



Retail Food Facilities

CSUF Construction Requirements

Newly constructed and remodeled retail food facilities must meet general requirements and undergo a plans approval process with Orange County Health Care Agency (OCHCA). Alterations or changes to the approved plans must have prior approval from OCHCA and Cal State Fullerton Environmental Health and Instructional Safety (EHIS) before the facility is permitted. All construction work must conform to campus and State building and Fire Marshal codes. The operator must call for a final inspection and receive approval from EHIS and the State Fire Marshal (SFM) prior to placing the remodeled or newly constructed facility into operation. OCHCA grants the final health and safety plans approval, while EHIS and the SFM make final determination allowing businesses to open.

Sanitation

Provide a source of potable water to the facility, a sufficient supply of hot water (120F or greater) for washing, rinsing and sanitizing multi-use utensils and for routine hand-washing (minimum of 100F). All hand wash facilities must include single use soap and paper towels stored in approved dispensers. Use strict protective measures to prevent contamination of food or food contact surfaces during the course of remodeling. Failure to do so may result in the closure of the food establishment until remodeling activities are completed.

Facilities Requirements

- **Food Surfaces.** Finishes on all food contact surfaces, other than the customer areas, must be smooth, nonabsorbent, easily cleanable, durable and light in color. (Note: “light in color” is defined as having a light reflectance value of 70% or greater.)
- **Walls** Use Fiberglass Reinforced Plastic (FRP) or similar non-absorbent materials on wall surfaces subjected to heavy water contact. Install sufficient light covers or shielding above open food storage, preparation or contact areas.
- **Aisles** Provide minimum 30 inch wide aisles in traffic areas if necessary.
- **Floor surfaces** in all areas in which food is prepared, packaged or stored, where any utensil is washed, where refuse or garbage is stored, where janitorial facilities are located, in all toilet and hand-washing areas and in employee change and storage areas shall be of an approved type and in general, conform to being smooth and durable.
- **Floor sinks** must be at least half-exposed or be in line with the front face of elevated free standing equipment, and within 15 feet of the condensate producing equipment.

Equipment, Fixtures, and Supplies

EHIS and OCHCA will review all new and used food service equipment at the time of the field inspection to ensure it meets NSF International standards.

- To support all equipment, including shelving, use six (6) inch high, easily cleanable legs, commercial castors, or completely seal them into position on a four (4) inch high continuously coved base or concrete curb to facilitate ease of cleaning.

- Install conduits, plumbing, etc., not concealed within walls, at least six (6) inches off the floor and ½ inches away from walls to facilitate cleaning.
- Seal all exposed flex conduit and areas where pipe lines enter a wall, ceiling or floor, and the opening around the line.
- Store all chemicals off the floor in an approved manner.
- Install all utensil sink compartments that are large enough to accommodate the largest utensil used at the facility or use alternative methods for sanitizing. Securely attach the sink to the wall and seal at all wall contact points. Check with Physical Plant regarding the drain line plumbing to determine whether indirect plumbing to a floor sink is required.

Permanent Retail Food Facilities

Floors – Approved floors have smooth, impervious, easily cleanable surfaces that continue seamlessly up the wall or toe-kicks, at least four (4) inches, with a 3/8 inch minimum radius cove. Ceramic, quarry or metal top-set base complies, but not Vinyl or rubber top-set base. Floors that are water-flushed for cleaning, where pressure spray methods for cleaning equipment are used, where slip resistant agents are used on floors and where excessive moisture may accumulate require floor drains with a slope of 1:50 to the floor drain. Install completely smooth flooring under equipment and on the coved bases, but use slip resistant agents, only in high traffic areas.

Walls – Install smooth nonabsorbent walls and ceilings, with light colored, easily cleanable finishes in food handling areas. Light reflectance values should exceed 70%. Seal all wall surfaces with a gloss or semi-gloss enamel, epoxy, varnish, or other approved sealer. Install acoustical ceiling tile only if it complies with the preceding requirements and if a sample is submitted and approved by OCHCA. Do not use acoustical plaster in food handling areas.

Exhaust Hoods and Ducts – Install mechanical exhaust ventilation at or above all cooking equipment such as ranges, griddles, ovens, deep fat fryers, barbecues and rotisseries to remove cooking odors, smoke, steam, grease and vapors. Install all hoods, ducts, and exhaust outlets in accordance with the current edition of the Uniform Mechanical Code. Solder or fit tightly all joints and seams for ease of cleaning. Do not use riveted seams. Install auxiliary equipment such as food heating or warming devices, cheese melters, etc., that are installed above other equipment beneath an exhaust hood, so that they do not create an air flow obstructions to proper ventilation of the equipment for which the hood ventilation system is designed. The design, construction and installation of such warming devices under a hood must undergo an evaluation and approval by OCHCA prior to installation. Consult the State Fire Marshal for fire suppression systems requirements.

Install the lower lip of canopy-type hoods no more than seven (7) feet above the floor and no more than four (4) feet above the cooking surface. Ensure the hood overhangs or extends a horizontal distance not less than six (6) inches beyond the outer edges of the cooking surfaces on all open sides. Install grease troughs and drip pans that are easily cleanable.

