

Orange County Environmental Health

Phone: 919-245-2360

Fax: 919-644-3006

Food Service Establishments

Guidelines for Construction

WALLS

1. Fiberglass reinforced polyester [FRP] panels are not recommended behind heat radiating equipment typically located under vent hoods such as fryers, griddles, ranges, etc.. Stainless steel [20 or 22-gauge] is the recommended finish material under ventilation hoods.
2. Wood blocking intended for the installation of shelving units or other equipment **may not** be mounted exposed on the wall surface. Plywood [5/8"] should be installed on the framing studs to form part of the wall where shelving or other weight-bearing equipment is to be installed.
3. At locations where plumbing pipes or electrical conduit penetrate the wall surface, the opening around the pipe must be sealed using appropriate flashing material or escutcheons.
4. All plumbing pipes and electrical conduit should be placed in the wall cavity and stubbed out at point-of-use. Any piping which must be run exposed on the wall surface must be offset from the wall at least one inch. Piping must be mounted to walls or floors using split ring pipe clamps.
5. Painted drywall is not recommended behind utensil washing equipment, can wash and mop basin facilities, or behind prep sinks. Material such as FRP or ceramic tile is recommended at those locations.

6. Where paint is used as a finish material, water-based acrylic latex or epoxy are the approved paints. A primer coat should always be applied first.
7. It is highly recommended that corner guards be installed on the edges of partition walls, columns, and other areas subject to impact. Plastic, aluminum, and stainless steel are approved materials for this purpose.

FLOORS

1. Approved floor finish materials include quarry tile, ceramic tile, commercial grade 1/8” thick vinyl composition tile [VCT], ¼” thick seamless vinyl floor covering, and double-broadcast epoxy.
2. Grouting shall be non-absorbent and impregnated with epoxy, silicone or polyurethane.
3. Joints between floors and walls shall be coved with an approved radius using materials such as vinyl or rubber cove base or coved quarry tiles or other approved material.
4. Walk-in coolers and freezers must have an approved floor material such as aluminum tread plate, stainless steel, quarry tile, or VCT. Be advised that galvanized metal floors are **not** approved.
5. Floor drains, floor sinks, and other wastewater receptacles should be located so that they are easily accessible for cleaning and other maintenance.
6. Piping such as gas lines must be offset above finished floor level at least 6-inches.

CEILINGS

1. Finishes should be light-colored and where required must be smooth, non-absorbent and easily cleanable. Vinyl faced drop-in-ceiling tile [USG Corporation “Clean Room ClimaPlus” or equivalent] or drywall finished with epoxy paint are considered approved materials for installation in kitchen and food service areas.

Equipment Installation

1. Undercounter equipment installed on the floor shall be equipped with
 - Casters
 - 6-inch sanitary legs
 - sealed to the floor and properly spaced to facilitate cleaning

2. Equipment such as utensil and prep sinks may be placed flush with the wall surface and anchored to the wall using split-ring pipe clamps attached to the legs of the sink. It is recommended that the sink **not** be fastened to the wall using screws drilled through the splash back of the sink. Sinks may also be offset from the wall at least 3-inches using stainless steel brackets.
3. Handwash sinks must have horizontal spacing of at least 18-inches from any equipment such as work tables, food prep sinks, clean drainboards of utensil sinks, food storage equipment or any other equipment where cross-contamination is possible. If the 18-inch clearance is not obtainable, then splash barriers must be installed. The barrier shall extend to a vertical height of 14-inches above the flood rim of the sink. The barrier may be fabricated from stainless steel or lexan [polycarbonate]. The splash barrier should be mounted to the wall and not to the sink. Sinks may be purchased with integral splash barriers fabricated as part of the sink.
4. Equipment placed directly on the floor such as display cases, proofers, bakery ovens, large kettles, etc. shall be effectively sealed to the floor using silicone caulk, metal flashing, vinyl cove base, or other approved material.
5. Quick-disconnect couplings for utility connections [gas lines] are required on caster-mounted equipment. Utility connections on mobile equipment shall be designed to be disconnected without the use of tools or shall be of sufficient length to permit the equipment to be moved for cleaning.
6. Equipment placed on the floor must be supported by sanitary legs or casters. Equipment elevated on legs must have an unobstructed clearance of at least 6.0 inches beneath the unit. Angle iron, bricks, concrete blocks, wood blocks are **not approved** to support equipment.
7. Sneeze guards used to protect food on display or food products offered for customer self-service or food prep areas must conform to National Sanitation Foundation [NSF] standards for installation including height and angles.
8. The top of ventilation hoods must be sealed [enclosed] with metal flashing or other approved methods if space exists between the hood and the ceiling.
9. Water heaters must be installed above floor level at least 6-inches using an approved equipment stand fabricated from metal or other approved material.
10. The bottom shelf of free-standing stationary storage racks shall have at least 12-inches of unobstructed clearance below the shelf. Shelving units placed on casters shall have the lowest shelf placed at least 6-inches above the floor.
11. All exterior doors and all restroom doors must have a self-closing device [hydraulic arm] installed and the door must close completely and be tight-fitting to the door frame.

12. Syrup transport lines [Coke or Pepsi] must be wrapped in “synflex” to facilitate cleaning.
13. Drainage lines and condensate lines from refrigerators, ice storage bins, ice chests, beer or water tap drainers, etc. should be run using rigid PVC or copper piping.
14. Storage racks [dunnage racks or other approved units] must be provided for the storage of beer kegs within walk-in coolers. The placement of beer kegs directly on the floor is prohibited.
15. Mop basins shall be sized according to the needs of the establishment. The minimum size for most establishments is 3 ft. x 3 ft. with a 4-inch curb. Establishments that use floor mats may need a larger size basin.
16. Light bulbs in fixtures in food preparation, storage, and display areas shall be shatter-proof or shielded. Shatterproof bulbs which have a plastic coating may be purchased ready to be installed.
17. A minimum of 6-inches of space must be provided between items of equipment to allow access for cleaning. Additional space may be required for large equipment when 6-inches is not adequate to provide complete access.
18. Holes cut into cabinet bases for the installation of plumbing drain pipe or other utilities must have the opening sealed to prevent vermin harborage under the cabinet.
19. Hardware such as handles and pulls, louvers, hinges, etc. shall have a smooth finish, constructed to be easily cleanable, and have corrosion resistance. Hardware shall not have open seams, recesses, or unnecessary projections.
20. Pre-rinse countersunk sinks used in conjunction with dishmachines for disposal of liquids and solids from soiled utensils shall be fitted with readily removable strainer baskets.

For further information contact the Environmental Health Division at 919-245-2360.

The North Carolina Food Code may be accessed on the internet at www.deh.enr.state.nc.us/ehs/index.htm. Under rules, click on Sanitation of Food Service Establishments.