EXHAUST VENTILATION (CalCode 114149)**



1. 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.

2. 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.

3. Each room provided with an exhaust system shall have supplied to the room an amount of filtered make-up air equal to the amount of air to be exhausted. The number and location of return air registers should be such as to provide uniform distribution of makeup air throughout the facility, taking into consideration cross drafts, room configurations, and required air flows. The makeup air registers should be located so as to prevent a short-circuiting of the air being supplied for the exhaust system.

**4. EXHAUST HOODS AND DUCTS**

- a. A Type-I exhaust hood shall be required over all cooking equipment that may produce grease-laden vapors, such as ranges, griddles, deep fat fryers, charbroilers, wok ranges, tandoor ovens, rotisseries, tilting-skillets, etc.
- b. A Type-II exhaust hood shall be required over all equipment that may produce steam, heat and non-grease-laden vapors, such as upright mechanical dishwashers, gas-fired appliances including gas rice cookers, gas steam tables, ovens that do not require Type-I hoods, re-thermalizers, cheese melter, gas-fired coffee roasters, steamers, etc.
- c. In addition to mechanical drawings, provide the manufacturer's hood drawings including overhead and elevation details, duct size, exhaust fan schedule, and listing formulas.
- d. Provide an air balance schedule that indicates all exhaust, makeup air, and any outside air to be supplied by the HVAC system. Doors, windows, or louvers may not be used as makeup air.
- e. Complete and submit the Exhaust Ventilation System worksheets for all Type-I and Type-II hoods and submit specification sheets with the performance curves for the blower(s), filters(s) and make-up air unit(s).

**5. Hood Exemptions**

- a.** Certain types of cooking equipment (e.g. induction cookers, convection ovens, hot plates) may be considered for exemption from exhaust hood requirements. Only two pieces of equipment may be considered for exemption. See the handout, Cooking Equipment Exhaust Ventilation Exemption Guide. The application for exemption must be submitted along with a letter or report from a licensed mechanical engineer to verify that the ventilation where the equipment is located will be adequate to dissipate any heat, steam, or vapors released by the units. The letter or report must also address the latent and sensible heat load emitted from such appliances.

**P. EQUIPMENT (CalCode 114130, 114169)**

- 1.** All new and used equipment and utensils shall be certified or classified for sanitation by an American National Standards Institute (ANSI) accredited certification program, e.g. NSF, ETL Sanitation, UL EPH, UL Sanitation, CSA Sanitation. Equipment design, construction and installation are subject to approval by the enforcement agency.



- 2.** All cracks and crevices at construction joints of counters, cabinets, bars, and similar fixtures shall be sealed with a caulking type sealant. All finishes shall be smooth and washable.
- 3.** All equipment shall be installed on castors, six (6) inch high round metal legs, or on a minimum four (4) inch high curb or pedestal with a continuously covered base at the floor juncture.
- 4.** Equipment that is fixed because it is not easily movable shall be spaced to allow access for cleaning along the sides, behind, and above the equipment, or shall be sealed to adjoining equipment or walls.
- 5.** Walk-in coolers and freezers, exhaust hoods, and some large bakery equipment must be flashed to the ceiling with an approved washable material to close off an area that is otherwise not easily accessible for cleaning.

**Q. REFRIGERATION (CalCode 114153, 114157, 114193, CPC)**

- 1.** All refrigeration units shall be adequate in capacity for the needs of the proposed operation and shall comply with the following requirements:
  - a.** Be certified or classified for sanitation by an American National Standards Institute (ANSI) accredited certification program.
  - b.** Be provided with an accurate, readily visible thermometer.
- 2.** Walk-in refrigeration units shall also:



- a. Have shelving that is at least six (6) inches off the floor with smooth, round metal legs and plastic-coated to prevent rust damage.
  - b. Have condensate waste drained into a floor sink unless unit is self-contained having a manufacturer equipped evaporator.
  - c. Open into the building.
3. Floor sinks and floor drains may not be located inside of the walk-in refrigeration units or freezers.
  4. Provisions must be made for the rapid cool down of any potentially hazardous food that has been heated. Such food shall be cooled from 135° Fahrenheit to 70° Fahrenheit within two (2) hours and from 70° Fahrenheit to 41° Fahrenheit within four (4) hours. [CalCode 114002]

**R. ICE MACHINES (CalCode 114193)**

1. All ice machines shall be located within the building in an easily cleanable, well-ventilated area, and shall be drained to a floor sink.

