FOOD SERVICE ESTABLISHMENT

CONSTRUCTION GUIDE & REQUIREMENTS

OFFICE OF FOOD PROTECTION – PLAN REVIEW SECTION 200 COUNTY SEAT DR., MINEOLA, NY 11501 PH # 516-227-9717 / FAX # 516-227-9559 foodplanreview@nassaucountyny.gov





TABLE OF CONTENTS

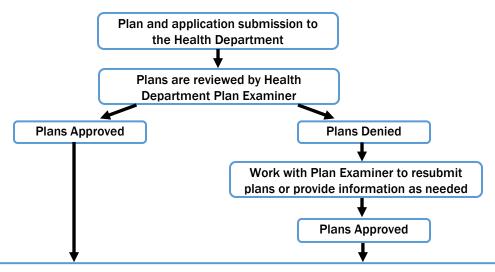
Overview	1
A Guide to the Submission of Food Establishment Plans	2
Floors, Walls & Ceilings	3
General Equipment Requirements & Installation	4
Facilities to Maintain Product Temperature	6
Facilities to Protect Food	8
Sinks	9
Warewashing Machines	11
Hot Water Supply	12
Lighting	13
Ventilation	13
Garbage & Refuse Storage	13
Screening & Rodent Proofing	14
Toilet Facilities	14
Dressing & Locker Rooms	15
Ice Machines & Ice Bins	15
Dry Storage Areas	15
Outdoor Food Service/Prep	16
Plumbing & Cross Connection Control	17
Sewage Disposal	20

OVERVIEW

NEW YORK STATE SANITARY CODE 14-1.191 - PRE-OPERATIONAL REVIEW

It is the responsibility of the operator of a food service establishment to construct, equip, furnish, maintain and operate the food service establishment under their control in compliance with the requirements of Chapter 1 of the New York State Sanitary Code [Subpart 14-1] and other applicable laws, rules, and regulations. Prior to construction, major renovation, or commencing operation of a food service establishment under their control, the operator must submit sketches or plans showing the floor layout, equipment, plumbing, ventilation, refuse storage facilities, sewage disposal facilities, and similar information. Submission and review of plans does not relieve the operator of a foodservice establishment or their successor for meeting all requirements of this code.

This guideline is to serve as a general overview of the plan and construction requirements of the Nassau County Department of Health and is not necessarily all-inclusive.



Permit application is completed and submitted with the designated fee and supporting documentation.

Complete your construction. Schedule a pre-operational inspection with your Plan Examiner for final Health Department approval. (Inspection will not be scheduled without application and documentation)

NASSAU COUNTY FOOD MANAGERS TRAINING COURSE

Be advised that it is required that all high-risk food establishments have a Nassau County certified food manager on staff. For those food facilities open for more than 12 continuous hours, a second certified service food manager is required. In general, it is recommended that all food facilities have a Nassau County certified food manager on duty during all hours of operation.

Additional information, and online registration for our Food Managers Training Course may be found at our website at: https://www.nassaucountyny.gov/FMTC

EMPLOYEE HEALTH POLICIES

Every food service facility is required to have a written Employee Health Policy. Management must restrict or exclude employees with disease or infection which can be transmitted by food or drink. Employees should be trained to recognize symptoms of foodborne illness and know that it is their responsibility to report to management if they have any of the symptoms. Learn more here: FDA Employee Health and Personal Hygiene Handbook

https://www.fda.gov/media/77065/download

A GUIDE FOR THE SUBMISSION OF FOOD ESTABLISHMENT PLANS

The part of the plan relating to the food facilities must include the following:

- 1) A legible floor plan of all food preparation and storage areas, <u>drawn to scale</u> and showing the size, location, and type of all equipment such as stoves, hoods, sinks, refrigerators, worktables, storage shelves, etc. Sinks must show the number of compartments and the drainboards. If applicable, existing equipment must be shown on the plan.
- 2) A plumbing riser diagram, or specifications providing information regarding all plumbing fixtures and their water and waste connections). Water heater information <u>must</u> be provided.
- 3) Materials to be used as floor, wall, and ceiling coverings in the food areas.
- 4) If food preparation is proposed to be conducted in the basement or other area of the building, the area and equipment must be shown separately on the plan. Any proposed auxiliary operation must receive approval from the Department.
- 5) Food storage and garbage areas are to be shown.
- 6) The location and number of properly vented toilet facilities. Various agencies such as the State Liquor Authority, Public Assembly Division of Town agencies, as well as Nassau County Department of Health have toilet requirements that may differ from one another.
- 7) In most areas of the County, the Nassau County Department of Public Works has jurisdiction over grease trap requirements. Contact Industrial Waste Control at 516-571-7319 in regard to obtaining necessary permits for a grease interceptor and inspection of installation.
- 8) Where public sewers are not available, separate plans showing the location and design of existing or proposed sewage disposal facilities must be submitted for approval by this Department. For new or renovated foodservice establishments located in areas where public sewers are not available, final approval to operate is contingent upon receiving certification of the sewage disposal system and its installation by the Bureau of Environmental Engineering of the Nassau County Department of Health. Please contact the Bureau at 516-227-9692.

Please be advised that it is also necessary for you to contact your Township or Village Building Department so that you will be in compliance with their rules and regulations. Building permits are required prior to construction.

