Plan Review Application Guidance

The Tennessee Department Health Rules and Regulations governing Food Service Establishments require that plans drawn to scale for food service establishments be submitted for review and approval to the local Health Department prior to construction/renovation/modification of the facility.

The purpose of quality plan review is to ensure food establishments are safe, sanitary, and efficient.

**MENU REVIEW AND FOOD FLOW**

Providing an **equipment list and location of equipment**, as well as specifications for finish and plumbing schedules will highlight potential problems on paper while allowing for modifications to be made before costly purchases, installations, and construction is performed.

The **menu** dictates the space and equipment requirements for the safe preparation and service of various food items. The menu will determine if the proposed delivery areas, storage areas, preparation and handling areas, and thawing, cooking and reheating areas are available and adequate to handle the types and volumes of foods being prepared and served.

The menu will also indicate whether a [HACCP plan](#) and/or a [variance](#) will need to be in place for specific menu items to be available.

**HACCP and Variance**

A Hazard Analysis Critical Control Point “HACCP” plan consists of a written document outlining the seven-step process an establishment operator can use to address hazards introduced or controlled by a food preparation or process.

A “variance” means a written document issued by the department that authorizes a modification or waiver of one or more requirements of the Tennessee Food Service rules 1200-23-01, if a health hazard or nuisance will not result from the modification or waiver. When submitting for a variance, an operator must provide a copy of their HACCP plan.

Some types of food or food processing will require a variance and an approved HACCP plan; while some food, food processes, and circumstances will require only a HACCP plan, but not a variance.

Please visit the State website, at the link below, for additional information regarding the need for a HACCP plan and a variance, and how to create and apply for both.

[https://www.tn.gov/content/dam/tn/health/healthprofboards/GUIDANCE_FOR_REQUESTING_A_VARIANCE.pdf](https://www.tn.gov/content/dam/tn/health/healthprofboards/GUIDANCE_FOR_REQUESTING_A_VARIANCE.pdf)
**REFRIGERATION**

Refrigerators and freezers are required to maintain TCS Food at or below 41°F and 0°F (frozen). All refrigeration units must have numerically thermometers, accurate to ±3°F.

Refrigeration and freezer storage involves five major areas:
1. Storage for short-term holding or perishable and TCS food.
2. Long-term storage.
3. Storage space for quick chilling of foods.
4. Space assembling and processing of TCS food.
5. Display storage for customer service.

To plan refrigeration storage, the following areas should be considered: menu, number of meals per day, number of deliveries per week, and adequate ventilation in the areas where the refrigeration systems will be located. Shelving space within the refrigeration and freezer units should be designed to prevent the cross-contamination of foods. Thermometers must be conspicuously located in all units.

**Walk-in Cooler/Freezer units** should meet an ANSI accredited certification or equivalent, or deemed acceptable by the Regulatory Authority. Approved flooring and integral cove bases need to be provided. Quarry tile, ceramic, and galvanized flooring are not recommended flooring materials for walk-in units. All gaps, cracks, penetrations, seams, and plug holes shall be sealed smooth and flush with the surface material.

Walk-in units are beneficial when there is a need for long-term storage of perishable and TCS food or when cooling space is needed for prepared and cooked foods.

Each walk-in unit shall be equipped with lighting that provides 10 foot candles of light throughout the unit when it is full of product. Lights must be properly shielded or shatter resistant.

**STORAGE**

Dry storage space needed depends on the menu, number of meals served between deliveries, frequency of deliveries, and the amount and type of single-service articles to be stored.

Dry storage is not to be under exposed sewer lines, open stairwells, or other sources of contamination. Stationary shelving needs to be a minimum of 6” off the floor.

Designate an area for poisonous or toxic material storage that is aware from food and clean utensils.
WAREWASHING
The minimum requirement for ware washing in a food establishment is a three-compartment sink. A mechanical ware washing machine may be installed in place of, or in addition to the three-compartment sink.

A. Manual Ware Washing requirements:
- The sink compartments of the three-compartment sink, shall be large enough to completely immerse the largest pot, pan or piece of equipment to be used in the establishment that will not be cleaned in place.
- Each compartment shall be supplied with adequate hot and cold potable running water, temperature of the wash solution shall be maintained at not less than 110 °F, or the temperature specified on the cleaning agent manufacturer’s label instructions.
- Drain boards, utensils racks or tables large enough to accommodate clean and soiled utensils shall be provided. The drain boards shall be self-draining.
- Ware washing machines shall be installed in accordance with the manufacturer’s recommendations. If used, a hot water booster for ware washing machines must be identified during plan review.
- Adequate facilities shall be provided to air dry washed equipment and utensils. Drain boards, utensil racks or tables must be large enough to allow proper and sufficient air drying of equipment and utensils.

