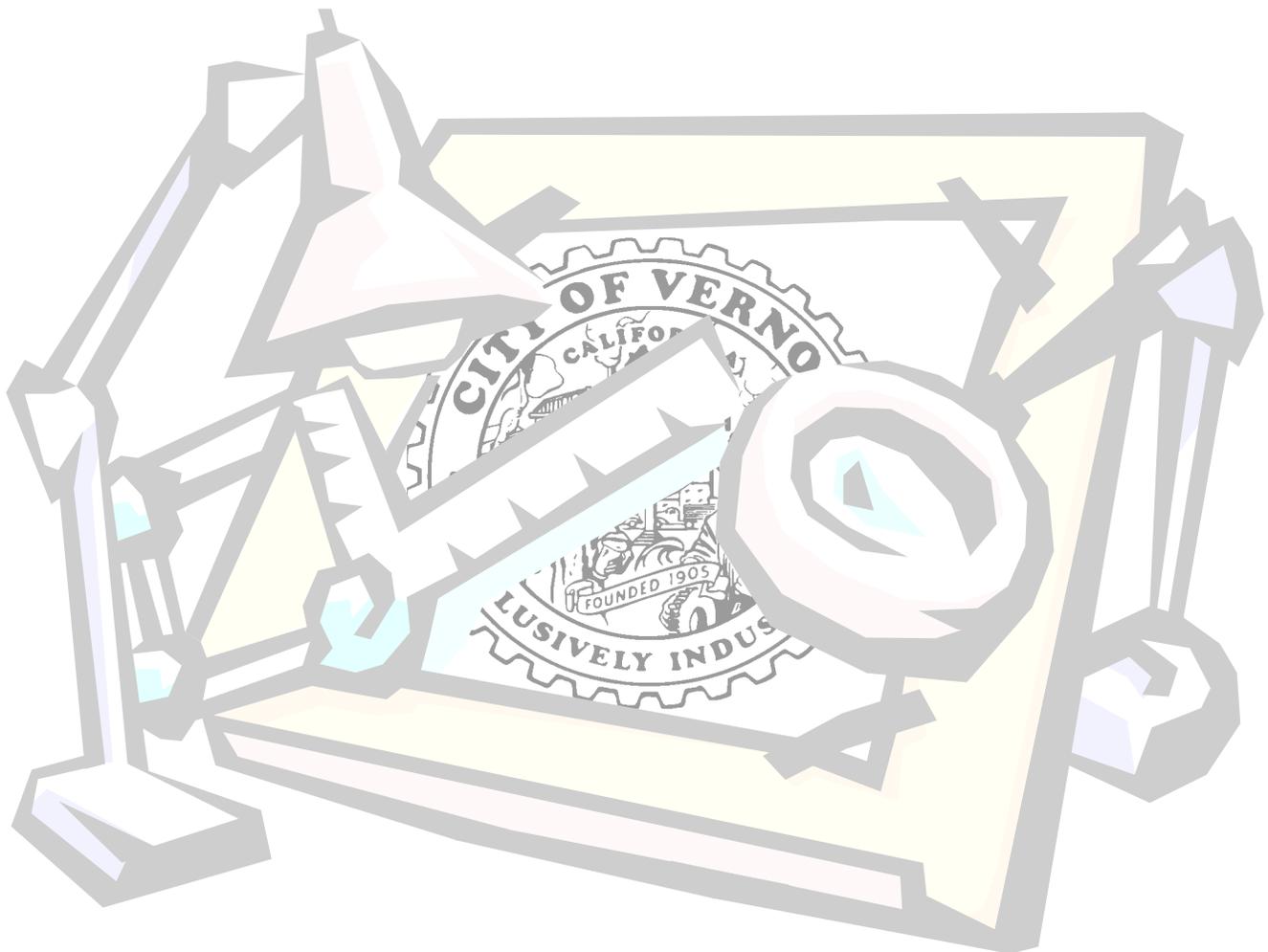
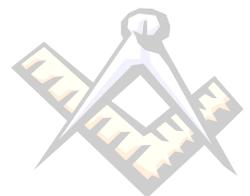


FOOD ESTABLISHMENT CONSTRUCTION GUIDE



CITY OF VERNON **ENVIRONMENTAL HEALTH DEPARTMENT**

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GUIDELINES FOR CONSTRUCTION OF WHOLESALE FOOD PROCESSING AND MANUFACTURING ESTABLISHMENTS

Before constructing, enlarging, altering, or converting any building, room, or area for use for food processing or storage, three (3) sets of complete plans must be submitted to the City of Vernon for review and approval by the Community Services and Environmental Health Departments. Depending on work to be done, separate Building, Electrical, and Plumbing/Mechanical Construction Permits may be required.

