

Wholesale Food Distribution Construction Guide



Guidelines for Contruction or Remodeleing Wholesale Food Distribution Plants

(800) 442-2283
www.sbcounty.gov/dph/dehs



COUNTY OF SAN BERNARDINO
Environmental Health Services
DEPARTMENT OF PUBLIC HEALTH

CONSTRUCTION GUIDE

TO BUILD IT RIGHT

These guidelines are intended to assist the contractor, designer, or owner in the development of plans when constructing or remodeling a food prepackaged warehouse in the County of San Bernardino. A separate guide is available for wholesale food facilities which will handle open/processed food. Please contact us if you are unsure about your particular type of facility. The reference materials used in the development of this booklet include the Building, Fire, Mechanical codes or are part of the Good Manufacturing Practices State and Federal food safety laws and regulations.

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PLAN SUBMISSION AND REVIEW PROCESS

Plan approval must be obtained from the County of San Bernardino, Division of Environmental Health Services (DEHS) before constructing, altering, converting or remodeling any building used as a food facility. ("Remodel" means construction, building, or repair to the food facility that requires a permit from the local building authority). The following is required to process and obtain approval to build or remodel a food facility.

PLAN SUBMISSION

1. Submit three (3) sets of detailed plans and specifications, complete an application for Food Service Plan Review and pay the required plan check fees. Proposed food facilities located in County (unincorporated) areas require five (5) sets of identical plans and specifications when submitted.

Or

A set of digital plans in Adobe PDF format may be submitted via CD, flash drive or email to EHSPlanReview@gmail.com. An application and plan check fees must be submitted in person or via mail as of August 2013. Visit our website for improvement updates.

2. The plans must include sufficient information to demonstrate compliance with the California Health and Safety Code in order to be approved.
3. Plans may be prepared by an architect, draftsman, consultant, contractor or owner. All plans must be drawn to a minimum scale of 1/4" per foot for Public Pools and 1" per foot for Spa pools in a professional manner encompassing all applicable requirements of this construction guide.
4. Plans will be approved or rejected within twenty (20) working days after receipt and the applicant will be notified. Rejected plans (plans that are incomplete, or require significant change) will have two (2) sets returned for revision. Three (3) complete sets must again be submitted for review or one (1) electronic set before approval will be granted; no additional fee is required.
5. Upon approval, two (2) sets of plans will be returned to the applicant, and the third (3rd) set will be kept on file until construction has been completed. An approved set of plans must be maintained at the construction site until the final inspection has been made.
6. Any changes to DEHS approved plans require additional review and approval. Application and fee may apply.
7. Before beginning construction, a building permit must be obtained from the appropriate Department of Building and Safety. (By law, building permits for pool facilities are not to be issued until plan approval has been obtained from DEHS.)

NOTE: An approved plan is valid for two (2) years (five [5] years for schools and institutions). After such time, the plan is VOID.

INFORMATION REQUIRED FOR PLAN SUBMITTAL

The plans shall show and specify in detail the following on the plan and/or accompanying paperwork:

Provide the exact name and address of the food facility, the name, telephone number and email address of the owner, contractor and contact person.

Plans shall be drawn to scale, e.g., minimum 1/4" = 1 foot using non-erasable ink or print (no pencil), and shall include:

- A site plan showing the proposed location of a separate impervious area for garbage cans/bins, with approved drainage. The site plan should also show the spatial relationship between the food facility and any adjacent buildings.
- Floor plan of entire food facility, including but not limited to storage areas, walk-in coolers, janitorial areas, toilets, dressing room, break rooms, garbage and trash areas, etc., including all interior and exterior doors. Location of the manager's or chef's office, if present, must be shown. Spaces such as employee dressing rooms or food storage areas cannot be used for office space. Include the total square footage of the facility.
- Complete equipment layout and equipment schedule, listing type, make and model numbers of all equipment.
- Complete plumbing layout showing water lines, hot water heater, sewer lines, floor drains, floor sinks, vents, cleanouts, etc.
- Electrical layout including lighting. Location of electrical panel(s) must be shown.
- Complete finish schedule for the floors, cove base, walls, and ceilings that indicates the type of material, color, and the surface finish. Samples may be required.
- A complete description of the food(s) to be stored and product flow.

NOTES:

If project is a remodel of an existing food facility, clearly indicate the extent and square footage of the remodel. Include a layout of the existing facility, as is prior to the remodel.

State on the plans whether the food facility is served by a Public Water System or individual water wells.

- If water wells are to be the source of potable water, contact Environmental Health Services, Water/Waste Water Program for water supply permit requirements at (800) 442-2283.

State on the plans whether the food facility is served by a sewer district or by an on-site sewage disposal system.

- If an on-site sewage disposal system is to be installed, approval must be obtained from San Bernardino County Environmental Health Services Water and Waste Management/LEA section, at (800) 442-2283.
- If an onsite sewage disposal system is existing, a completed septic certification form signed by an A, B, or C-42 contractor is required.

FIELD CONSTRUCTION INSPECTIONS

Request for inspections should be made at least 5 working days in advance. Contact DEHS to schedule an inspection. The construction of the food facility must conform to the latest set of DEHS approved plans.