Regulations concerning hoods, ducts, fire suppression systems, etc. are available from the Nassau County Fire Marshal's Office (573-9900).

All food service establishments must comply with the New York State Clean Indoor Air Act and the Nassau County Public Health Ordinance regulating smoking.

As you can see, several agencies may be involved. It is important that each agency is contacted in order to learn of their requirements. The requirements of all agencies must be complied with, especially the agency with the most stringent requirements.

Please read the enclosed material, complete the application and return it with your establishment plan, equipment schedule, and proposed menu. Unless specifically requested otherwise, only ONE set of plans is to be submitted. Ensure that plans are legible, labeled, and sized so that they are easily readable. Professionally drawn plans should be at least 24"x36" in size.

Should you choose to expedite your plan, please complete the Expedited Plan Review application and return it with a certified check or money order for \$500.00.

Construction of Floors, Walls & Ceilings

FLOORS:

All floor coverings in food preparation, food storage, equipment and utensil washing areas, walk-in refrigeration units, dressing rooms, locker rooms, toilet rooms and vestibules must be smooth, non-absorbent, easily cleanable and durable. Anti-slip floor covering may be used in high traffic areas only.

There must be coving at base junctures that is compatible with both wall and floor coverings. The coving should provide at least $\frac{1}{4}$ -inch radius and 4" in height and closed to no larger than 1 mm. Cove molding should be suited to the application and be of durable, cleanable material and installation.

Some recommended materials include: Ceramic or quarry tile, poured epoxy, approved commercial grade sheet vinyl, vinyl composite tile (not recommended in wet areas). Grouting should be non-absorbent and impregnated with epoxy, silicone, polyurethane or equivalent compound.

WALLS:

The walls, including non-supporting partitions, wall coverings and ceilings of walk-in refrigeration units, food preparation areas, equipment washing and utensil washing areas, toilet rooms and vestibules must be smooth, non-absorbent, and capable of withstanding repeated washing.

Wall materials that come in panels or sheets are to have their seams closed and sealed. Wall areas along cooking equipment should be covered in heat resistant materials (e.g. stainless steel). Wet areas, such as those found by sinks and dishwashers, should be covered in a material more durable than sheetrock.

Some recommended materials include: FRP (fiberglass reinforced panels, properly joined and sealed), stainless steel, ceramic tile, high gloss latex paint or epoxy enamel over a smooth surface (sheetrock), etc.

CEILINGS:

All ceiling materials in food preparation, food storage, equipment and utensil washing areas, walk-in refrigeration units, dressing rooms, locker rooms, toilet rooms and vestibules must be light-colored, smooth (non-perforated and non-fissured), non-absorbent and easily cleanable.

Some recommended materials include: High gloss latex paint or epoxy enamel over a smooth surface (sheetrock), drop ceiling with washable panels, etc. Note: Standard acoustic ceiling tiles are not permitted in these areas.

Equipment:

Equipment should always be used for the purpose it was intended. All equipment in food establishments must be commercial grade. All equipment in food establishments should comply with the design and construction standards of appropriate, nationally recognized standards and/or code requirements bearing the certification mark of an ANSI accredited organization. The following are some examples of certification symbols:











PLEASE NOTE: Any changes made in the future to the layout of the facility may require Health Department approval. Please contact the Health Department prior to adding, removing or rearranging equipment in the facility.

Equipment Installation:

Layout:

- Equipment should be placed in a manner to allow safe movement of personnel. This is to protect personnel from accidents and also to facilitate the sanitary operation of the establishment.
- Equipment should be placed in order to allow for the proper flow pattern of foods, with little cross usage of equipment and workspace and little need for personnel to cross paths.
- The area should be large enough to account for any potential, temporary changes to the standard operation of the facility such as seasonal or holiday increases in business.

General Equipment Installation:

- Most cooking equipment must be installed below a hood with adequate ventilation or individually vented. Please consult with the Nassau County Fire Marshal's office for additional requirements and permit information (516-573-9900).
- No food equipment should be installed beneath a waste line or a break sink.
- Food preparation equipment should not be placed next to an exterior door or in such a position as to be contaminated when exterior doors or windows are opened.

Individual Equipment Installation:

- If possible, as many items as possible should be on wheels to allow for easy cleaning and maintenance.
- If not moveable, equipment should be installed away from the walls and other equipment so as to allow easy cleaning all around the unit.
- The alternative to the above is to place equipment tightly against the walls and other
 equipment and seal all spaces (no matter how small they appear) to preclude grease and
 food wastes from getting into inaccessible areas.
- Equipment should be on legs (as tall as is practical) to allow easy cleaning below.

Equipment Installation (continued):

Individual Equipment Installation (continued):

- As an alternative to the above, equipment should be attached directly to the floor and sealed to eliminate grease and food wastes from getting below the unit. This method works best when equipment is installed on a raised concrete pad (6" to 8" high and completely grease resistant).
- Cooking equipment, with adequate cleaning space around and below each unit, can be installed within a trough or in a depressed area of the floor. This is an area surrounded by a low (4" 6") concrete barrier or a curb. The interior is heat and detergent resistant material and pitches toward an adequate drain system (French drain or round screened drains). This design allows for cleaning with high-pressure hoses, steam cleaners and mobile hot water/detergent spray equipment.