Plans shall be drawn to scale and include a complete floor plan with plumbing, electric and equipment details. In addition, a finish schedule for floors, walls and ceilings that indicate type of material, finish, color and type of cove base at the floor-wall juncture (see attached) shall be provided. Brand names with specific product numbers as well as samples of materials may be requested to ensure acceptability.

The following information is a guide only and is not intended to cover every situation that may arise. Some facilities may have additional requirements.

Electronic Submissions / Storage

Plans may be submitted electronically via e-mail to longyiu@ci.vernon.ca.us or in a CD. A written letter must be submitted to this office indicating the delivery of electronic plans. This letter must be delivered prior to review of electronic plans. Plans must be submitted in an Autocad format (DWF, DWG, .DXF) or in a .PDF format. A digital copy of the file, in a CD, showing all the corrections must be submitted to this office prior to final approval of the project.

I. CONSTRUCTION

A. FLOORS

The floor surfaces shall be of such construction and material so as to be smooth; impervious to water, grease, and acid; and easily cleanable in the following areas:

1. Food or beverage preparation, processing or storage rooms or areas;
2. Walk-in refrigerators;
3. Utensil or equipment washing rooms;
4. Refuse or garbage storage rooms;
5. Restrooms, dressing rooms, and locker rooms.

Acceptable floor surfaces may be smooth, sealed concrete; quarry tile; ceramic tile; approved epoxy coating or other comparable approved material. A minimum of a four-inch (4") cove base with a minimum three-eighths inch (3/8") radius shall be provided at the juncture of the wall and floor (except in food storage rooms for unopened containers). The base material may be quarry or ceramic tile, smooth concrete, approved epoxy coating or other comparable approved material. Metal coved bases are approved only for walk-in refrigerators. Top set vinyl or rubber bases are not acceptable. (See IV – Installation requirements).

B. WALLS

Food preparation or processing rooms, walk-in refrigerators, equipment washrooms, utensil/dishwashing rooms, toilet rooms, and dressing rooms shall have walls, which are

smooth, washable, and light in color. Acceptable materials include plaster, smooth concrete, five-eighths inch thick (5/8") wallboard, or fiberglass reinforced plastic panels (FRP). Panels shall be tightly sealed to the wall with finished joints and edges.

Concrete block walls are acceptable if the mortar joints are flush and the walls are plaster coated to a smooth finish. All pervious or porous surfaces shall be sealed with a high gloss enamel, epoxy, or other approved sealer.

C. CEILINGS

The ceilings in food processing, packaging, and utensil/equipment washing areas shall be smooth, nonabsorbent, and have a light-colored washable finish. An acoustical plaster or aluminum foil type ceiling is not acceptable. Lay-in ceiling tile (T-bar), with hold down clips, may be approved if it complies with the above requirements (submit a sample for pre-approval). Perforated ceiling tiles are acceptable if the perforations do not penetrate the entire depth of the tile and do not comprise 25 or more percent of the exposed panel surface. Drop ceiling systems are not allowed in food processing areas with frequent processing of baking flour or other flammable dust activities. FISSURE TEXTURE ON THE CEILING TILE IS NOT ACCEPTABLE.

D. LIGHTING:

Food preparation, utensil/equipment washing, toilet, and dressing rooms of food processing establishments require ten (10) foot candles of light measured at work or use surfaces. Food and utensil storage rooms require five (5) foot candles of light, and ten (10) foot-candles of light during clean up activities. Lighting fixtures/lights in food preparation and dishwashing areas shall be protected against breakage through the use of plastic shields, plastic sleeves with end caps, shatterproof bulbs and/or other approved devices.

E. VENTILATION:

Approved ventilation shall be provided throughout the establishment (including toilet rooms, and dressing rooms) to keep all areas reasonably free from excessive heat, steam, condensation, smoke, and vapor, and to provide reasonable comfort for all employees. Adequate mechanical exhaust ventilation hoods shall be installed above all heating or cooking equipment where heat, smoke, steam or vapors are released. Hoods shall extend at least six inches (6") horizontally beyond the equipment or conform to manufacturer's ventilation specifications. Equipment such as ranges, griddles, ovens, deep fat fryers, tortilla ovens and similar equipment shall have an exhaust system. Adequate make-up air throughout the establishment shall be provided. All equipment, construction, and installation shall be in accordance with manufacturer's specifications, local building and safety requirements and the Uniform Mechanical Code.