✓ PRELIMINARY (FINISHES) INSPECTION

After finished surface materials have been installed (i.e. floors, cove base, walls and ceiling) with plumbing, rough ventilation, and prior to equipment installation.

✓ CONSTRUCTION (EQUIPMENT) INSPECTION

Upon installation of 80-100% of all equipment, and any corrections listed on the Preliminary Inspection Report.

✓ FINAL INSPECTION

Upon completion of all construction, including all previous corrections; permanent utilities (electric, gas, potable water, sewage disposal) must be provided at time of final inspection. Hot water of at least 100°F must be provided. All equipment must be operational (refrigeration must be at proper temperature of 41°F or below with a thermometer present).

When more than three (3) inspections are necessary to approve the facility to operate, additional fees may apply.

The owner/operator will receive an application for an annual Environmental Health Permit at the time of the equipment construction inspection. This application along with applicable permit fees, are due at the time of final inspection.

Final construction must be approved by DEHS prior to the issuance of a health permit and the opening of a new food facility or the use of remodeled areas.

Food should not be stocked or prepared until specific authorization is given by DEHS.

GENERAL CONSTRUCTION AND EQUIPMENT REQUIREMENTS

1. FLOORS

Floors in food facilities shall be durable, smooth and impervious to water, grease, acid, and of easily cleanable. Concrete floors are to be sealed with a seamless troweled epoxy floor system, or a USDA approved penetrating sealer, which is nonabsorbent, grease and acid resistant. Non-approved sealers (like Polyurethane) and epoxy paints (i.e. any form of garage floor paints available at Home Stores) are not acceptable.

2. WALLS AND CEILINGS

The walls and ceilings in the restrooms, walk-in refrigerators, refuse areas, shall be of a durable, smooth, nonabsorbent, light colored, and washable surface. (e.g. gloss or semi-gloss enamel paint, epoxy paint, FRP, stainless steel, ceramic tile or other approved materials and finishes).

3. CONDUIT/ PIPELINES

All plumbing, electrical, and gas lines shall be concealed within the building structure as much as possible. Where this is absolutely not possible, all runs shall be at least 1/2 inch away from the walls or ceiling and at least six (6) inches off the floor.

- a. Where conduit or pipelines enter a wall, ceiling or floor, the opening around the line shall be tightly sealed.
- b. Conduit, pipe or drain lines shall not be installed across any aisle, traffic area or door opening at or near the floor surface.
- c. Multiple runs or clusters of conduit or pipelines shall be furred out and encased in an approved raceway or other sealed enclosure to prevent a vermin harborage.

4. LIGHTING

Food storage areas, janitorial facilities, refrigeration storage rooms and toilet rooms shall be provided with sufficient natural or artificial lighting.

5. RESTROOMS

Toilet facilities shall be provided within each food facility convenient for the employees. (Check with local Building and Safety departments for special circumstances, such as the American Disability Act.)

- a. The floors, walls and ceiling shall have surfaces that are smooth, nonabsorbent and easily cleanable.
- b. Handwashing sinks shall be provided within each toilet room. The sink shall be provided with soap and sanitary towels.

6. CLOTHING CHANGE ROOMS / DESIGNATED AREAS

Provide a room, lockers or similar enclosure, separated from toilet, food storage, where employees may change and store their outer garments and personal belongings. NOTE: Check with local Building and Safety departments for American Disability Act requirement

7. REFRIGERATION/FREEZERS

All refrigeration/freezer units shall be adequate in capacity to the needs of the proposed operation and shall comply with the following requirements:

- a. Be specifically constructed for commercial use . (*Domestic model refrigeration / freezer units will not be accepted.*)
- b. Be provided with an accurate, readily visible thermometer.
- c. Have shelving that is nonabsorbent and easily cleanable. (*Wood is not acceptable.*)
- d. Have smooth, nonabsorbent and easily cleanable surfaces. All joints must be sealed.
- e. Condensate waste from refrigeration/freezer units must be drained into a floor sink via legal air gap (*two times the diameter of the pipe*) or to a built in evaporation tray.
- f. Rapid cool down facilities may be required depending on the food operation.

WALK-IN REFRIGERATION UNITS /REFRIGERATED ROOMS SHALL ALSO:

- a. 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.
- b. Have shelving that is at least six (6) inches off the floor with smooth, easily cleanable legs, or cantilevered from the wall for ease of cleaning. Small, easily movable, casted dollies may be used in place of a lower shelf inside a walk-in refrigeration unit.
- c. Have condensate waste drained into a floor sink. The floor sink should not to be located inside the walk-in refrigeration unit/room.

NOTE: Floor drains, and trench drains are not permitted inside the walk-in unit unless they are indirectly connected to the sewer through a legal air gap.

8. FLOOR SINKS

All condensate from equipment shall be drained by means of indirect waste pipes into a floor sink via legal air gap of at least two pipe diameters.

