



CONSTRUCTION GUIDELINES FOR *PREPACKAGED* **RETAIL FOOD FACILITIES**

Hours for Initial Plan Submittals: 8:00 a.m. to 4:30 p.m.



County of Orange Health Care Agency
Public Health Services, Environmental Health
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Introduction

This construction guide is for any person wanting to construct or remodel a retail food facility handling prepackaged food in Orange County. A prepackaged food facility sells food and beverages that are in their original, distributor or manufacturer direct container, bottle, box, or packaging and have not been opened. This guide provides an overview of the plan check process, a checklist, and an outline of all the structural details that the State of California Health and Safety Code require for retail food facilities. A separate guide is available for retail food facilities which will handle unpackaged food. Please contact us at the number listed on the cover page if you have questions about your particular type of facility.

First, let's take an overview of the Environmental Health Plan Check process from the beginning to your grand opening:

Plan Check Process Overview

Plan Submittal

Before beginning any construction or remodeling work, you must submit three (3) copies of detailed plans/blueprints and specifications to the Environmental Health office (see below for plan specifics). The plans may be prepared by an architect, draftsman, contractor, or owner. All plans must be drawn in a professional manner encompassing all applicable requirements of this construction guide. In addition, you must obtain all approvals from your local building and fire authorities prior to construction. Prior to accepting your plans for submittal, a preliminary check will be conducted. The purpose of this check is to ensure that the basic requirements for the facility have been included. A copy of the Plan Submittal Checklist is attached to this Construction Guide.

Plan Check Fee

When it has been determined that your plans may be submitted, a plan check fee must be paid. The fee is based upon seating capacity when applicable or square footage and whether it is new construction or a remodel. Current fee schedules are available on our website at www.ocfoodinfo.com and by request.

Remodels of retail food facilities also require plan review and submittal of the associated fee. A remodel is any construction or alteration to an existing retail food facility. Remodeling also includes the installation of equipment or repairs to a food facility which alters its configuration or method of operation. Installing a food facility in a new structure or in an empty building is new construction. Also, installing a food facility in a former non-food related facility,

such as a shoe store, falls under the new construction category. If you are starting from a former food facility where all the equipment and interior structures have been removed, that also is considered new construction.

Initial Plan Review

Plans that are submitted will be reviewed and approved as submitted, approved with corrections, or denied. In order for plans to be approved, they must include all the information regarding structural requirements that are listed in this guide, and the plans themselves must be drawn to scale (e.g., $\frac{1}{4}'' = 1'$), using non-erasable ink or print (no pencil). Your plans must include:

- ✓ Complete floor plan with plumbing and electrical outlets and electrical panels.
- ✓ Complete equipment layout, including elevations of equipment and equipment specifications.
- ✓ Complete exhaust ventilation plans, including make-up air. Indicate the type of comfort cooling in the building (e.g. "building is cooled by refrigerated air conditioning", "evaporative cooling" or "no cooling system is installed").
- ✓ Finish schedule for walls, ceilings, floors, and base coves that indicates the type of material and surface finish. Samples of proposed finish materials should be submitted with the plans.
- ✓ Remodel plans must identify all proposed changes to existing structures, spaces, and equipment.
- ✓ A site plan showing the proposed rubbish and food waste storage receptacle location.
- ✓ A statement of the proposed customer seating capacity, when applicable.

Approval or Denial

If the plans you submitted do not contain all the information in order to meet the requirements, additional information will be needed and the plans may have to be revised before approval is granted. If your plans do meet all the requirements, your plans will be marked with approval stamps and you will be given back two sets of the originals that you submitted. One of these copies must be kept at the jobsite until the end of the construction/remodel

project. It is only after you receive the approval of your plans that you can begin construction/work at your facility.

Modification of Plans If any changes are proposed to the plans *after* approval, they must be reviewed and re-approved by this Agency prior to being implemented.

Preliminary Inspection When construction is approximately 75% to 80% completed, with plumbing, rough ventilation, and rough equipment installed, you must call your Plan Checker (the person indicated on your approved plans) for a *preliminary construction inspection*. Requests should be made at least two (2) working days prior to the date of inspection requested. The preliminary inspection is usually scheduled at least two weeks prior to the proposed opening of the food facility. Note that approved materials and approved workmanship are significant factors in the evaluation and field approval of food facility construction and equipment installation.

Final Inspection Upon completion of 100% of the construction, including all finishing work, you must call your Plan Checker to arrange for a *final construction inspection*. Contact your Plan Checker at least two (2) working days in advance for an appointment for the final inspection.

