

## Food Service Design Requirements and Procedures

### PURPOSE

This document serves as a brief overview of the plan review process and minimum design requirements – including many of those requirements that are frequently overlooked.

Proper kitchen design of a food service establishment is essential for proper work flow, cleanliness, and prevention of common food violations which may lead to food borne illness outbreaks.

For further information in regards to design requirements, please refer to the following website: <http://dph.georgia.gov/food-service-design-installation-and-construction-manual> or contact Clarke County Environmental Health Services at 706-583-2658 to speak with an Environmental Health Specialist or plan reviewer.

### PLAN REVIEW

**Clarke County Environmental Health Services (CCEH) must approve plans before new construction or remodeling may begin.** Our department is the regulatory authority responsible for determining if the code and standards for design and materials - in regards to opening and operating a food service establishment – are met. Starting construction prior to approval may result in costly corrections and delayed openings.

Plans are reviewed in the order in which they are received. Plans must be submitted at least 10 business days prior to proposed construction, but please note that **plans may take up to 30 days to review.** Incomplete plans may take longer to review so please carefully review the plan submittal requirements in this document.

### PLAN REVIEW PROCESS

Once your plans are up for review you will be contacted by a plan reviewer either by phone or by email. A summary of the plan review process is as follows:

1. Your proposed menu will be discussed in detail. Be prepared to have yourself or a representative discuss every menu item from receipt to final service. This is important because the proposed menu determines the requirements and size of the kitchen. An on-site visit to the establishment for remodels will most likely be scheduled as well.
2. Your submitted plans will be reviewed to determine if the size, equipment, and finishes match your proposed menu and meet the current construction requirements in the food code.
3. Plans will be returned for re-submittal if incomplete or if additional requirements are determined. A re-submittal of plans fee may be charged – especially for incomplete plans or excessive re-submittals.

4. A letter of approval will be issued for all final approved plans and copied to the local county planning department. Once you have received all approvals required (from all other agencies), you may begin construction or remodeling.

## **PLAN SUBMITTAL REQUIREMENTS**

In order to complete a timely review of your project, all the information listed below should be included with the plan. Refer to the plans submittal guidelines in your application packet.

- A completed plan review application with the required fees payable to Clarke County Environmental Health Services
- One complete set of plans drawn to scale (minimum  $\frac{1}{4}$  inch to 1 foot), detailing the proposed layout. Show all equipment, counter top equipment, ventilation hoods, sinks, shelving, plumbing, equipment elevations, entrances and exits, restrooms, dining area etc.
- Finish schedule for floors, base cove, wall and ceilings
- A proposed menu
- A description of the project
- Equipment locations on the layout
- Equipment specifications sheets for all equipment.  
(All food service equipment shall be of commercial design and have one of the following certifications: National Sanitation Foundation International (NSF) or Intertek Testing and Certification (ETL Sanitation) certified)
- Water heater and dish washer specifications (if applicable). Note the additional requirements for tankless water heaters in the water heater section of this document.
- One complete set of elevations and drawings for all custom equipment
- Counters and cabinetry shop drawings indication cabinet construction and countertop finish.
- A copy of the zoning approval or building permit from the local unit of government
- Completed verification of residency form

\*Please note that other information may be requested during the plan review process.

## Pre-Opening Inspections

1. Plan reviewers will make on-site inspections of the facility during and after the construction/remodel process. Two pre-opening inspections are required for all issuance of the final food service permit:
  - a. Finished construction inspection – floors, walls, ceilings – **before equipment is placed.**
  - b. Opening inspection – establishment must be clean, stocked (without perishable food) and operational.
2. FIVE business days advance notice is required to schedule a pre-opening inspection.

## DESIGN REQUIREMENTS – Subject to change depending on menu

### Equipment:

1. Commercial design and construction: NSF or ETL Sanitation certified.
2. Ventilation is required over all food heat processing equipment. Exceptions may include single Panini presses, waffle irons, convection ovens for baked goods only. Check with local building/fire code for specific requirements.
3. Shelving is to be commercial wire or stainless steel. No wood or plastic shelving is allowed with the exception of some cabinetry in bar and front service areas.

### Temperature Control -

1. Sufficient cooler/freezer space for long term storage. Walk-in (WI) coolers and freezers usually meet this requirement. Without a WI, 3 or 4 doors of full sized refrigerations is usually required for long term storage (not counting prep coolers or dedicated coolers for cooling foods). No glass door coolers are allowed in the kitchen area.
2. Foods that need assembly of ingredients per customer order (salads, burgers, pizzas, sandwiches) OR ingredients that are frequently used in made to order cooking (wok or short-order grill) require an open top make/prep table. Ice is not approved for long term storage of these items.
3. Appropriately sized make tables, steam tables and other holding equipment are required. The number of available wells and slots will be evaluated to determine if the number matches your menu. Hot holding cannot be on a stove top or in an oven. Holding cabinets, additional steam tables, heat lamps may be required.
4. For working portions of food, ‘prep’ coolers and freezers near cooking equipment and prep areas are required as to not continuously access long term storage. For example, no walking to the WI freezer continually for frozen fries. A prep freezer would be required next to the fryers. Server coolers for desserts and condiments may be required as well.
5. Self-service buffet and cafeteria type service require back up hot holding equipment (awaiting placement on the buffet).