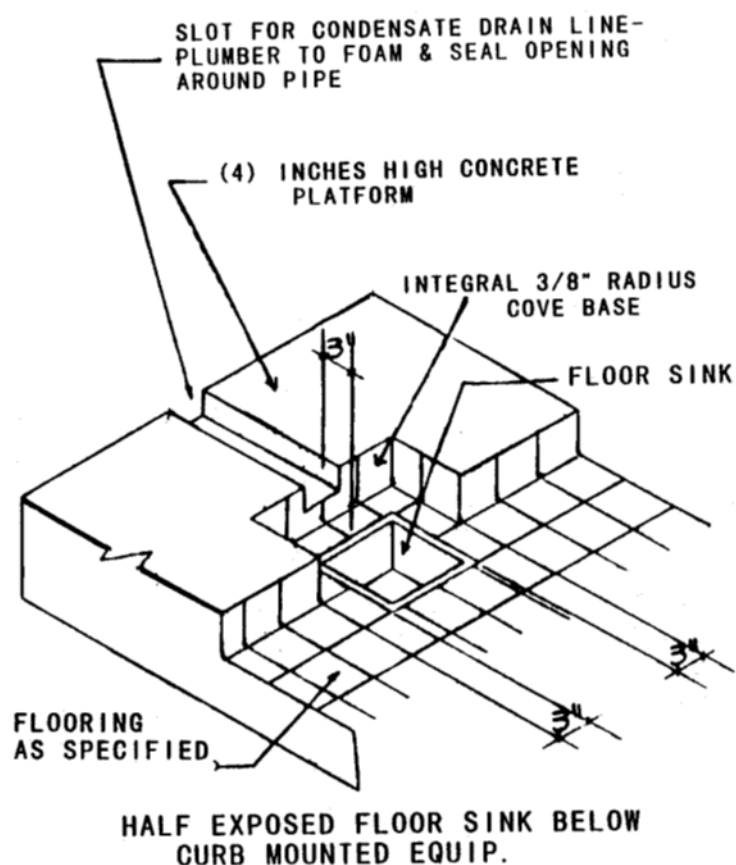
- a. Floor sinks shall be installed flush with the floor surface and have strainers and proper grates.



- b. Horizontal runs of drain lines shall be at least 1/2 inch from the wall and six (6) inches off the floor with a 1/4" per foot slope until terminating above the overflow rim of the floor sink by at least two pipe diameters.
- c. Floor sinks shall be located 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 or otherwise slope at a rate of 1/4 inch per foot.
- d. Waste lines shall not cross any aisle, traffic area or door opening at or near the floor.

9. JANITORIAL SINK AND SUPPLIES

A janitorial room, area, or cabinet, separate from any food preparation or storage area, shall be provided for the storage of cleaning equipment and supplies, such as mops, buckets, brooms and cleaning agents.



- a. A janitorial sink shall be located within the building, in a separate janitorial room or separated from the rest of the food establishment by a solid-wall partition. The partition must be a minimum six (6) foot high, durable, smooth and an easily cleanable surface.
- b. A one-compartment, wall-mounted janitorial sink or a floor mounted janitorial sink, or a curbed area, (properly sloped to a drain), that has hot and cold running water through a mixing faucet, with an approved backflow-prevention device, shall be installed for general cleanup activities. All curbed-area surfaces shall be smooth, impervious and of easily cleanable construction. Where duckboards or floor mats are used in the food facility, a curbed area with a drain is required for cleaning.

10. WATER HEATER

An adequate, protected, pressurized, potable supply of hot water and cold water shall be provided. The water supply shall be from a water system approved by the health officer or the local enforcement agency.

Provide the make, model and input rating of the water heater on the plans.

- a. Hot water shall be supplied at a minimum temperature of at least 120°F measured from the faucet, unless otherwise specified.
- b. Handwashing facilities shall be equipped to provide warm water (100 degrees °F) under pressure for a minimum of 15 seconds through a mixing valve or combination faucet.

- c. In sizing the water heater, the peak hourly demands for all sinks, etc., are added together to determine the minimum required recovery rate.
- d. All sinks shall be provided with hot and cold running water from a mixing faucet.

11. WATER AND SEWAGE DISPOSAL

All liquid waste including sewage, generated by a warehouse shall be disposed of in an approved manner into either a public sewer system or to an approved private onsite disposal system.

12. GARBAGE AND TRASH AREAS

Outdoor storage areas or enclosures 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 a drain.

- a. Check with your local planning, building and storm water agencies to determine their requirements for sizing, construction and wastewater discharge for outside refuse and grease storage areas.
- b. Inside trash storage areas shall properly drain (slope 1:50) to a floor drain.
- c. Outside trash storage areas should be situated as far away from delivery doors as possible.

13. VERMIN CONTROL

All buildings shall be insect and rodent proof. Compliance will be determined at the time of the field inspection but generally, no gaps or spaces large enough for insect or rodent entrance are permitted. Weather-stripping and adding self closing devices to entrance doors and sealing gaps around piping will prevent vermin entrance from the outside. Unobstructed, clearly delineated, space (12 to 18 inches)between walls and stored items maintained.

All openable windows, such as restroom windows, shall be screened with not less than 14 mesh screening.