Issuance of Permit Once your facility has passed the final inspection, you will be issued a Health Permit and you are then able to open for business or begin using the newly remodeled areas of your business.

CHECKLIST GENERAL CONSTRUCTION & EQUIPMENT REQUIREMENTS

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RETAIL FOOD FACILITY GENERAL STRUCTURAL REQUIREMENTS

1. FLOORS

- a. Floors in food facilities shall be smooth and impervious to water, grease and acid, and be made of easily cleanable construction. Floor surfaces in all areas where food is stored, where refuse or garbage is stored, where janitorial facilities are located, in all toilet and handwashing areas and in employee change and storage areas, shall be an approved type that continues up the wall or toe-kicks, at least four (4) inches, in a seamless manner, with a 3/8 inch minimum radius cove. An approved slim foot ceramic, integral quarry, or metal topset base is generally acceptable.
- b. Floor drains are required in floors that are water-flushed for cleaning including where pressure spray methods for cleaning equipment are used. Trench drains may be used in doorways or when the amount of water used for cleaning will be excessive. High pressure hot water cleaning systems are recommended in addition to floor drains when the degree of roughness of the slip resistant agent is excessive as determined upon evaluation by this Agency.
- c. Flooring under equipment and on the coved bases shall be completely smooth. Floor surfaces, which contain slip resistant agents, shall be restricted to traffic areas only.

2. WALLS / CEILINGS

- a. Walls and ceilings in restrooms and around janitorial facilities shall be smooth and nonabsorbent with a light colored, washable finish. (Note: light colored is defined as having a light reflectance value of 70% or greater.)
- b. Wall materials other than smooth plaster or putty coat plaster, drywall with sealed and taped joints, or plywood with properly sealed joints require submission of a sample.
- c. All wall surfaces in restrooms and around janitorial facilities shall be sealed with a cleanable paint such as: gloss or semi gloss enamel, epoxy, varnish or other equivalent washable finish.

3. REFRIGERATION

- a. All refrigeration units shall be adequate in capacity to the needs of the proposed operation and shall comply with the following requirements:
 - (1) Be capable of operating so as to maintain the refrigerated foods at or below 41° Fahrenheit at all times.

- (2) Be specifically constructed for commercial use. Domestic model refrigeration units are not constructed for commercial use and do not meet the American National Standard Institute (ANSI) certified sanitation standards, such as National Sanitation Foundation (NSF) International Food Service Equipment.
- (3) Be provided with an accurate, readily visible thermometer.
- (4) Have smooth, nonabsorbent and easily cleanable interior and exterior surfaces.
- (5) Condensate waste from reach-in refrigeration units may be drained into a floor sink or an approved evaporator unit.
- (6) Cooling coils and related electrical, drainage and refrigerant lines shall be installed in a safe and easily cleanable manner. Drainage and refrigerant lines shall be constructed of nontoxic materials or properly insulated and covered with an approved, easily cleanable and nontoxic material.

b. Walk-in refrigeration units shall also:

- (1) Have a coved base with a radius of at least 3/8 inch at the floor/wall juncture; the floor material shall extend up to a height of at least four (4) inches on the walls. Four (4) inch approved metal topset coving with a minimum 3/8 inch radius is acceptable against metal wall surfaces of walk-in refrigeration units.
- (2) Open into an area with approved finishes within the facility. Refrigeration units may not open to the customer area or directly outside, with the exception of customer self-serve, prepackaged refrigeration units.
- (3) Have condensate waste drained into a floor sink. The floor sink is not to be located inside the walk-in refrigeration unit.
- (4) If cement, plywood or other similar absorbent materials are used, the surfaces and joints must be sealed.

4. FLOOR SINKS

- a. All condensate and similar liquid waste shall be drained by means of indirect waste pipes into an open floor sink or approved receptacle.
- b. Drain lines must be installed, constructed and maintained to be easily cleanable and prevent the harborage of insects. Installing horizontal runs of drain lines at least 1/2 inch from the wall and six (6) inches off the floor will accomplish this task. All drain lines must terminate at least one (1) inch above the overflow rim of the floor sink to provide an air gap.

- c. Floor sinks shall be located so that they are readily accessible for inspection, cleaning and repair. The floor sink must be located close enough to the equipment being drained to facilitate proper drainage. Typically, this distance is within 15 feet.
- d. Waste lines may not cross any aisle, traffic area or door opening.
- e. Floor sinks or floor drains are not permitted inside walk-in refrigeration units.