6. Sufficient space and equipment for the cooling of items cooled from hot or prepared in advance of service is required (example: soups, cheese sauce, in-house prepared chicken salad):
  - a. Bulk ice, possible additional preparation sink for ice baths, additional counter space.
  - b. Speed racks and trays are required for cooling in a WI cooler. A dedicated cooler for cooling affixed with additional racks is required if no WI cooler is available.
7. Dedicated breading table for breading or battering items (non-ice) needed if applicable.

***Hand washing –***

1. A minimum of one hand washing sink is required for use by food employees.
2. Required hand sink locations are: server area(s) after bussing tables, dish wash area, prep or grill area, main prep area in kitchen, bar area. Hand wash stations need to be conveniently located to all above stated areas.

***Prevention of cross-contamination –***

1. Dedicated fruit and vegetable washing sink or food preparation sink (if applicable). Drain board may be required dependent on processes.
2. Dedicated sink for the preparation of raw meats (if applicable).
3. Splash guards required if sinks are set less than 3 feet from another area due to splashing.
4. Dedicated cooler or grill drawers may be required for raw meats awaiting preparation or cooking (if applicable).
5. Adequate prep area space allowed (stainless steel prep tables for food preparation).
6. Dedicated table/area for the preparation of raw meats if not batch preparing (if applicable).
7. Dedicated mop sink/basin required with running hot and cold water. No white plastic basins allowed.
8. Adequate food shields or sneeze guards for self-service buffets. Food shields are to be NSF certified. Partitions for separation from customers required if customers will be next to kitchen areas (specifications attached at end of document)

***Storage:***

1. Dedicated floor space to accommodate the following storage should equal 25 percent of food preparation area, or a minimum of 100 square feet:
  - a. Drying racks for clean kitchenware and utensils.
  - b. Dirty dish staging area.
  - c. Clean kitchenware and utensils storage.
  - d. Mop/broom/chemical storage.
  - e. Dry goods storage, single service items, paper goods, alcohol and liquor storage.
  - f. Employee belongings area.

2. The 25 percent is for dedicated FLOOR storage space. Wall shelving or cabinet storage does not count towards this minimum.

***Ware washing:***

1. Minimum 3-compartment sink with drain boards on both sides. This is required whether or not a dishwasher is proposed.
2. A 4 –compartment sink or additional pre-rinse sink is required if tableware will be utilized. A dishwasher with a pre-rinse sink would meet this requirement.
3. Coffee shops, bars, smoothie bars, server areas are required to have a dump/rinse sink in addition to a 3-compartment sink. Upgrading to a 4-compartment sink *may* meet this requirement as the first compartment may be used as a rinse sink.