Equipment Construction:

Food Contact Equipment Should:

- Be seamless or have smooth seams (silver, solder or stainless steel weld)
- Have round corners and edges (interior & exterior)
- Have no exposed nuts, bolts, or screws
- Have no areas that cannot be reached for easy cleaning
- Break down for easy cleaning
- Have no exposed wires, sharp edges, open flame, exposed motors, belts, or chains, etc.
- Be of durable construction; use only commercial equipment
- Be moveable if possible or have self-cleaning capacity
- Have a surface of durable material stainless steel, clad or annealed non-toxic metals, high polished aluminum, food grade plastic, glass-ceramics, plastic matrix hardwoods, food grade rubber
- Be of sufficient weight and thickness to withstand repeated use and cleaning over time

Non-food Contact Equipment Should:

- Be of durable construction; use only commercial equipment
- Be of proper material (no soft woods, plywood, veneered woods, raw iron or steel, soft or toxic metals, non-food grade plastics or rubbers, etc.)
- Be easily cleanable, no deep recesses or exposed mechanisms, etc.
- Be free of safety hazards
- Have a suitable surface those above (food contact) plus: enamel, epoxy, acrylic and heat resistant paints, anodized aluminum, copper, tin, zinc, brass, bronze, high strength, hard surfaced, smooth, iron & steel, hard woods, oiled or waxed hard woods, plastic, rubber, etc.

FACILITIES TO MAINTAIN PRODUCT TEMPERATURE

COLD HOLDING UNITS

The establishment is required to provide adequate refrigeration facilities for the proper storage, transportation, display, and service of potentially hazardous foods. A determination for specific refrigeration needs will be made based upon the menu, the estimated number of meals to be served, frequency of deliveries and preparation in advance of service. All refrigeration units must be capable of maintaining potentially hazardous foods at 45°F or below* (NCDOH recommends adherence to the FDA Model Food Code of 2013 where cold holding temperatures are at 41°F or below). All freezer units must be capable of maintaining foods in a frozen state at all times.

NOTE: Insufficient or inadequate refrigeration may result in a restriction of the menu or modification of the proposed food service.

*Special note regarding smoked fish and smoked fish products: Smoked fish and smoked fish products are to be maintained at a refrigerated temperature of 38°F or less.

When potentially hazardous foods are prepared more than 12 hours in advance of service, a cooling procedure must be put in place that is capable of cooling the foods from 120°F to 70°F in the first two hours and to 45°F in the next four hours. The capacity of the refrigeration units on site must be sufficient to accommodate the volume of food that requires cooling.

Refrigerator and freezer units should be provided at work stations and cook lines to facilitate food preparation. Unless they are designed for such use, they should not be located directly adjacent to cooking or other high heat producing equipment.

All refrigeration units must be adequate in capacity to the needs of the proposed operation. All refrigeration units are to comply with the following requirements:

- Refrigeration equipment must be <u>commercial</u> units certified by an ANSI accredited certification program that meet the NSF 7 standard or equivalent. Refrigeration units in cooking areas should be models intended for use where the ambient air temperature may be elevated (approximately 86°F (30°C) or higher).
- Interior finishes of units must be smooth, non-absorbent and easily cleanable.
- Shelving in refrigeration and freezer units should be easily cleanable, non-absorbent, suitable for wet environments, and allow for proper air circulation throughout the unit.
- Air circulation in refrigerator and freezer units should not be obstructed, allowing for even and consistent air flow throughout the unit.
- An accurate air temperature thermometer must be provided to monitor the unit.
- Condensate water from refrigeration units must drain to an evaporator pan or to the sanitary sewer via an indirect drain. This includes condensate lines exterior to the building.
- Refrigeration and freezer units are to be located within the food establishment (or open up directly into the facility).
- Merchandiser units may be used for prepackaged foods in a display, sales area only. They
 are not approved for open foods and are not permitted to be used for food preparation areas.

Residential refrigerators and freezers are NOT approved for use.

FACILITIES TO MAINTAIN PRODUCT TEMPERATURE

COLD HOLDING UNITS (continued)

Additional note about walk in boxes:

- Walk in units must have a tight-fitting door.
- Sufficient lighting is to be provided. The standard single light fixture furnished with many walk in boxes does not provide enough light intensity. Larger walk in boxes will be required to have overhead lighting of at least 20 lumens/ft².
- They must have an approved coved juncture base along the interior and exterior of the unit.
- Shelving must be provided at least 6 inches off the floor for ease of cleaning. Shelving should also be suitable for use in a cold, damp environment.

HOT HOLDING & REHEATING FACILITIES

Hot holding units are to be commercial grade and certified by an ANSI accredited certification program. They must be capable of maintaining potentially hazardous foods at an internal temperature of 140°F or above during display, service and holding periods.

Any equipment used to reheat food items must be capable of doing so rapidly. Potentially hazardous foods are to be reheated to at least 165°F within a maximum of 2 hours.

If the hot holding or reheating units use water or steam, the methods for filling and draining the water for the unit must be identified. Water supply lines directly connected to food service equipment must have a backflow prevention device installed. Drain lines from these units must be indirect.

