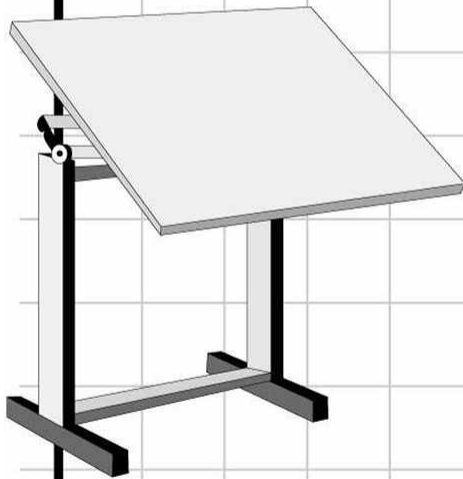
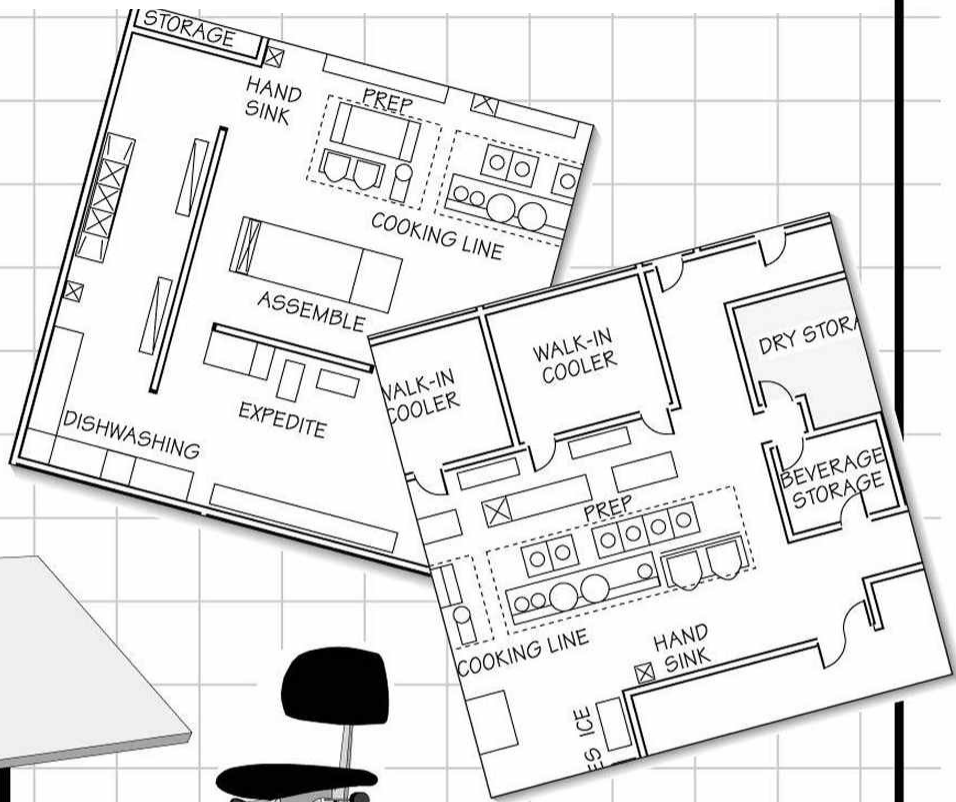




Oak Park Health Department
123 Madison Street
Oak Park, IL 60302



Food Service Design & Construction Manual

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Introduction

This manual is intended to be a resource for architects, contractors, equipment suppliers, food service operators and other interested professionals. The purpose of the manual is to assist in the development of plans that comply with the requirements of the Village of Oak Park Health Department and produce a safe, sanitary and efficient food service facility.

The requirements within this manual apply to any retail establishment offering food or beverages including restaurants, bars, caterers, fast food operations, food stores, schools, day cares and other institutions. Plan information, at the time of the initial submittal must comply with the most current edition of the Food Service Design & Construction Manual.