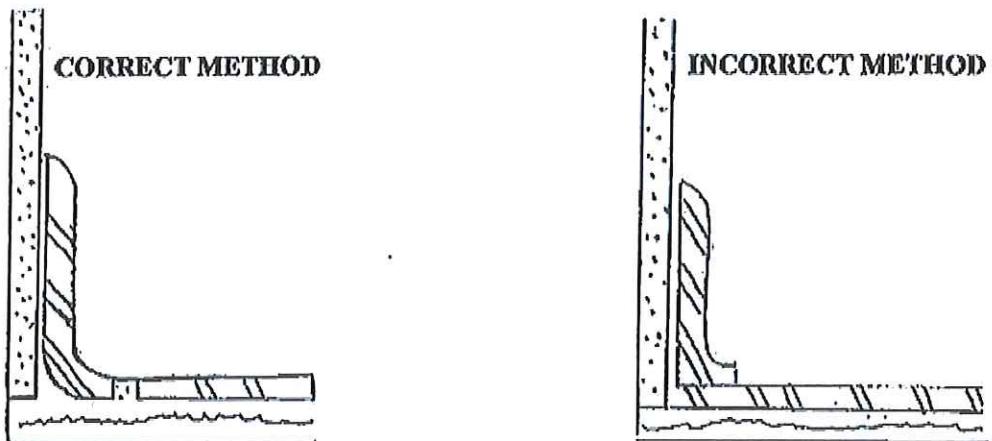
***Physical facilities:***

***Floors, walls and ceilings (see finish chart at end of document) -***

1. Floors, walls and ceilings are to be smooth and easily cleanable.
2. Flooring – Approved finishes are quarry, ceramic tile\*, epoxy resin flooring system\* (poured and troweled and NOT painted or rolled on), rubber commercial sheet linoleum\*  
*\* = requires prior approval from CCEH. Usage recommendation provided by the manufacturer must support use in a commercial kitchen. Ceramic or porcelain tile may be considered in lieu of quarry tile if it meets tensile strength requirements.*
3. Commercial VCT (Vinyl Coated Tile) flooring is not approved for any areas other than dry storage, dining, office.
4. Cove base is required in all areas – including restrooms – and must be the same material as the flooring. Rubber base cove molding is not approved for any flooring other than VCT. No rubber base cove is to be installed over tile.

5. Tile cove base must be installed correctly and not top set over the floor tile:

**Appendix #2 - Coved Base**



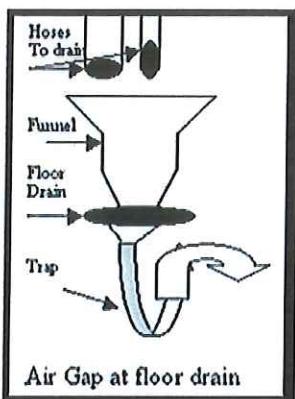
\* Improper installation will require the tile cove and possibly areas of the floor tile to be re-installed

6. Walls and ceilings must be smooth and easily-cleanable in all kitchen areas except dry storage. Walls in all kitchen areas require FRP (Fiberglass Reinforced Panel) or other washable panels. Washable painted sheet rock is allowed in dry storage areas only.
7. Wood doors and frames, grooved panel, or any wood surface is not an approved wall surface. Washable ceilings are required everywhere but the office, dining area and dry storage.
8. Ceilings greater than 15 feet in height over bars or service areas only are allowed without a washable drop ceiling.

***Other -***

1. Compartmentalized kitchen designs (such as converted office space or add-on's to a previous small kitchen) may be required to have significant structural changes as to provide a large more centralized kitchen space.
2. All equipment requiring drainage must be connected to the establishment's plumbing system. No pumping of waste is allowed to the nearest floor drain.
3. Ice bins must be self-draining. Ice bins are to have cooling tubes and components separated by a divider plate creating a faux bottom BY DESIGN in order to keep drinking ice separate from the cooling components.
4. Areas used for dry storage must be finished – no exposed wood frames, conduit, rafters etc. Example: no storage in an unfinished basement. Washable floors with appropriate cove molding are required in all storage areas to include dry storage and chemical storage.
5. No sinks allowed to be top set into cabinets in main kitchen areas. This may be allowed in front service areas only.

6. Indirect drainage connections are required for food and utensil equipment and sinks (air gap or air break – must ‘see’ air).



7. Custom cabinetry is to be constructed to NSF Standard #35 with plastic laminate on all exposed surfaces. Wood cabinetry is not permitted. Cabinetry must be installed elevated 6 inches off floor or with cove base installed at the floor to wall juncture. Show all cabinetry on plans.
8. Wood used for bar tops should be composed of a hard-wood and finished with polyuerthane to be smooth and easily cleanable.
9. Decorative wood may be permitted above back bar countertop if approved by the Regulatory Authority. No other wood is permitted.
10. Sufficient shielded lighting (50 foot candles) is required in all food preparation and ware washing areas. This is about as bright as a typical office space. Our department has a light meter that can be used for testing.

#### ***Water Heaters-***

1. Proposed water heaters will be calculated based upon the number of hot water utilizing fixtures in the establishment. Insufficient water heaters may be upgraded or additional units may be added.
2. On-demand units (tankless) may not be used with a dishwasher without the following:
  - a. A separate intermediate storage tank used to supply the dishwasher alone
  - b. Dishwasher must be approved for use with an on-demand unit by the manufacturer and a gallons per minute (gpm) flow rate provided.
3. Storage tank and tankless water heaters may not be installed together to supply the same hot water line without engineer certification.
4. If tankless water heaters are proposed, several units may need to be installed.

5. Water heaters are not to be installed directly above a mop basin or sink without maintaining at least 8 feet of clearance. This is to allow mops to dry.

***Waste disposal -***

1. Proposed establishments on a well or septic system will need permitting, approval and possibly upgrades from CCEH.
2. Grease trap requirements for city sewer area are issued by the local water/sewer authority.
3. Waste from sinks and equipment must drain to a floor drain using gravity. No pumping of waste is allowed.

***\*\* Kitchen size determination***

If the proposed space cannot meet the above requirements due to space, you may be required to expand the square footage or propose a different location. Dining/seating, office or common space may be reduced as well to accommodate greater kitchen size.