5. JANITORIAL SINK

- a. A one-compartment, non-porous janitorial sink or mop basin with hot and cold running water shall be installed for general cleanup activities.
- b. 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, is also acceptable. All curbed area surfaces shall be non-porous.

6. GENERAL PURPOSE HOT WATER

- a. Provide a water heater which is capable of constantly supplying hot water at a temperature of at least 120°F to all sinks and other cleanup facilities. A 10-gallon water heater is typically suited to meet this demand in a prepackaged food facility.

7. BACKUP DRY FOOD AND BEVERAGE STORAGE

- a. Adequate and suitable floor space shall be provided for the storage of prepackaged foods, beverages and related products. In most prepackaged food facilities, a minimum of 50 square feet of dedicated floor space is generally sufficient to meet this requirement.
- b. An area comprised of 50 square feet can be accommodated with 16 linear feet of approved shelving units.
- c. Approved shelving units are readily available and are sold with a minimum of 18 inches in depth and are three (3) tiers high. To assist you in calculating shelving units, four (4) shelving units, each of which is four (4) feet long and three (3) tiers high, would equal 16 linear feet of shelving units.
- d. Shelving is required to be constructed in an easily cleanable design of smooth metal or wood which has been finished and sealed. When constructing wall mounted metal or wood units, they must be finished and sealed. The shelves installed on a wall shall have at least one (1) inch of open space between the back edge of the shelf and the wall surface; otherwise, the back edge of the shelf shall be sealed to the wall with silicone sealant or equivalent. This will prevent food waste from accumulating in the cracks and eliminate insect harborage areas. 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 covered base, with a minimum height of six (6) inches. The clearance under the shelving units allows for easy access for cleaning the floor and monitoring for rodent or insect activity.

8. RESTROOMS

- a. Toilet facilities are required within each food facility for use by the employees.
- b. If you have toilet facilities for patrons, they shall be so situated that patrons do not pass through food storage areas when they are allowed access to the toilet facilities.
- c. Handwashing sinks shall be provided within or adjacent to each toilet room. The sink shall provide water of at least 100° Fahrenheit through a mixing valve or combination faucet. Soap and sanitary towels in single-service dispensers shall be provided at the handwashing sink. Heated-air hand drying devices may be used in lieu of sanitary towels.
- d. Toilet tissue shall be provided in a permanently installed dispenser at each toilet.
- e. The restrooms shall be provided with well-fitting, self-closing doors.
- f. All toilet rooms shall be provided with ventilation. If adequate ventilation cannot be provided by an openable, screened window, mechanical ventilation will be required.

NOTE: If there are five (5) or more employees, separate toilet facilities for each sex may be required by the local building department.

9. GARBAGE AND TRASH AREA

An area shall be provided for the storage and disposal of all waste material and for the cleaning of garbage and trash containers.

10. LIGHTING

- a. Food and utensil storage rooms, refrigeration storage rooms, toilet rooms, and dressing rooms shall be provided with at least 10 each, foot-candles of light.



Plan Submittal Checklist
 County of Orange, Health Care Agency, Environmental Health
 1241 E. Dyer Rd., Ste. 120, Santa Ana, CA 92705
 (714) 433-6074

The intent of this form is to assist in determining the acceptability of the proposed plans for official review and is NOT a substitute for a full and detailed review by a Plan Check Specialist.

- Plans accepted for plan check review. SR _____
- Plans not accepted. Please resubmit three (3) new, complete sets. Provide this form with your next submittal.

Facility Name _____
 Address _____
 Contact Name and Phone Number _____
 Preferred Method to Receive Letters Mail Fax Email _____
 Date _____

Unpackaged Food Facility Criteria:

Y	N	N/A	Criteria
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Three identical sets of plans
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Floor plan drawn to scale, readable, and in ink
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	All equipment drawn on floor plan
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Equipment schedule with make and model numbers
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Finish schedule
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Menu (For new construction and large remodels only)
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Storage shelving
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Change room or lockers
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Detailed exhaust hood drawings, including elevations
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	3-Compartment sink with integral drainboards
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Handwash sink
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Mop sink
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Water heater location and proposed energy input
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Employee restroom(s)
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Public restroom(s)

Packaged Food Facility Criteria:

Y	N	N/A	Criteria
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Three identical sets of plans.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Floor plan drawn to scale, readable, and in ink
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	All equipment drawn on floor plan
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Equipment schedule with make and model numbers
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Finish schedule
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Storage shelving
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Mop sink
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Water heater location and proposed energy input
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Employee restroom(s)

Comments: _____

Preliminary checker _____

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