Important points to remember:

- There are minimum equipment, finish and storage requirements for all food service facilities regardless of the size or type of operation.
- A menu analysis is a critical part of the plan review process. The type of food, method of preparation and service style will influence the types of equipment required. Submit a proposed menu or list of products to be sold along with your plans for review.
- Plans should be based on the principles of HACCP (Hazard Analysis Critical Control Points). The facility layout should reflect an efficient flow of supplies, food and people from the receiving stage to final service. Equipment should be installed so it is easily accessible for cleaning. Anticipate your equipment needs to meet food storage, refrigeration, cooking, food holding and serving demands.

I. Plans and Inspections

A. Plan Review

A complete plan review package, in English, must be submitted for all new construction and remodeling to include renovations, upgrading, and re-opening. Advance approval from the Health Department is required prior to initiation of **any** on-site construction. Failure to receive plan approval prior to construction may result in legal action.

The plan review package must include the following:

1. Six sets of architectural food service plans submitted directly **to the Oak Park Building Department, 123 Madison Street, Oak Park, IL 60302** that including the following:
 - a. Food service equipment layout, including floor plan. Equipment elevations may be required.
 - b. Food service equipment list with manufactures' names, model numbers and equipment specification sheets.

- c. Plumbing plans including layout with waste diagram and specifications.
- d. Room and area finish schedule for floors, walls and ceilings.
- e. Kitchen ventilation plans with a completed exhaust plan review form.
2. Plan review fee of \$512.00.
3. Completed plan review application form.
4. Copy of complete menu or menu listing.
5. Copy of Illinois Food Manager Certification information or proof of enrollment.

The plan review process cannot begin with packages that are incomplete.
Allow a minimum of 15 business days for a review and response to your plan submittal.

Subsequent changes to approved plans must be re-submitted and receive approval prior to construction. The identical plan information that is submitted/resubmitted to the Health Department must also be submitted to the Building Department for review and approval.

B. Health Inspections

New Construction:

The Village of Oak Park Health Department conducts the following inspections prior to opening:

- Pre-operational inspection
- Final inspection

Inspections must be scheduled and confirmed a minimum of 72 hours (three business days) in advance by contacting the plan review office at 708.358.5480. An Oak Park business license is issued through the Oak Park Clerk's Department, 708.358.5670. The business license will be issued only after the Clerk's Department receives approval from the Health Department.

Remodel:

Remodeling that may include any alterations to the menu; equipment changes, etc. will require a written submittal describing the scope of work proposed and a fixture/equipment plan. In addition, the plan review application form will need to be completed and the plan review fee submitted.

Once reviewed, an appointment for a construction evaluation may be scheduled. Construction evaluation will assess equipment, refrigeration and storage capacities, finishes, plumbing fixtures and cookline ventilation. The evaluation will include documentation of existing conditions throughout the entire facility that will require modifications or additions to the original scope of work.

Modification of dining area or restrooms that will impact kitchen or wait staff areas will require the submittal of the plan review package.

Re-opening:

The proposed re-opening of a food service facility that is no longer in operation will be considered new construction and a complete plan review package will need to be submitted for review and approval.

Existing conditions such as floor plan(s), cookline ventilation hood(s), food service equipment, room & area finishes, walk-in and reach-in refrigeration unit(s), and plumbing are not approved until reviewed and evaluated by the Village of Oak Park Health Department.

II. Equipment

A. Materials and Design

All food service equipment must be commercial grade and meet the standards regarding design, materials, intended use and workmanship of the National Sanitation Foundation International (NSF) or Environmental Testing Laboratory (ETL) or Underwriters Laboratories (UL-SAN). The trademark seal is an indicator that the equipment is approved. Unmarked equipment and household grade equipment will not be accepted. Any equipment that has been painted or has chipping, peeling paint will not be considered acceptable. Painting of any food service equipment is prohibited. Always include equipment make and model numbers with your plans so equipment approval can be verified. Small wares equipment such as microwaves, mixers, toasters, etc. will also be required to meet commercial, NSF standards. Proposals to use existing or used equipment will require prior evaluation and approval by the Village of Oak Park Health Department.