Non-canopy type hoods must be easily cleanable and comply with minimum exhaust air velocity requirements. Install shielding when necessary at the ends of the hood to prevent

interference from cross drafts. Provide make-up air equal to that amount which is mechanically exhausted. Do not use windows and doors to provide make-up air. Fire extinguishing systems must comply with State Fire Marshal requirements and Underwriters Laboratory Standard 300 (UL 300). Install them to allow easy cleaning of the hood and duct systems, and whenever possible, shall not be above food handling areas.

Refrigeration – Use refrigeration units with adequate capacity to the needs of the proposed operation and that comply with the following requirements:

1. Can maintain refrigerated foods at or below 41° Fahrenheit at all times.
2. Constructed for commercial use (domestic model units are not acceptable).
3. Provided with an accurate, readily visible thermometer.
4. Use nonabsorbent and easily cleanable shelving.
5. Use smooth, nonabsorbent and easily cleanable surfaces. Seal all cement, plywood, or other similar absorbent materials, and seal all joints.
6. Drain condensate wastes from reach-in refrigeration units into floor sinks or approved evaporator units.
7. Install cooling coils and related electrical, drainage and refrigerant lines so that they are safe and easily cleanable.
8. Construct drainage and refrigerant lines of nontoxic materials or insulate and cover them with approved, easily cleanable and nontoxic material.

Walk-in Refrigeration Units:

1. Have flooring that complies with requirements for food handling areas
2. Can open into an area with approved finishes within the facility, but not into the customer area or directly outside.
3. Drain condensate waste into floor sinks located outside of walk-in refrigeration units.

Locate ice machines within the building in an easily cleanable, well ventilated area, and drain them to a floor sink.

Floor Sinks – Ensure all condensate and liquid waste drains through indirect waste pipes into an open floor sink installed flush with the floor surface, but not inside walk-in refrigeration units.

- Install horizontal runs of drain lines at least 1/2 inch from the wall, six (6) inches off the floor, terminating at least one (1) inch above the overflow rim of the floor sink, and do not install across any aisle, traffic area or door opening.
- Locate floor sinks so that they are readily accessible for inspection, cleaning and repair. The floor sink must be located within 15 feet of the drain opening of the equipment served.

Utensil Sinks – Provide a three (3)-compartment stainless steel sink with dual, integrally installed stainless steel drain-boards and an indirect connection to a floor sink where multiservice utensils are utilized and within each facility handling unpackaged foods.

The compartment sizes must meet or exceed 18" x 18" x 12" deep with minimum 18" x 18" drain-boards, or 16" x 20" x 12" deep with 16" x 20" drain-boards. **The sink must otherwise be capable of accommodating the largest utensil to be washed, and the drain-boards shall be as large as the largest sink compartment.**

1. Form, as an integral part of the sink, and for sinks installed next to a wall, a stainless steel "backsplash" extending up the wall at least eight (8) inches, and sealed to the wall. Install the ends of the sink with a minimum two (2) inch separation from walls or with integrally installed "end returns".
2. Install additional drain-board space or storage racks as required where multiservice customer eating and drinking utensils are used.
3. Add an additional sink compartment when installing a garbage disposal.

Automatic Dish Machines – Select automatic dish machines that meet applicable NSF International Standards.

1. Provide booster heaters for all spray type dish machines which are designed for a hot water sanitizing rinse, or connect it to an approved re-circulating water system capable of maintaining rinse water at 180° Fahrenheit.
2. Provide thermometers and pressure gauges for the dish machine
3. Indicate the proper water flow pressures and temperatures.

Janitorial Sink – Install a one-compartment wall-mounted janitorial sink with hot and cold running water for general cleaning activities. Cement tubs are not acceptable;

1. Install as an alternative to a sink a curbed area properly sloped to a drain that is provided with hot and cold running water, a mixing faucet, and an approved backflow prevention device. Use smooth, impervious, and easily cleanable construction. Where duckboards or floor mats are used, install a curbed area with a drain.
2. Use easily cleanable legs for free standing janitorial sinks. Legs with "L" angles will not be accepted.

Hand-washing Sinks – Provide a hand-washing sink in food preparation areas with soap and sanitary towels in single-service, permanent dispensers.

Food Preparation Sinks – Food facilities that prepare raw vegetables or meat may be required to have a food preparation sink with an indirect connection to a floor sink.

Dipper Well – A running water dipper well must be provided if scoops are used for dipping ice cream. The dipper well shall be drained by an indirect connection to a floor sink.

Window Screens – All operable windows, such as restroom windows, shall be screened with not less than 16 mesh screening.

Direct Service – Shield displays of unpackaged foods to intercept a direct line between the customer's mouth and the food being displayed or dispense from approved self-service containers. (Request a review from EHS for requirements regarding sneeze-guards, buffets, salad bars, and bulk food operations.)

Dry Storage – Provide enough food, beverages, and related products storage for working and refrigeration storage, including cabinets over and under food handling equipment and wall mounted shelves in and used in conjunction with food preparation areas. Refer to the following to determine the minimum amount of backup storage space required:

- Within food facilities that have food preparation areas which total 400 square feet or less and have 100 customer seats or less, install a minimum 100 square feet of floor space dedicated for backup dry food storage.
- Install at least 32 linear feet of approved shelving units in the 100 square feet of dedicated floor space.