Note about steam tables: Water inlets that are submerged in the steam table wells require dual check valves (backflow prevention device).



FACILITIES TO PROTECT FOOD

Adequate facilities must be provided to promote good hygienic practices, sanitary food handling and to minimize the potential of cross contamination between ready-to-eat and raw products.

GENERAL FOOD PROTECTION

Food preparation areas for handling, washing and preparing raw meat, fish, and poultry must be identified. Procedures for cleaning and sanitizing food contact surfaces, equipment, and utensils between use must be identified during plan review.

All food being displayed, served, or held must be adequately protected from contamination by the use of: packaging, serving line, storage or salad bar protector devices, display cases, or by other effective means, including dispensers.

Cold, running water dipper wells must be provided for the in-use storage of dispensing utensils. Dipper well units must be provided with an indirect waste line and must be conveniently located to the dispensing area of the food.



Cleaned equipment and utensils must be stored in a clean, dry location where they are not exposed to splash, dust, or other contamination.

All toxic materials, including cleaning supplies, any medications, or other personal toiletry items may not be stored in a manner where they may cause contamination. Toxic materials may not be stored directly above or adjacent to food, food preparation areas, clean equipment, paper goods, etc. The facility should have a designated area for such materials.

Sneeze guards must comply with the standards of an ANSI accredited certification program. The food shield should intercept the direct line between the customer's mouth and the food on display. On the average, the vertical distance from the customer's mouth to the floor is 4'6" to 5'. This average must be adjusted for children in educational institutions, and for other special installations such as to accommodate the wheelchair bound.

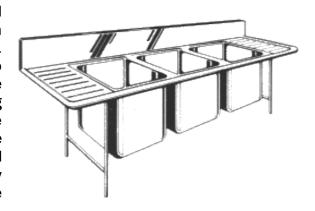


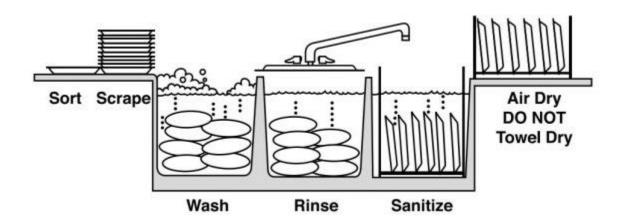
SINKS

Most food facilities are required to have at least one of each of the following types of sinks. Large establishments or those with multiple preparation and serving areas may be required to have additional units. When food preparation and service facilities are located on multiple levels, additional units may be necessary as well.

1. THREE COMPARTMENT SINK

A three compartment stainless steel sink with coved corners plus double drainboards is to be provided in order to wash, rinse and sanitize wares and utensils. Each compartment must be large enough to accommodate the largest piece of equipment to be cleaned therein. Drainboards must be self-draining and appropriately sized. If space is a problem, the clean drainboard may be wall-mounted drain above three-compartment sink. Remote food preparation or service areas (including bars) may installation of additional compartment sinks.





Regarding sanitizing:

- Where hot water (minimum of 170°F) is used, a heating device or fixture is to be installed to maintain the water at the minimum temperature. Thermometers are to be provided to ensure the proper temperature. Immersion baskets are to be provided to ensure that the wares are properly and safely submerged.
- When chemicals are used for sanitizing, appropriate test kits are to be maintained to ensure that the appropriate concentration of chemical is provided.
- All equipment is to be air-dried after sanitizing.

SINKS (continued)

2. HANDWASH SINKS

Handwash sinks are to be conveniently located within or adjacent to all food preparation and service areas.

- Hot water is to be tempered by means of a mixing valve or single lever combination faucet. Hot water supplied to handwash sinks (foodservice & lavatory) should not exceed 110°F.
- Each handwash facility is to be provided with hand-cleaning soap or detergent with a sanitary storage receptacle. Individual single-service towels or warm air blowers are to be provided. Common towels are prohibited. Conveniently located waste receptacles are to be provided if disposable towels are used. Handwashing signs are to be posted at all employee handwashing facilities.



3. FOOD PREPARATION SINK

In most food establishments, a food preparation sink is required. It must be stainless steel and NSF approved, or equivalent (coved corners and edges, no difficult-to-clean internal corners and crevices), and be equipped with an indirect waste line. Additional food preparation sinks should be provided as necessary, depending on the menu, to prevent potential cross contamination.



4. JANITORIAL SINK

A janitorial facility is required to be located for convenient use. This may necessitate the installation of multiple janitorial facilities for multi-level operations. A utility sink or curbed cleaning facility with a floor drain is to be provided and used for cleaning mops, washing floor mats, and disposal of mop water and similar liquid waste.

Maintenance and cleaning tools, such as brooms, mops, vacuum cleaners and similar equipment, are to be stored and maintained in an orderly manner that does not contaminate food, utensils, equipment or linens. Mops may not be hung up outside to dry. Mop water must not be discarded outside. Any faucets to which a hose will be attached must have a backflow prevention device in place.





SINKS (continued)

5. DUMP SINKS & OTHER WORK SINKS

A dump sink may be required for facilities that have bars, blender stations, beverage stations or other areas where liquids and ice may be poured out. The three compartment sinks and hand sinks in these areas are not to be used for this activity.