B. Equipment Installation

1. Table-Mounted Equipment: Specify table-mounted equipment on four inch legs unless it is portable. Portable equipment is defined as weighing less than 75 pounds and has no rigid utility connections. Allow six inches of spacing between equipment.
2. Floor-Mounted Equipment:
 - a. Casters: Cookline and reach-in refrigeration/freezer equipment are to be specified with casters.
 - b. Spacing: Equipment dimensions will determine the spacing needed between a piece of equipment and any fixed item to allow for proper cleaning access.
 - i. Maintain at least eight inches of spacing when the area to be cleaned is less than four feet long.
 - ii. Maintain at least 18 inches of spacing when the area to be cleaned is four feet long or more.
 - iii. Legs: Floor-mounted equipment requires a minimum six inch clearance above the finished floor. Alternate movable equipment (on casters) with stationary equipment (on six inch legs) for long banks of equipment.

- iv. Curb or raised floor platforms for cookline equipment installation will not be approved.
3. Sealing: Specify gaps, voids, wall penetrations, protrusions and escutcheon plates to be sealed using silicone caulk. Caulking back splashes of food service equipment is optional. Equipment such as three-compartment sinks or preparation sinks should be properly secured.
4. Utility Connections:
 - a. Keep exposed utility lines (plumbing, gas, electrical, refrigeration, etc.) to a minimum. Keep exposed lines at least six inches off the floor and at least one-half inch away from the wall.
 - b. Specify that commercial grade waterproof (liquid-tight) electrical lines will be provided in areas subject to grease, high moisture or splash zone areas that require frequent cleaning.
 - c. Specify commercial grade NSF poly-vinyl coated gas lines with quick disconnects for equipment using gas.

C. Specific Equipment

1. Food Preparation Sink: Specify at least one separate sink intended for vegetable washing, thawing and/or cooling in the food preparation area. One bin with one integral drain board is the minimum requirement. Multiple food preparation sinks with overhead spray faucets may be required based on menu and food preparation procedures. The use of a three-compartment sink for preparation purposes will not be approved.
2. Food Contact Surfaces: Specify a minimum of eight linear feet of stainless steel work surfaces in locations where food is prepared, assembled or re-packaged. Painted, galvanized, tiled, wood or laminate surfaces are not approved.
3. Dipper Wells: Specify dipper wells with running water when bulk ice cream is dispensed. Dipper wells may be required for other dispensed food items.
4. Cheese Melters: When wall-mounted cheese melters are proposed over cooking equipment, a stainless steel angled deflector or a stainless steel arc will be required. The arc must completely enclose the bottom and sides of the cheese melter.
5. Ice makers: Ice makers with integral storage bin are designed to make and store a larger volume of ice and are not approved for dispensing purposes. Additional ice production capacity will be needed if ice is used as part of the cooling process. Ice machines should be located in food production areas and not in areas such as front service counters, hallways, janitorial stations, by exterior doors and/or under stairwells. Ice bins are required for daily use of consumable ice. Specify ice bins that

have cold plates as an integral part of the bin. Drop-in cold plates are not approved. Ice caddies should be considered for transport purposes.

6. Single Service Dispensing Equipment: Specify equipment to display and dispense single service items such as disposable cups, lids, straws and utensils.