F. FLY, RODENT, AND OTHER PESTS EXCLUSIONS:

1. Windows: Any openable windows shall be provided with screening of no greater than fourteen (14) mesh. Openable windows in processing rooms are not approved.
2. Delivery Doors: All delivery doors leading to the outside from the processing room shall be provided with an effective fly exclusion device, e.g. air curtain. LARGE CARGO-TYPE DOORS SHALL NOT OPEN

DIRECTLY INTO A FOOD PROCESSING AREA FROM THE OUTSIDE.

3. Entrance Doors: Approved doors are required at all entrances into the processing room, including entrances between the warehouse (storeroom), and the processing area. All doors shall be self-closing and/or may be equipped with an effective fly exclusion device, e.g. air curtain.
4. Rodent Exclusion: Openings at exterior doors (base and sides) shall be no greater than one-quarter inch (1/4"). All openings in exterior walls, including openings around pipes and other conduits are to be tightly sealed. All exterior wall vents shall be properly screened with one-quarter inch (1/4") wire mesh screen.

II. FACILITIES

A. LAVATORIES (HAND WASHING):

Employee hand wash lavatories shall be provided within or adjacent to toilet rooms. Hot and cold running water under pressure shall be provided through a mixing valve or combination faucet. The minimum hot water temperature for hand wash sinks is 110° F. Automated hand washers with integral hand sanitizers or infrared controlled faucets capable of dispensing at minimum hot water temperature may be acceptable based on prior review and approval by the Health Department. Faucets with spring operated shut-off mechanisms are not permitted. Hand washing detergent/soap and sanitary towels shall be provided in permanently installed dispensing devices at all hand washing sinks. A conveniently located hand wash sink is required in all food preparation rooms and areas. The number of hand washing sinks required is dependant upon the number of employees, the size of the processing rooms, and accessibility.

B. TOILET FACILITIES:

Separate toilet facilities for each sex are required if there are five or more employees per shift. Urinals may be substituted for toilets in toilet rooms for males but shall not exceed one-third (1/3) of the required number of toilets. Toilet rooms shall be provided with an openable window or approved ventilation system. Toilet facilities shall not open directly into a food processing area. All doors leading to toilet facilities must be equipped with a self-closing device. Required number of toilets is dependant upon the number of employees. To calculate the number of employees, the calculation shall include managers and/or owners. For specific number and type of toilet facility fixtures, refer to Uniform Plumbing Code.

C. DRESSING ROOMS:

A dressing room with a minimum of eighteen (18) square feet of floor space, separate and apart from food preparation, food storage, and toilet rooms, is required where five or more employees of different sexes are on duty at any one time. If there are never more than five (5) employees on any shift, lockers or wardrobe closets are acceptable if provided and located in an area away from the food preparation and storage rooms. Employees shall include managers and/or owners.

D. WAREHOUSE/STORAGE FACILITIES:

Adequate warehousing or storage facilities shall be provided and be separated by a door(s) from food processing and preparation rooms with an effective fly-exclusion device. All food shall be properly stored a minimum of six inches (6") above the floor on approved shelving. Pallets may be used in lieu of shelving if equipment is available upon demand to move the pallets. If warehouse facilities are located in a separate building, the building shall be vermin proof and restroom facilities shall be provided in accordance with the above requirements. RAW MATERIALS STORED IN THE FOOD PREPARATION AREAS SHALL NOT EXCEED THE AMOUNT PROCESSED IN ONE DAY.

E. GARBAGE AND TRASH AREA:

An area of adequate size for the proper storage of garbage and trash shall be provided for trash containers. The walls and floor of this area shall be constructed so as to be smooth, impervious to moisture and grease, easily cleanable, and light in color.

F. GENERAL PURPOSE WATER:

All sinks are to be provided with hot and cold running water. Approved backflow protection shall be provided for all faucets, hose bibs, wash down stations and industrial water use sites.

G. JANITORIAL FACILITIES AND CLEANING CHEMICAL STORAGE ROOMS:

A room, area, or cabinet, separated from any food preparation or storage area, or utensil washing area, shall be provided for the storage of cleaning equipment and supplies, such as mops, buckets, brooms, and cleaners.