Rinse/work sinks such as those used at a blender station may be required if the three compartment sink is not in the immediate vicinity. A blender station may double as a dump sink. The sink and faucet dimensions should be capable of accommodating the blender pitcher for rinsing.



AUTOMATIC WAREWASHERS

Any food establishment that uses dish service with a seating capacity of more than 25 must install an automatic warewashing machine appropriately sized for the operation and demands. All automatic warewashers (dishwasher and glass washers) must be commercial units that are certified for sanitation by an ANSI accredited certification program.

Drain lines from the machine must be indirectly wasted. There may be a direct connection between its waste outlet and a floor drain when the machine is located within 5 feet (1.5 m) of a trapped floor drain and the machine outlet is connected to the inlet side of a properly vented floor drain trap.

Depending on the distance between the hot water heating system and the warewasher a recirculating pump may need to be installed. This is to ensure that adequate hot water is reaching the machine at all times.

Note: Installation of an automatic warewashing machine does not eliminate the need for a three compartment sink in the facility.

All dishwashing machines must have:

- Thermometers to check their operation
- An appropriate means of sanitizing the wares, either through a hot water booster (180°F minimum) or sanitizing agent final rinse
- Chemical test kits when a sanitizing agent is used
- Pressure test gauge to permit checking the flow pressure of the final rinse water where needed. Pressures are to be maintained within the range specified by the manufacturer.

Drainboards and/or tables are required for storing dirty and clean equipment. Adequate facilities must be provided to air dry washed utensils and equipment. Storage facilities must be provided to store cleaned and sanitized utensils and equipment at least 12" above the floor, protected from splash, dust, overhead plumbing or other contamination; on fixed shelves; or in enclosed cabinets.

HOT WATER SUPPLY

The hot water supply must be sufficient to meet the continuous and peak hot water demands of the facility. The minimum temperature required at warewashing, culinary and janitorial sinks is 140°F. Hot water at handwashing facilities is to be tempered so that it does not exceed 110°F.

When calculating the hot water demand, all fixtures that require hot water are used in calculations. This includes all sinks, automatic warewashers, clothes washers, showers and other fixtures.

Any hot water generating equipment must be commercial equipment and conform to nationally recognized standards and be certified or classified by an ANSI certification program. Recovery rates using a 100°F rise are to be used when evaluating specifications for potential hot water heaters. When multiple water heaters are used to provide a single hot water supply, the units are to be plumbed in parallel to provide maximum hot water output.

If fixtures requiring hot water are located more than 60 feet from the hot water heater a recirculation pump must be installed. Recirculation pumps are strongly recommended for warewashing machines, regardless of the distance, so that appropriate hot water is available at all times.

Special note on tankless/instantaneous water heater systems, if approved for use:

- Commercial units or units with commercial upgrades are to be used.
- Flow rates using 100°F rise criteria must be used.
- Small point-of-use instantaneous water heaters are approved only for hand sink use.
- Automatic warewashing machines appliances and other fixtures that utilize large quantities
 of hot water may be required to provide a dedicated tankless water heater in order to supply
 hot water exclusively to the automatic warewashing machine. Some machines are not
 compatible with tankless water heaters.
- The installation of a tankless water heater in conjunction with an automatic warewasher is to be completed as per BOTH the warewasher and tankless unit manufacturers.
- Metered faucets are not recommended to be utilized in conjunction with tankless water heaters due to inadequate hot water flow to the faucets.

The following figures may be used to <u>estimate</u> the potential, hourly hot water demand. Plan examiners will evaluate the facility during the review to make a final determination:

EQUIPMENT	STORAGE TANK DEMAND (GPH)	TANKLESS DEMAND (GPM)	
Three compartment sink (size dependent)	40-70	2 per faucet	
Food preparation sink (per compartment)	5-15	2 per faucet	
Janitorial Sink (depending on facility size)	5-15	2	
Bar 3-compartment sink	15	2	
Dump/Service sink	5	2	
Automatic Warewasher	as nor Manufacturer's anges	as nor Manufacturaria anosa	
Glasswasher	as per Manufacturer's specs	as per Manufacturer's specs	
Pre-Rinse Spray sink	45	2	
Clothes washer	45-60	as per Manufacturer's specs	
Shower	20		
Handwash & Lavatory sinks	to be determined	0.5	

LIGHTING

Lighting must be adequate in all food preparation and storage areas. Protective covers or shields are to be provided over all bulbs.

- Light intensity must be at least 10 lumens/ft² at a distance of 30 inches (75 cm) above the
 floor, in walk-in refrigeration units and dry food storage areas and in other areas and rooms
 during periods of cleaning. NOTE: The standard single light fixture furnished with many walk
 in boxes does not provide enough light intensity.
- Light intensity must be at least 20 lumens/ft² at a surface where food is provided for consumer self-service; where fresh produce or prepackaged foods are sold or offered for consumption; inside equipment such as reach-in and undercounter refrigerators; handwashing areas; warewashing areas; equipment and utensil storage areas; and in toilet rooms.
- Light intensity must be at least 50 lumens/ft² at a surface where a food employee is working with food or working with utensils or equipment such as knives, slicers, grinders, or saws where employee safety is a factor.