Within food facilities that have food preparation areas which total more than 400 square feet, or more than 100 customer seats, determine the floor space required for backup dry food storage by dedicating one square foot of floor space per customer seat, or by dedicating a space equal to 25% of the food preparation area, whichever is greater. Base the quantity of shelving units to be installed in this dedicated space upon whichever of the following formulas provides the greater amount of shelving:

- Required linear feet of shelving units = $32 \times (\text{seating capacity}) / 100$
- Required linear feet of shelving units = $32 \times (\text{preparation areas sq.ft.}) / 400$

Where remote dry food and beverage storage is proposed, locate at least half of the required storage within the food preparation areas. The remaining storage must be located within the food facility in an approved storage room.

Within a bar, dedicate a segregated room or area with at least 50 square feet of floor space for backup beverage and bar supply storage. Install at least 16 linear feet of approved shelving units in the 50 square feet of dedicated floor space. When a bar is located within a restaurant, provide the bar backup storage in addition to the required dry food storage.

Remote food service operations in restaurants, such as sushi bars and espresso bars, must provide at least 16 linear feet of approved shelving units. A shelving unit shall be a minimum 18 inches in depth and three tiers high. For example, eight shelving units, each of which is four feet long and three tiers high, would equal 32 linear feet of shelving units.

1. Construct shelving in an easily cleanable design of smooth metal or wood, which has been finished and sealed.
2. Shelves installed on a wall shall have at least one (1) inch of open space between the back edge of the shelf and the wall surface, or, the back edge of the shelf shall be sealed to the wall with silicone sealant or equivalent.
3. The lowest shelf shall be at least six (6) inches above the floor, with a clear unobstructed area below or be the upper surface of a completely sealed continuously coved base, with a minimum height of six (6) inches.
4. Set back all shelves located below a counter or work surface at least two (2) inches from the drip line of the surface above.
5. If shelves are supported by legs, they must be smooth and easily cleanable.

Do not mount electrical panels, large fire prevention system components or wall-mounted equipment in food storage rooms unless adequate approved provision is made to compensate for the space required for the installation.

Temporary Food Facility

A Temporary Food Facility (TFF) may operate at a campus “community” event after obtaining a special events application through EHIS, a Facility Reservation Request form through the University Conference Center, or a Facility Reservation Request form through the Student Organizations Resource Center. Food or beverage booth operators must complete and take their forms to EHIS. These approved forms act as the health permit application along with the temporary food facility operation specifications discussion with EHIS. These completed applications with an approval signature from EHIS will act as the permit.

1. Submit a legible site plan that is drawn to scale at least two weeks prior an event. The plan must include the proposed locations and detailed descriptions of the temporary food facilities, restrooms, refuse containers, potable water faucets, waste water disposal facilities, and all shared ware-washing and hand-washing facilities.
2. Prepackaged and open food booths operators must obtain campus health permits.
3. The health permit is only good for the single event and cannot be transferred; it must be approved by EHIS prior to operating the booth.
4. Operators must display on the booth the facility name (at least 3 inches high letters), operator name, and address (at least 1 inch high letters).
5. Store all foods, utensils and other related items must be stored at least six (6) inches off the ground and adequately protected from contamination while being transported, stored, prepared, displayed and served.
6. Use equipment and utensils made of smooth, non-absorbent, easily cleanable, and non-toxic materials.
7. All condiments outside of the enclosed booth must be prepackaged or dispensed from approved pump squeeze or pour-type devices.
8. Ensure approved hot and cold holding equipment provide proper food temperature control during transportation, storage, and operation.
9. Equip food preparation, storage, and ware-washing areas with overhead protection.
10. Provide at least one approved toilet facility for each 15-employees/food handlers within 200 feet of each TFF.
11. Provide one mechanical hand-wash facility with warm running water (100° F) and under pressure for each required toilet facility.
12. Provide single-use soap and paper towel dispensers at hand-wash facilities.
13. Provide a janitorial sink on site as needed.
14. Use food- grade quality hoses for transporting potable water.
15. Install proper equipment for disposal of liquid waste (i.e., sewer system, wastewater holding tank). Wastewater holding tanks must be large enough to capture the total daily intake of wastewater.
16. Use only TFFs that can be readily disassembled for storage and transporting that can be readily assembled to its original integrity.

Pre-Packaged Food

1. Store all foods at least 6 inches off the ground.
2. Install overhead protection made of approved materials.
3. Do not use dirt floors.
4. In lieu of a hand-wash station, use cold water with germicidal soap.

Unpackaged Food

1. Fully enclose the booth.
2. Construct walls and ceilings of smooth, durable and easily cleanable materials.
3. Install pass-through openings no larger than 432 square inches.

Mobile Food Facility

Mobile Food Facilities such as push carts, trailers, trucks, and other vehicles must meet requirements the OCHCA plans review specifications. To discuss what is required or submit plans contact EHIS at (657) 278-3083.

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