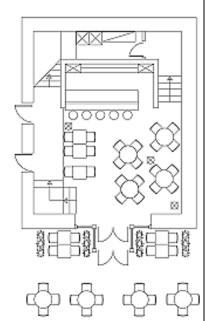
CONSTRUCTION, DESIGN AND FACILITIES

Food premises that are easy to clean and have a good flow for both people and food products are less likely to have food safety issues. Before building or renovating any part of a food premises, plans of the layout and design should be discussed with your public health inspector. Having plans reviewed before work starts can save money and time by keeping you from having to change things after they're built.

FACILITY LAYOUT

Good layout of a commercial kitchen gives consideration to:

- Allowing people and food to easily move from place to place to avoid crowding and cross-contamination
- Making sure there is plenty of storage space for cold storage and dry storage, staff clothing, garbage and cleaning supplies
- Having separate food preparation areas for raw foods and ready to-eat foods, if possible, to reduce risks of crosscontamination
- Making access to handwashing sinks easy and convenient
- Having separate sinks for handwashing and dishwashing
- Separating the dishwashing area from food preparation areas



FACILITY DESIGN

Food safety depends not only on proper layout, but also on how your premises is designed and maintained. Make sure your building has proper:

- Lighting
- Ventilation
- Storage areas food supplies and non-food supplies
- Maintenance of floors, walls and ceilings
- Food contact surfaces
- Water supply
- Washrooms and change rooms
- Handwash sink(s)
- Waste disposal solid and liquid
- Dishwashing equipment



Lighting

Food premises must be equipped with lighting that is adequate in intensity to enable the sanitary operation and maintenance of the food handling areas.

Lighting fixtures should be shielded with shatterproof coverings in areas where there is exposed food, equipment, utensils, linens or unwrapped single-use articles. Shielded lighting is not necessary in areas used only for storing food in unopened packages.

Ventilation

Food premises must provide natural or mechanical ventilation to food handling areas to remove odours, fumes, steam, vapours, smoke or excessive heat.

Provincial fire codes and building codes should be referred to with respect to choosing the necessary size and type of mechanical ventilation as well as determining the frequency of professional cleaning required.



Storage Areas - Food and Non-Food

Stored items must be protected from contamination such as water leakage, pest infestation or any other unsanitary condition. Foods are to be stored in an area separate from all other non-food related items.

The following criteria should be applied to all storage areas:

- All items must be stored a minimum of 15 cm (6 in.) off the floor on racks, shelves or pallets.
- Shelving should be at least 5 cm (2 in.) from the walls to allow for access, and permit easier visual inspection
- Storage areas should be located in a dry, pest-free location
- Shelving must be constructed of materials which are durable, non-absorbent and easily cleaned. Unsealed wood is not an acceptable finish for shelves, ceilings and walls.
- A cleanable area that minimizes the deterioration of stored materials and protects food from contamination during storage

Storage facilities may not be located:

- in laundry areas or in areas used for the storage of soiled linens
- in locker rooms
- in washrooms
- in garbage rooms
- in mechanical rooms
- under unshielded sewer lines
- in the same room/vicinity as chemicals/pesticides.

Chemicals such as cleaners, sanitizers, detergents, pesticides, etc. should be stored in an area that prevents the potential for cross-contamination with food, food contact surfaces, and non-food materials such as utensils and linens.

Personal belongings of employees must be stored separately from food storage and food preparation areas.

Recyclables such as bottles and cans need to be stored in a sanitary manner that prevents the harborage of pests.

Items not used for the operation of the food premises should be stored in a separate, designated area that prevents the potential for cross-contamination with food, food ingredients, food contact surfaces, and non-food materials such as utensils, linens, single-service and single-use utensils and packaging materials.



Floors, Walls and Ceilings

Microorganisms can be transferred from floors or walls to food contact surfaces by other objects.

- Floors must be tight, smooth, and non-absorbent
- Walls and ceilings (including drop-ceiling tiles) must be easy to clean
- Floors, walls and ceilings must be kept clean. Repair any damaged areas as they can't be properly cleaned and sanitized
- Water damaged or broken ceiling tiles need to be replaced
- Floor drains, dishwashers, and sinks used for washing pots and pans must pass through grease interceptors, or grease traps. Grease interceptors prevent fats, oils and grease (FOG) from entering the sanitary sewer system and creating blockages. Blocked sewers can result in sewage backups and increased vermin presence. This increased contact with disease-causing organisms could be reasonable cause for food premises closures. Proper maintenance of a grease interceptor is essential. A contract with a liquid waste disposal service for frequent, routine pump-outs should be arranged

Food Contact Surfaces and Equipment

All food-contact surfaces such as counters, cutting boards, tables and grills must be durable, smooth, light-coloured, non-absorbent and easy-to-clean.

Having many small cutting boards on-hand is better than having a few large ones. Small boards can be quickly changed when dirty without slowing down food preparation and can be easily washed in a dishwasher.