VENTILATION

- All rooms must have sufficient ventilation to keep them free of excessive heat, steam, condensation, vapors, obnoxious odors, smoke and fumes. Ventilation systems must be designed and installed according to law.
- Cooking ventilation hoods and devices must be designed and installed to prevent grease or condensation from collecting on walls, ceilings, and fire suppression supply piping and from dripping into food or onto food contact surfaces. The design and installation of such hoods and associated fire suppression equipment falls under the jurisdiction of the Nassau County Fire Marshal's Office.
- Make up air intakes must be screened (bird screen) and filtered to prevent the entrance of dust, dirt, insects and other contaminating material. Sufficient make up air must be provided at least equal to that amount which is mechanically exhausted.
- Hot water sanitizing warewashing machines must be provided with adequate ventilation sized according to the warewashing machine manufacturer's specifications.

GARBAGE & REFUSE STORAGE

Garbage and refuse containers, dumpsters, and compactors located outside of the establishment must be kept on or above a smooth surface that is constructed of non-absorbent material. This includes grease waste containers. Garbage, refuse, and grease containers must have tight fitting lids or covers. Garbage must be in covered containers outside of the establishment at all times. This may necessitate that a private carter remove your waste from your facility.

Garbage and refuse rooms must be constructed of cleanable, non-absorbent, washable materials and must be insect proof and rodent proof. Floors are to be smooth, durable, grease-resistant, nonabsorbent, coved, easily cleanable, and sloped to a floor drain. The drain must discharge to the sanitary sewer.

SCREENING & RODENT-PROOFING

A food establishment must be constructed, equipped, maintained and operated in a manner to prevent the entrance and harborage of animals and vermin (including, but not limited to rodents and insects).

Openings to the outside must be effectively protected against the entrance of rodents. Openings to the outside must be protected against the entrance of insects by the installation of tight fitting, self-closing doors; closed windows; self-closing serving windows or air curtains at drive-thrus; screening; controlled air currents; vestibules; or other means approved by the Health Department.

Screen doors are to be self-closing and screens for windows, doors, skylights, transoms, intake air ducts and other openings to the outside must be tight fitting and free of breaks. Openings around pipes, conduit or wiring entering the building from the outside must be sealed. Loading docks and delivery doors must be provided with effective air curtains or vestibules with self-closing doors to preclude the entrance of insects. Outside lighting installed around loading areas and entrances should be of a nature to reduce insect attraction. All foundations are to be constructed to be rodent proof. Openings between the floor and bottom of outer doors must be adequately flashed with rodent proof material to eliminate any opening.

TOILET FACILITIES

Toilet facilities, including the number of toilets and handicapped facilities, are to be installed in accordance with local building and plumbing code.

- Each food establishment is to have adequate, conveniently located, and properly installed toilet facilities for its employees. Such facilities are to be accessible at all times. Toilet fixtures are to be of sanitary design and readily cleanable. Toilet rooms are to be completely enclosed and to have tight-fitting, self-closing doors.
- Toilet facilities are to be kept clean, in good repair and free from objectionable odors. A
 supply of toilet tissue is to be provided at all times at each toilet. Easily cleanable receptacles
 for waste paper and other refuse are to be provided. One receptacle, in toilet rooms used for
 women, is to be covered. Employee handwashing signs are to be posted in each employee
 toilet room area.
- All food service establishments with a seating capacity of 20 or more are to provide toilet facilities for their patrons.
- Customer toilet facilities are to be located so that customers do not have to pass through food preparation areas, food storage areas or warewashing areas.
- Toilet rooms are not be used for the storage of food, utensils, equipment, paper goods or employees belongings.

Please refer to the local building department for guidance on Accessible bathrooms and fixtures, as well as the number of bathrooms and/or stalls required.

DRESSING & LOCKER ROOMS

Rooms or areas separate from food preparation, storage or service areas, and separate from utensil washing or storage areas should be provided if employees will routinely change clothes within the establishment. Lockers or other suitable storage facilities should be located in the dressing areas.

If dressing rooms are not required, separate facilities should be provided for the storage of coats or other personal belongings.

ICE MACHINES & ICE BINS

Ice machines must be located inside the food facility in an easily cleanable, well-ventilated area. Drains from the unit must be indirectly wasted. They may not be located under waste lines or by other sources of contamination. A proper scoop is required to remove the ice from the machine. The scoop is to be stored in such a manner so as to prevent contamination of both the scoop and the ice. Ice used for beverages or food must be transported in a food grade container.

Ice bins are required to have an indirect drain. Beverage tubing and cold-plate beverage cooling devices may not be installed in contact with stored ice. When a cold plate is constructed integrally with the ice storage bin, the ice that is stored in that bin may be used for food service.

DRY STORAGE AREAS

Dry storage areas should be sized to the needs of the facility based on the menu and frequency of deliveries. The location of the storage area should be adjacent to the food preparation areas and convenient to deliveries and receiving. Adequate lighting and ventilation must be provided in these areas.

Shelving should be made of durable, cleanable and non-absorbent materials. The lowest shelf should be at least 6 inches from the floor.

Food and paper goods storage shelving should not be located beneath any waste lines or dripping water lines.

Bulk food items that are removed from their original packaging must be stored in an approved foodgrade container with a tight fitting lid. Any packaged food items, once opened, must be stored in an approved, covered container. Scoops, with handles, are to be provided for each container.