B. Mechanical Ware Washing requirements:
Ware washing machines shall be installed in accordance with the manufacturer’s recommendations. Adequate facilities shall be provided to air dry washed equipment and utensils.

All cleaned and sanitized utensils and equipment must be stores at least 6” above the floor.

WATER SUPPLY
The concerns relative to water supply in a food establishment are to ensure the facility is supplied with a safe and adequate water supply and verify that water will remain safe while in the facility.

The availability of an approved public water supply will be verified during the plan review process. Any use of a non-public water source (well water) musts comply with local, state, and/or federal laws, and construction and testing standards.

The hot water supply shall be adequate to provide enough hot water to all faucets of the establishment during peak hot water demand, or hours of operation. Hot water for hand washing must be at least 100°F. Hot water for mechanical ware washing must be able to reach 160 °F - 180°F for sanitizing.

Tank less water heaters shall be installed and used in accordance with the manufacturer’s recommendations.
**BACKFLOW PROTECTION**

Plumbing shall be sized and installed according to applicable codes in order to avoid cross connections between the potable water supply and any non-potable systems.

A direct connection may not exist between the sewerage system and any drains originating from equipment in which food, equipment, or utensils are placed.

When a ware washing machine is located within 5 feet of a trapped floor drain, the dishwasher waste outlet may be connected directly on the inlet side of a properly vented floor drain trap.

An indirect connection may be one of two types, an air gap or an air break.

1. **Air gap** = the unobstructed, vertical air space that separates a potable system from a non-potable system.
2. **Air break** = a waste line from a fixture that discharges used water or liquid waste to a drain where the waste line terminates below flood level.

![Air Gap](image1) ![Air Break](image2)

**SEWAGE DISPOSAL**

All sewage, including liquid waste, shall be disposed into a public sewage system, or an individual sewage disposal system constructed and operated according to law. Where individual sewage disposal systems are utilized, the location shall be noted on the plans and certification of compliance with state and local regulations shall be provided.

For information regarding the need for a grease interceptors, contact your local utility district.

**HAND SINKS**

Adequate and conveniently located hand sinks are important to ensure employees are washing their hands, during food preparation, food dispensing, and ware washing.

Splash shields may be needed in order to prevent contamination of food contact-surfaces, clean equipment or utensils, and food product.

The location of soap and paper towel dispensers at hand sinks should be installed in such a way that does not contaminate food, food contact surfaces, utensils or equipment.
HAND SINKS continued
Handwashing sinks shall be easily accessible and not be used for purposes other than handwashing.

Splash shields may be needed if splash from use of a handwashing sink may contaminate food, food-contact surfaces, clean equipment, or utensils.

RESTROOMS
Properly functioning toilet facilities must always be accessible to employees.

OUTER OPENINGS
All openings to the outside shall be effectively protected against the entrance of insects and rodents.

Insect control devices, used to electrocute or stun flying insects, shall be designed to retain the insect within the device. These devices must not be located above food preparation areas and installed to prevent the contamination of exposed food, clean equipment, utensils, and linens.

FINISHES
All finishes in a food service establishment kitchen must be smooth and easily cleanable. Any exposed concrete, drywall or wood, must be sealed.

Examples of approved floor materials are as follows:
1. Quarry tile, ceramic tile
2. Sealed curbed concrete
3. Seamless poured epoxy (minimum 3/16 inch thick)
4. Commercial-grade sheet vinyl (no felt backing)
5. Commercial-grade vinyl composition tile (VCT)

In food preparation, storage, handling, and packaging areas, a coved flooring material (baseboard) is required at the base of the wall (wall/floor junctures). Coved flooring material should extend integrally up the walls.

Examples of approved wall materials are as follows:
1. Stainless steel
2. Ceramic tile
3. Aluminum
4. Fiber-glassed reinforced panels (FRP)
5. Sealed concrete blocks or bricks
6. Epoxy or glazed drywall

Examples of ceiling materials are as follows:
1. Easily cleanable, non-absorbent ceiling tiles
2. Painted drywall
PEST CONTROL
All outer openings must have an effectively barrier in place to protect against the entrance of insects and rodents.

Some examples of effective barriers include:
1. Solid, tight fitting, self-closing doors
2. Fixed or self-closing screens of #16 mesh or finer
3. Effective air curtains.

Insect control devices shall be designed to retain the insect within the device, and must not be located above food preparation, exposed food, clean equipment, clean utensils, and clean linens.

MECHANICAL VENTILATION
Please consult the Fire Marshall for requirements related to ventilation systems.

LIGHTING
All lighting over exposed food, clean equipment, utensils, and linens, or unwrapped single-service and single-use articles, must be shatterproof and/or shielded with a plastic shield with end caps. Heat lamps shall be protected against breakage as well.