

Structural Guidelines
for
Food Service Establishments
and
Retail Food Stores



Jefferson County Department of Health
Food & Lodging Protection Division

Before construction or remodeling of a food service establishment or retail food store is begun, or before an existing structure is converted to use as a food service establishment or retail store, **properly prepared plans and specifications shall be submitted** to this Department for review and approval. The plans and specifications shall indicate the proposed layout, arrangement, mechanical plans, and construction materials (including finishes) of work areas, and the type and model of proposed fixed equipment and facilities.

Fees for plan review range from \$150- \$1000

The following guidelines should be helpful in preparing plans to be submitted for review.

FLOORS

- **Floors and floor coverings of all areas subject to flushing** (i.e., with a hose) or **spray cleaning methods**, or that receive discharges of water or other liquid waste from equipment, shall be constructed of quarry or ceramic tile or similar durable, smooth, easily cleanable, and nonabsorbent material. Abrasive finished tiles may not be used beneath fixed equipment. Quarry or ceramic sanitary cove base tiles shall be applied to the bases of the walls adjoining such floors or approved, durable, seamless flooring material shall be continued up along the bases of walls to create coved and sealed junctures between floors and walls. Such floors shall be graded to properly installed, trapped floor drains.
- **Commercial grades of linoleum or vinyl tile may be acceptable in small establishments** where floors are mopped and where large quantities of water are not discharged onto the floor. Vinyl composition cove base strips or similar smooth, durable, nonabsorbent, easily cleanable material shall be applied to the bases of walls adjoining such floors. The junctures between such floors and the adjoining coved base material may not present an open seam of more than 1/32 inch.
- **Walls**, including non-supporting partitions (e.g., bar dies, partial-height walls, etc.), **and ceilings** of food preparation and service areas, equipment, and utensil washing areas, and restrooms and their vestibules shall be smooth, durable, easily cleanable, and nonabsorbent. Studs, joists, and rafters may **not** be exposed in these areas. Concrete blocks used for interior wall construction in these locations shall be sealed with block filler and finished with epoxy or durable, gloss enamel paint. **Ceiling tiles**, if used in these areas, shall be non-perforated and non-fissured.
- Walls and ceilings in areas where unopened packages of foods and where single-services articles are stored shall be smooth, durable, and easily cleanable.

UTILITIES

- **Utility service lines and pipes** shall not be unnecessarily exposed on walls or ceilings. **Installation of exposed horizontal utility lines and pipes on the floor is prohibited.**
- **Exposed or unprotected sewer or water lines** shall not be installed above food storage, preparation, service, or display areas.

EQUIPMENT

- Equipment shall be constructed of materials that are durable, corrosion-resistant, nonabsorbent, smooth, and easily cleanable. Equipment shall be designed and fabricated to be free of unnecessary

ledges, projections, cracks , or crevices. Food equipment that is certified to NSF® standards or classified to those standards by another ANSI accredited certification program will be deemed to comply with requirements for food equipment.

- **Refrigeration equipment** shall be designed and fabricated for commercial food establishment use and shall be capable of maintaining potentially hazardous foods at a temperature of 41°F or less. Frozen foods shall be stored in equipment that will keep the food frozen.
- **Equipment shall be installed** to facilitate the cleaning of the equipment and adjacent areas. Table mounted equipment shall be portable, sealed to the table or counter, or elevated on the legs to provide at least a 4-inch clearance between the table or counter and equipment. The clearance space may be less if the space between the table top and the equipment can be easily accessed for cleaning. Floor mounted equipment shall be mounted on wheels or casters, sealed to the floor, or elevated on legs to provide at least a 6-inch clearance between the floor and equipment.

PLUMBING

- **Handwashing sinks** shall be conveniently located in food preparation areas, service areas where unpackaged foods and drinks are handled, utensil washing areas, and in or immediately adjacent to restrooms or their vestibules. Each handwashing sink shall be provided with hot and cold running water tempered by means of a mixing valve or combination faucet. Any self-closing, slow- closing or metering faucets used shall be designed to provide a constant flow of water for at least 15 seconds.
- **A stainless steel three-compartment sink** with compartments that have coved corners and that otherwise satisfies the requirements of NSF® standards shall be provided for washing and sanitizing equipment and utensils. The sink compartments shall be large enough to accommodate (i.e., immerse) the equipment and utensils. Drain boards fabricated as integral parts of the sink, oversink wire drying racks, and/or easily moveable dish tables of adequate size shall be provided to accommodate both soiled and sanitized equipment and utensils. In addition to the installation of a 3-compartment sink, a commercial warewashing machine may be installed if desired.
- **Grease traps or interceptors**, if provided or required by local plumbing codes as enforced by local plumbing officials, shall be located to be easily accessible for cleaning. If an on-site sewage disposal system (i.e., septic tank and field lines) is used, contact the Community Environmental Protection Division of the Jefferson County Department of Health for approval before beginning construction or installation.
- Devices shall be installed to protect against **backflow** and **backsiphonage** at all fixtures and equipment where an air gap at least twice the diameter of the water supply inlet is not provided between the water supply inlet and the fixture's flood level rim. Examples of backflow prevention devices required include a hose bib vacuum breaker attached to a faucet to which a hose may be attached, a backflow prevention device installed on the water supply line at an automatic dishwashing machine, and a backflow preventer which meets A.S.S.E. Standard 1022 installed on the water supply line between the pump and carbonator of a fountain drink dispensing machine.
- **Ice storage bins** shall be drained through an air gap between the end of the drain pipe and the flood rim of a properly trapped drain.