OUTDOOR Food Preparation Areas and Bars

Outdoor food service may only be operated in conjunction with a licensed food service establishment and are subject to plan review and subsequent inspection. Therefore, these outdoor facilities are required to meet the same standards as those inside. An outdoor area may not operate without plan submission and approval.

In addition to being in compliance with all other jurisdictional codes, the outdoor area must meet these minimum requirements:

- 1. Permanent overhead protection, such as a roof, is required.
- 2. When not in use, the outdoor area must be able to be enclosed and secured.
- 3. A commercial, hot water heating system capable of providing a continuous supply of 140°F hot water to the fixtures is to be installed.
- 4. Floors are to be smooth, non-absorbent, easily cleanable and durable. Cove base is required. (See Construction of Floors, Walls & Ceilings on p.3)
- 5. Walls are to be light-colored, smooth, non-absorbent, and capable of withstanding repeated washing. (See Construction of Floors, Walls & Ceilings on p.3)
- 6. Ceilings must be light-colored, smooth, non-absorbent, and easily cleanable. (See Construction of Floors, Walls & Ceilings on p.3)
- 7. A three-compartment stainless steel sink with coved corners plus double drainboards is to be provided in order to wash, rinse and sanitize wares and utensils. The hot water must be at least 140°F. (See p.9 for more details on three-compartment sinks)
- 8. At least one conveniently located hand sink is required. Soap and towels are to be provided. (See p.9 for more details on Handwashing Sinks)
- Depending on the nature of the food and beverage service at the outdoor area, a dump/rinse sink may be required. (See p.11 for more details on dump/work sinks)
- 10. A janitorial facility may be required if the main facility's janitorial sink is inconvenient. (See p.10 for more details on janitorial sinks)
- 11. Ice bins must be indirectly drained.
- 12. Adequate, shielded lighting must be provided if natural lighting is insufficient.
- 13. All water must be from a potable water supply.
- 14. All waste water must drain to sewers or an approved on-site sanitary system.
- 15. Food is to be protected at all times. No containers of food are to be left out, unprotected, when the area is not in use.
- 16. The facility is to be thoroughly cleaned at the end of each day to prevent the attraction of vermin.

<u>Please note</u>: This list of minimum requirements may not be all-inclusive of what is necessary for an outdoor area to meet Health Department standards. A case-by-case determination will be made based on an evaluation of the proposed operation.

PLUMBING AND CROSS-CONNECTION CONTROL

Submerged Inlet Protection (Backflow/Backsiphonage Prevention)

Cross-connection

A cross-connection is defined as any connection or structural arrangement between a potable water system and a non-potable source, liquid or otherwise, through which backflow can occur.

Backflow

Backflow is defined as the flow of water or other liquids, mixtures or substances into a potable water system from any source, other than the intended source.

Cross connections are not permitted between the potable water supply and any non-potable water supply. The potable water system is to be installed in a manner to preclude the possibility of backflow and backsiphonage. Devices to protect against backflow and backsiphonage at all fixtures and equipment are to be installed unless an air gap is provided. The air gap must be at least twice the diameter of the water supply inlet, but not less than one inch, between the water supply inlet and fixtures flood level rim.

The following provides examples of some of the common types of equipment with potentially submerged inlets and required backflow/backsiphonage protection:

	Backflow/Backsiphonage Preventer Required
Equipment	in Lieu of an Air Gap
Carbonators for beverage dispensers	Dual check valve with intermediate atmospheric vents
All hose bibs inside and outside of establishment	Hose bib-type vacuum breaker
Pre-rinse sprayer with a nozzle head that may be submerged	Pressure vacuum breaker
Inlet which may or may not become submerged:	
-Water fill line to steam kettle	Atmospheric vacuum breaker*
-Water supply line to warewashing machine	Atmospheric vacuum breaker*
-Supply lines to all soap and chemical dispensing units on warewashing machine	Atmospheric vacuum breaker*
-Water supply lines for coffee/tea brewers	Atmospheric vacuum breaker*
-Soap portioner on faucet	Soap portioner must have an internal air gap
-Integrated water supply line for steam table	Dual check valve with intermediate atmospheric vents

^{*}An atmospheric vacuum breaker refers to a mechanical device which automatically air vents a pipeline to prevent backsiphonage. The device is to be located beyond the last control valve prior to the first outlet and at an elevation 6 inches higher than any source of contamination. Atmospheric vacuum breakers must be installed so that they are not subject to backpressure or continuous operating pressure of more than 12 hours duration.

PLUMBING AND CROSS-CONNECTION CONTROL

Some examples of the most common backflow prevention devices (please note that backflow prevention devices are not limited to those seen below):

Hose bib-type backflow preventer

Atmospheric vacuum breaker

Pressure vacuum breaker

vacuum breaker

Dual check valve (vented)

WASTE CONNECTIONS

A connection to a sewer line may be direct or indirect:

- A direct connection is a solid physical joining to a waste line or soil line;
- An indirect connection is other than a solid physical joining to a waste or soil line (such as a submerged inlet)

Types of indirect connections:

 An air gap means the unobstructed vertical distance through the free atmosphere between the lowest opening from any pipe or outlet supplying the fixture, or other device, and the flood level rim of the receptacle. The vertical physical separation must be at least two times the inside diameter of the water inlet pipe above the flood rim level, but cannot be less than one inch.