It's a good idea to designate cutting boards for specific uses to avoid crosscontamination. For example, red boards for raw meat, green boards for vegetables, orange boards for bread, etc.



Plastic cutting boards are durable and easy to clean and sanitize.

Hardwood can be used as long as it remains free of deep grooves/cracks that can trap pieces of food and make proper cleaning and sanitizing difficult. Otherwise it must be replaced. Wooden food contact surfaces must not be varnished or sealed as these finishes can wear over time and contaminate food.

Other Food Contact Surface Requirements:

- Must be food-grade made of corrosion-resistant and non-toxic materials
- Must be properly designed, constructed, located, operated, maintained, and cleaned to prevent contamination
- Must be adequate in number and capacity
- Equipment used continuously at room temperature or used with hazardous foods needs to be cleaned and sanitized at least once every four hours
- Equipment used with raw and ready-to-eat foods needs to be cleaned and sanitized between each use. Ex. meat slicer, milkshake blender, large cutting boards
- Clean and sanitize all tables, counters, and work surfaces often
- Wash and sanitize empty food bins before refilling them
- Meat slicers must be taken apart and thoroughly cleaned and sanitized after use. If slicers are used several times every day, clean the equipment throughout the day. At the end of the day take the slicer apart and thoroughly clean it
- Change utensils (i.e., knives, ladles, tongs, etc.) often throughout the day
- Can opener blades enter the can and touch the food. They must be cleaned regularly



Water Supply

Water supplied to a food premises must be from a potable (safe for drinking) source, such as a public water system or a private water system approved by local or provincial health authorities. The use of non-potable water in food establishment is prohibited.

Hot and cold water must be provided under adequate pressure and in sufficient quantities to meet peak demands.

Private water sources must have a written water sampling plan and protocol. Water is to be tested routinely at a schedule determined by your local health department.

Lab results must be maintained for at least one year.

Washrooms and Change Rooms

At least one toilet, and more if deemed necessary according to the building code, should be provided for the use of workers in each food establishment.

Washrooms should not open directly into a food preparation or food storage area, and where toilet facilities are provided for the public, access to the washroom must not be through the food handling or food preparation areas.

Washrooms must have a tight-fitting and self-closing door, a handwash sink, clear handwash notices, a coat/apron hook on the outside, be well lit and ventilated, and be cleaned and sanitized at least once a day or as often as needed to keep it sanitary.

Change rooms should be provided if workers routinely change their clothes in the food establishment. Change rooms should be:

- easily cleanable
- well ventilated and well lit
- provided with lockers or other suitable facilities for the storage of workers' possessions, and
- completely enclosed and provided with a lockable door, unless separate facilities are provided for each sex

Handwash Sink

Food premises need to have at least one sink dedicated to handwashing only. This sink needs to be in a convenient location for employees. In large food premises, multiple handwash sinks are required – one in each food prep area.

At a minimum, each handwashing sink needs to have:

- Hot and cold water
- Soap in a dispenser
- Clean, single use towels

The handwash sink can't be used for any food preparation, washing dishes, emptying out water from pots or cleaning

buckets. Using the sink for anything other than handwashing increases the risk of contaminating a food handler's hands.



Waste Disposal - Solid and Liquid

There should be enough garbage containers available to keep them from getting overfilled, and the containers should be emptied often to prevent overfilling. Lids will help to prevent odours, pests and airborne contamination.

Garbage containers need to be cleaned and sanitized after each use, so they need to be made of durable materials. Garbage containers located outdoors need to be pest-proof and able to keep any odours and contaminated food inside. Any spills or leaks should be cleaned up right away.



The food establishment must be hooked up to a municipal sewer system or another acceptable wastewater treatment system capable of treating all wastewater generated at peak operating times.

Liquid wastes from wet floors, etc. are contaminated with microorganisms and filth and should not be emptied into sinks used for food preparation or dishwashing. Instead service sinks should be used. Other liquid wastes, like grease collected in grease traps, should be stored in pest-proof containers with lids until collected and disposed of by a contracted disposal service.



Dishwashing Equipment

A stainless steel 3-compartment sink of sufficient size to adequately clean and sanitize each utensil (tableware, pots, pans, etc) is required, unless otherwise approved by a Public Health Inspector.



The dishwashing area must be designed such that there is sufficient space for: handling dirty and clean utensils; maintaining an adequate separation distance to prevent them from coming in contact with each other and ensuring the work flow is uninterrupted and goes from soiled dishes to clean dishes.

Dish tables and/or drain boards or racks are required and must be: non-corrodible; self-draining; and of sufficient size and numbers for the handling of soiled and clean utensils as well as air-drying of clean utensils.

Where a mechanical dishwasher is to be used, it must be of commercial grade, NSF International certified (or equivalent) and approved by a Public Health Inspector.