- At least one **floor-mounted mop service basin or curbed cleaning facility** with a properly trapped floor drain and a wall-mounted service faucet shall be provided and used for the cleaning of mops and for the disposal of mop water or similar liquid wastes. This facility shall be large enough for washing refuse containers if a separate facility for this purpose is not provided (see **GARBAGE AND REFUSE**). Facilities for hanging mops and brooms should also be provided.

RESTROOMS

- Restrooms and toilet facilities shall be installed according to law and shall be the number required by law as enforced by local plumbing and/or building officials. Restrooms shall be completely enclosed, have tight fitting, self-closing, solid doors, and be mechanically vented to the outside (e.g., with an exhaust fan).

GARBAGE AND REFUSE

- Garbage and refuse containers (e.g., garbage cans, waste grease containers), dumpsters, and compactors located outside shall be stored on or above a smooth surface of nonabsorbent material such as concrete. Enclosures or storage rooms, if used, shall be constructed of easily cleanable, nonabsorbent, washable materials.
- **Suitable cleaning implements and supplies such as high pressure pumps, hot water, steam, and detergent** shall be provided and used for washing garbage and refuse containers, dumpsters, and compactors at a frequency to prevent insect and rodent attraction. **Liquid waste** from compacting or cleaning operations **shall be disposed of as sewage**. For establishments using garbage cans and no dumpster or grease container, this requirement may be satisfied by providing a floor-mounted fixture with a properly installed, trapped floor drain and a hot water supply (see **PLUMBING**).

Where a dumpster, compactor, and/or waste grease container is used, a curbed, reinforced concrete pad graded to a properly installed, trapped floor drain connected to the sanitary sewer or on-site sewage disposal system shall be provided. The installation of such refuse container cleaning facilities shall be approved by the local building officials and either the Jefferson County Environmental Services Department (for public sewer connections) or the Community Environmental Protection Division of the Jefferson County Department of Health (for on-site sewage disposal systems).

LIGHTING, VENTILATION, ETC.

- **Permanently fixed artificial light sources** shall be installed to provide at least **50 foot-candles** of light on all food preparation surfaces and at equipment and utensil washing area and including the area under the hood. **Shielding or shatter resistant, Teflon® or silicone coated bulbs** to protect against broken glass falling onto food shall be provided for all artificial lighting fixtures located over, by, or within unpackaged food storage, preparation, service, and display facilities, and facilities where utensils and equipment are cleaned and stored.
- **Commercial kitchen ventilation hoods** shall be installed over grills, fryers, and other cooking equipment from which grease, smoke, or steam may be released and above "high-temp" warewashing machines. Such hoods and devices shall be designed to prevent grease or condensation from collecting on walls and ceilings and from dripping onto food contact surfaces. Fire extinguishing systems, ventilation hood systems, and other ventilation systems shall be *installed* according to law as enforced by local fire

and/or building inspection officials.

- **Laundry facilities**, if used, shall be located in a separate room except that such operations may be conducted in storage rooms containing only packaged food or packaged single service articles. Where a washer is provided, an electric or gas dryer vented to the outside should also be provided and used.
- Enough **lockers or other suitable facilities** shall be provided for the orderly storage of employee clothing and other belongings.
- **Openings to the outside** shall be effectively protected against rodents. Outside openings (e.g. exterior doors, drive through windows, etc.) shall be protected against the entrance of insects by tight fitting, self-closing doors, closed windows, screening, controlled air currents, or other means. Screen doors shall be self-closing, and screens for windows, doors and other openings to the outside shall be tight fitting and free of breaks.
- The **walking and driving surfaces** of all exterior areas shall be surfaced with concrete or asphalt, or with gravel or similar material effectively treated to facilitate maintenance and minimize dust. These surfaces shall be graded to prevent pooling of water.