An air break is a piping arrangement in which a drain from a
fixture, appliance, or device discharges indirectly into another
fixture, receptacle, or interception at a point below the flood
level rim. The connection does not provide an unobstructed
vertical distance through the free atmosphere and is not solidly
connected, but precludes the possibility of backflow to a
potable water source into a sink or dishwasher/or fixture being
drained.



WASTE CONNECTIONS (continued)

Fixtures & Equipment Requiring Indirect Drains Are:

Ice making machines	Steam cabinets & steam tables	Refrigerators
Ice storage bins	Hot or cold food storage devices	Potato peelers
Ice cream dipper wells	Food preparation sinks	Cooking kettles
Refrigerator coils	Automatic warewashers*	Walk-in coolers

^{*}An automatic warewasher may have a direct connection between its waste outlet and a floor drain when the machine is located within 5 feet (1.5 m) of a trapped floor drain and the machine outlet is connected to the inlet side of a properly vented floor drain trap.

Fixtures Which Do Not Require Indirect Drains Are:

3-compartment sinks Pot washing sinks Toilets & urinals Floor sinks Handwashing sinks Janitors sinks Bar sinks

Installation of Indirect Waste Piping:

Waste lines from all equipment requiring indirect drains are to be installed to prevent backflow from drains and sewers and from other fixtures. All indirect waste must discharge into a properly trapped and vented receptor. The waste line must drain into an approved receptor of such size, shape, and capacity to prevent splashing or flooding. The receptor must be readily accessible for cleaning and inspection. In addition to the above, any installations are to be in full compliance with applicable state and local building (plumbing) codes.

FLOOR DRAINS

Properly installed, trapped floor drains are required in, but not limited to the following areas:

- Where floors are water-flushed for cleaning (e.g. food preparation areas, garbage disposal areas, etc.).
- Floors that receive discharges of water or other fluid waste from equipment.
- Areas where pressure spray methods for cleaning equipment are used.

Floor drains must be installed in a manner so that they are easily cleanable.

"Clean in Place" equipment, such as large kettles, skillets, soft-serve machines, etc. must have a floor sink or a trench drain to dump waste water into.

In all areas where floor drains are provided, floors should be sloped to the drain at least 1/8" per foot. They must not be located inside walk-in refrigerator or freezer units, in food or utensil storage rooms, inside or underneath cabinets or counters, or in inaccessible locations.

SEWAGE DISPOSAL

All sewage, including liquid waste, must be disposed of by a public sewage system or by a sewage disposal system constructed and operated according to the law.

For foodservice establishments located in areas where public sewers are not available, final approval to operate is contingent upon receiving certification of the sewage disposal system and its installation by the Nassau County Department of Health, Bureau of Environmental Engineering.

When sewage ejector pumps are installed (for example, in a basement or other remote area), they must be sealed, in-line systems. When ejected wastes include toilet room wastes, the system must include two pumps with an audible failure alarm.

Grease traps:

The Nassau County Department of Public Works has jurisdiction over grease trap requirements in sewered areas controlled by the County (some villages have their own ordinances and permits must be obtained through them directly – see note from DPW below). Contact Industrial Waste Control at 516-571-7319 in regard to obtaining the necessary permits for a grease interceptor, including the sizing and inspection of installation. In non-sewered areas, you must contact the Nassau County Department of Health, Bureau of Environmental Engineering, at 516-227-9692.

Compliance is to be ensured with the following directives regarding the grease interceptor:

- The grease interceptor(s) must be sized and installed in accordance with local and state codes and any other authority having jurisdiction. It should be located to provide easy access for cleaning and maintenance.
- The existing and/or proposed grease interceptor(s) must be cleaned and maintained in accordance with the manufacturer's recommendations.
- A grease interceptor(s) "Cleaning/Maintenance and Repair Log Book" must be kept on the premises for any authority having jurisdiction to evaluate during site inspections.

A note from the Nassau County Department of Public Works:

The Nassau County Sewer Ordinance No. 266-1985, section 7.2, states that as a new owner, there is a requirement to apply for and to obtain a Nassau County Special Sewer Use permit. (This permit is for the Nassau County sewer area owned by the County only. Some villages have their own ordinance including: Rockville Centre, Mineola, Part of Garden City, Freeport, the Village of Hempstead, Port Washington, Manorhaven, Village of Oyster Bay, and Great Neck). An application is to be completed and submitted, along with a one-time application fee (payable to Nassau County Treasurer) to: Industrial Pretreatment Program, 1194 Prospect Ave., Westbury, NY 11590-2723.

In addition, please note that a Nassau County DPW inspector must inspect all grease traps that are currently being used at your establishment to determine if they are in compliance with the Nassau County Sewer Use Ordinance.

Please be advised that your establishment will be liable for all costs incurred by the County for cleaning, blockages and damages to public and private properties as the result of the grease discharges from your establishment to the public sanitary sewer. If there are any questions concerning the above matter, please contact NCDPW at (516) 571-7319.

Link to application & fee: https://www.nassaucountyny.gov/DocumentCenter/View/18025