H. JANITORIAL FIXTURES:

All food facilities shall be equipped with at least one of the following, to be used for general cleaning purposes and for the disposal of mop bucket waste and other liquid wastes:

1. one-compartment, non-porous janitorial sink/mop sink (stainless steel, porcelain or fiberglass).
2. A slab, basin, or floor constructed of concrete or equivalent material, curbed and sloped to a drain and connected to approved sewerage, and provided with hot and cold running water (through a mixing valve).

III. EQUIPMENT

A. APPROVED TYPE:

All equipment and fixtures shall comply with National Sanitation Foundation (NSF) or equivalent standards, for material, construction, fabrication, and design. All equipment and equipment installation shall be subject to field evaluation. Specifications for equipment shall be available upon demand.

B. SINKS:

Where utensils are routinely washed by hand, there shall be provided at least a three (3)-compartment metal sink (NSF approved or equivalent) with dual integral metal drain boards sloped towards the sink compartments. The sink compartments and drain boards shall be large enough to accommodate the largest utensil to be washed. The sink must be provided with adequate hot and cold running water. The minimum hot water supply for this sink will be 120°F. Utensil wash sinks may be either directly or indirectly connected to waste lines.

Where food is washed or rinsed, a food preparation sink will be required. Produce, meat and/or food preparation/wash sinks shall be dedicated sinks. Preparation/wash sinks may not be used for hand washing or utensil/pot washing. Preparation/wash sinks shall be indirectly connected to waste lines.

C. REFRIGERATION:

Each food establishment where perishable food is prepared or stored must have adequate NSF approved or equivalent refrigeration. Condensate from walk-in refrigeration units must drain to properly located and approved floor sinks. Upright or reach-in refrigeration units may drain into an adequate self-contained evaporative unit. Domestic type refrigeration is not allowed.

All walk-in refrigeration or freezer units must have approved floors, walls, ceilings, and have approved base coving at wall and floor junctures. Adequate shelving must be available in the units to prevent food products from being stored on the floor. Floor drains or floor sinks are not permitted inside the walk-in units unless they are indirectly connected to the sewer system through a legal air gap.

D. ICE MACHINES:

All icemakers shall be located within the approved food establishment. Condensate and ice melt shall be drained to an approved floor sink by means of an indirect connection.

E. STORAGE EQUIPMENT:

Adequate storage shall be provided for all food establishments. Shelving shall be designed and constructed so as to be smooth, easily cleanable metal or wood, which has been finished and sealed. Shelves installed on a wall shall be sealed to the wall with silicone sealant or equivalent. The lowest shelf shall be at least six inches (6") above the floor, with a clear unobstructed area below. All shelves are to be set back at least two inches (2") from the drip line of the surface above. If shelves are supported by legs on the floor, the legs shall be round metal equipment legs. Establishments, which store food on pallets, must have pallet-moving equipment immediately available.

IV. INSTALLATION REQUIREMENTS:

A. EQUIPMENT:

All equipment shall be either easily moveable (e.g. on casters), light enough so as to be easily moved by one person (e.g. a light table), installed on raised six inch (6") rounded metal legs, or sealed to a minimum two inch (2") solid masonry island with minimum three eighths inch (3/8") radius coved base. If on an island, equipment shall overhang the base at least two inches (2"), but not more than the height of the island. Sealing to the floor is acceptable only on bulky equipment such as refrigerators and large bakery ovens. Gaps and spaces between pieces of equipment or equipment and walls, shall be sealed with silicone sealant (caulking is not an approved sealant). All equipment on counters, tables, and shelves that cannot be easily lifted shall be installed on approved four-inch (4") legs, or sealed to the table, shelves, etc.

B. FLOOR DRAINS:

Adequate floor drains should be provided in food preparation rooms, utensil or produce washing rooms, toilet rooms, garbage rooms, and in rooms subject to wash down type cleaning or wet conditions. Floor drains located directly outside walk-in refrigerators are acceptable if the floors in the walk-in units are sloped toward the drains.

C. CONDUITS:

All plumbing, electric, and gas conduit lines shall be concealed within the wall whenever possible. When it is not possible, all conduit runs should be at least one half inch (1/2") away from the walls or ceiling and at least six inches (6") off the floor. Conduit or pipelines shall not be installed across any aisle, traffic area, or door opening. Multiple runs or clusters of conduit or pipelines shall be furred in, encased in an approved runway, or other approved sealed enclosure.