**S. WAREWASHING SINK (CalCode Chapter 5: Cleaning and Sanitizing of Equipment)**

1. Where multiservice kitchen utensils (i.e., pots, pans, spatulas, tongs, knives, scoops, etc.) and equipment are utilized or where food is prepared, there shall be provided at least a three-compartment approved stainless steel sink with dual integrally installed stainless steel drainboards.
2. 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. [CalCode 114099]. A minimum compartment size of approximately 18 X 18 X 12 inches deep is generally adequate for most utensils. Facilities having large stock pots, baking sheets, or other large utensils may necessitate a three-compartment sink with 24 X 24 inch compartments.
3. Bars and separate food or beverage facilities located within restaurants are required to have an additional three-compartment sink. The three-compartment sink may also be required within each separate section of a large food establishment that handles unpackaged foods (i.e., sushi, deli, meat, bakery or oyster bars, etc.).
4. A mechanical warewashing machine shall not substitute a three-compartment sink.
5. The three-compartment sink must drain indirectly to a floor sink unless the local building department requires a direct connection. [CPC 704.3]

**T. GARBAGE DISPOSAL:**

1. A garbage disposal may not be installed under a required sink or drainboard unless an additional compartment is provided for the disposal.

**U. FOOD PREPARATION (CULINARY) SINK (CalCode 114163)**

1. All food facilities that wash, rinse, soak, thaw, or similarly prepare foods shall be provided with a food preparation sink. 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. This sink must be provided with hot and cold running water through a combination faucet and must drain to the sanitary sewer by way of an indirect sanitary sewer connection through a floor sink. Additional food preparation sinks may be recommended depending on operation.

**V. HANDWASHING SINKS (CalCode 113953)**

1. Handwashing sinks shall be equipped to provide warm water (at least 100°F.) under pressure for a minimum of 15 seconds through a mixing valve or combination faucet. If the temperature of water provided to a handwashing sink is not readily adjustable at the faucet, the temperature of the water shall be at least 100°F, but not greater than 108°F.
2. A handwashing sink shall be provided within each food preparation and warewashing area.
3. The handwashing sink 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 barrier to be rounded. A splash guard is also required between the handwashing sink and food preparation sink, and between the food preparation sink and 3-compartment sink.
4. No splashguard is required if the distance between the handwashing sink and the warewashing sink drainboards is 24 inches or more.
5. Handwashing soap and single-use towels shall be provided in permanently installed (enclosed type) dispensers adjacent to each handwashing facility. Bulb-style soap dispensers are not acceptable at handwashing stations.

**W. JANITORIAL SINK (CalCode 114279)**

1. At least one curbed cleaning facility or janitorial sink 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. The faucet must be equipped with hot and cold water and a backflow prevention device.
2. The curbed cleaning facility or janitorial sink must be of adequate size to wash large floor mats. A curbed cleaning facility must have approved tile or epoxy finishes with integral cove base and be sloped to drain. Plastic or fiberglass laundry tubs are not approved.
3. Provide a mop hanger positioned so that mops drip into the janitorial sink. After use, mops shall be placed in a position that allows them to air-dry without soiling walls, equipment, or supplies.
4. Cleaning supplies and chemicals may not be stored where contamination of food or utensils may occur. A metal shelf or cabinet installed adjacent to the janitorial sink is recommended.

**X. MECHANICAL WAREWASHING MACHINES (CalCode Chapter 5: Cleaning and Sanitizing of Equipment)**

1. All upright mechanical warewashing machines must be installed beneath a mechanical exhaust hood. The design of the hood must meet California Mechanical Code (CMC) requirements or the manufacturer's listing formula. Make-up air will be required as part of the overall mechanical exhaust system.
2. A three-compartment stainless steel sink with dual integral metal drainboards is required in addition to any mechanical warewashing machine.
3. All warewashing equipment shall be provided with two integral metal drainboards of adequate size and construction (equal length and width as the largest compartment). 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.

**Y. DIPPER WELL (CalCode 114119)**

1. A cold running water dipper well shall be provided if scoops or other reusable serving utensils are used repeatedly for portioning (e.g. ice cream and gelato service). The dipper well must be ANSI certified and shall drain to a floor sink unless the dipper well is heated and manufactured without drain. Heated dipper wells are recommended for utensils used to portion hot foods. Heated dipper wells shall be cleaned at a frequency necessary to preclude the accumulation of soil residues. Hot water in heated dipper wells shall be maintained at 135 degrees or above.

**V. FIELD CONSTRUCTION INSPECTION PROCEDURE**

- A.** The contractor or owner is responsible to contact this office to arrange for a construction inspection before the following milestones:
1. Rough plumbing signoff (Preliminary Inspection)
  2. Installation of equipment (Pre-final Inspection)
  3. Upon completion of the project (Final 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 will determine whether the construction meets the standards set in CalCode and adhered to the submitted plans. Final inspections determine if a permit to operate can be issued and should be scheduled with as much time as possible before the proposed opening of the establishment.

- B.** In the case of new food facilities, no food storage or food preparation is allowed onsite until authorized to do so by this department. A permit to operate will be issued upon the successful conclusion of our final construction inspection.