D. FLOOR SINKS:

All steam tables, refrigerators (including walk-in boxes), steam kettles, ice machines, and similar items shall drain into floor sinks. Floor sinks shall be properly plumbed and installed with the sink top flush with the floor surface. All condensate and similar liquid waste shall be drained by means of indirectly connected waste lines into open floor sinks. Horizontal runs of drain lines shall be at least six inches (6") off the floor, sloped toward floor sinks at a rate of one quarter inch (1/4") per foot, and shall terminate at least one inch (1") above the overflow rim of the floor sink. Floor sinks shall be located so that they are readily accessible for inspection, cleaning, and repairs, and not located in a walkway. Waste lines shall not cross any aisle, traffic area, or door opening. Floor sinks are not permitted inside walk-in units unless they are indirectly connected to the sewer system through a legal air gap.

V. SPECIAL REQUIREMENTS

A. CONSTRUCTION INSPECTIONS:

All construction and equipment installations are subject to on-site inspections. During the course of construction, and particularly well before operating, operators or contractors are advised to call to have questions answered, or to request interim inspections. The contact phone number is: (323) 583-8811, Ext. 233 (Monday - Thursday).

B. FINAL INSPECTIONS:

Final inspection and approval is required prior to beginning operation. Community Services and Environmental Health staff require AT LEAST THREE (3) WORKING DAYS PRIOR NOTICE TO ARRANGE FOR A FINAL INSPECTION. IT IS A MISDEMEANOR VIOLATION OF THE VERNON CITY CODE TO BEGIN OPERATING WITHOUT A VALID PUBLIC HEALTH LICENSE.

C. **THE GUIDELINES CONTAINED IN THIS DOCUMENT ARE INTENDED TO PROVIDE A BASIS FOR THE CONSTRUCTION OF FOOD ESTABLISHMENTS THAT WILL FACILITATE OPERATION AND MAINTENANCE IN COMPLIANCE WITH LOCAL, STATE AND FEDERAL FOOD SAFETY LAWS AND REGULATIONS. ANY CONCEPTS THAT DEVIATE FROM THESE GUIDELINES MUST BE SUBMITTED FOR EVALUATION AND DECISION BY THIS DEPARTMENT FOR ACCEPTANCE OR DENIAL.**

CITY OF VERNON FOOD FACILITY CONSTRUCTION REQUIREMENTS

THE FOLLOWING ARE BASIC CONSTRUCTION REQUIREMENTS. PLEASE CONTACT THIS OFFICE FOR OTHER SPECIFIC REQUIREMENTS.

	FOOD WAREHOUSE ² Dry, Unrefrigerated and Packaged	FOOD WAREHOUSE ² Refrigerated and Packaged Perishable Food Areas	FOOD PROCESSING ^{1,2} Separate Room required	RESTAURANT OR PLANT CAFETERIAS ²	FOOD MARKET RETAIL STORE ² No food preparation
Floors / Coving	Smooth cleanable floors, Coving not required	Approved floor and coving required	Approved floor and coving required	Approved floor and coving required	Approved Floor required Coving not required
Walls	NA	Approved walls must be smooth durable and cleanable	Approved wall materials / finish required	Approved wall materials / finish required	Approved Walls required
Ceilings	NA	Approved ceiling	Approved Ceiling –Smooth and cleanable	Approved Ceiling – Smooth and cleanable	Approved ceiling required
Utensil Washing Sink (three compartment sink)	NA	NA	Required when utensils are used and washed by hand	Required	Required when utensils are used e.g. coffee urns, tongs and scoops)
Food Preparation Sink	Not- required	Not-required	Required when food is washed or rinsed	Required	NA
Utility / Mop sink	Required	Required	Required	Required	Required
Hand wash Sink	NA	NA	Required in each process room	Required in food preparation areas	NA
Janitorial Room	NA	NA	Required	Required	NA
Lighting	NA	NA	Required	Required	NA
Locker Rooms	Required with 5 or more employees	Required with 5 or more employees	Required with 5 or more employees	Required with 5 or more employees	Required with 5 employees or more
Fly Exclusion over doors	NA	NA	Required	Required	NA
Door self closing devices	NA	NA	Required	Required	NA

1. Food Processing includes packaging, packing and repacking, making, cooking, baking, mixing processing, bottling, canning, slaughtering, salvaging, preparing and handling open food products. Whole produce items can be considered packaged unless they are trimmed for any reason. Repacking produce items will require an approved hand wash sink near repacking areas.
2. Restrooms are required in all food facilities. All food facilities require approved floors, walls, ceilings, base covings, hand wash sinks and ventilation. Doors must be equipped with self-closing devices.