D. Specific Food Service Operations

1. Remote Sampling Stations: Sampling of potentially hazardous food items conducted outside the confines of designated processing areas must comply with the following:
 - a. A separate designated clean room equipped with utensil washing, hand washing, stainless steel work surface and preparation equipment must be provided.
 - b. At each sampling station provisions for hand washing, hot and cold holding and food guards are required.
 - c. Advance approval to conduct sampling for outside vendor(s) must be obtained by the permit holder from the Oak Park Health Department.
2. Outdoor Cooking: Permanent outdoor cooking is not permitted by the State of Illinois or the Village of Oak Park Health Department rules and regulations. A Temporary Food Permit for special events may be obtained by contacting the Health Department.
3. Outdoor Bar Service: Outdoor bar service must have advance approval from the Village of Oak Park. Plans that include outdoor beverage preparation will require a separate plan submittal and operating permit. Restrictions limiting outdoor bar service may be imposed in addition to the specifications and requirements contained in this document. The outdoor bar will be subject to annual review and approval by the Health Department and the Clerk's Department. See section XIV.
4. Lodging Facilities with Food Service: Lodgings that serve a continental breakfast as defined by the Illinois Food Service Sanitation Code are establishments; "limited to only coffee, tea and/or juice and commercially prepared sweet goods" are not required to obtain a food service permit. All other food service menu items would be required to comply with the provisions of this manual and obtain an operating permit.
5. Carts and Kiosks: Proposals that include carts within the interiors of a building will require compliance with the provisions of this manual including installation of permanent water, sewer, and electrical services.
6. Commissary: A separate written proposal is required indicating the scope of the commissary operation for use as mobile vending or satellite foodservice. Additional plan review information will be required.

7. Sushi Operations: The sushi area must be physically separated from bar service, service stations and food preparation areas by means of sixty-inch high divider or a thirty-six inch walkway. Each sushi station must have the following:
 - a. Stainless steel, NSF approved wall-hung hand sink(s)
 - b. Stainless steel, NSF approved utility/preparation sink(s)
 - c. Stainless steel work surface(s)
 - d. Under counter refrigerator(s)
 - e. Refrigerated sushi display case(s)
 - f. Electric Rice Cooker(s)
8. Demonstration and Display Cooking: Cooking demonstration areas including “guest chef” food meal operations will be required to comply with the provisions of this manual.
9. In-Kitchen Dining: Proposals that include patron seating in the food service kitchen will require advanced submittal and approval.
10. Dining Area Expansion: Proposals to expand and to increase the seating capacity including outdoor dining will require plan submittal and evaluation of the existing facility.
11. Banquet Halls: All foods must come from commercial food service facilities that are permitted by a regulatory authority. A listing of menu items and their sources will be required. The following minimum requirements will be needed for facilities that solely receive food from outside sources include:
 - a. Three-compartment sink with dual integral drain boards
 - b. NSF stainless steel wall hung hand sink at each workstation (i.e. utensil washing, service bars, plating station etc.)
 - c. Mechanical hot and cold holding equipment
 - d. Approved refrigeration (Roll in refrigeration units)
 - e. Stainless steel work tables (16 linear feet)
 - f. Beverage Station (water fill station and bar)
 - g. Accessible janitorial station (mop basin)
 - h. Accessible restrooms that comply with current and applicable codes
12. Buffet: The following minimum requirements will be needed for facilities that conduct buffet service:
 - a. Set-Up: The minimum set up is the use of banquet table(s) with clean table linens. Use of blankets, mats, live plants, and any other decorative materials will not be approved. Other alternatives must follow the millwork specifications for counter tops and cabinetry found in Section IV.C. In addition the counter top must be modified and fitted using stainless steel flanges for drop-in cold and hot holding equipment.

- b. Food service equipment used for buffet service must be commercial, NSF approved.
 - c. Food Guards: Refer to NSF/ANSI2-2002 the maximum vertical distance between a counter top and the bottom leading edge of a food shield shall be 14 inches. The bottom leading edge of the food shield shall extend a minimum horizontal distance of seven inches beyond the front inside edge of a food well.
 - d. Hot Holding: Mechanical hot holding equipment such as, Cook N' Holds and electric chafing units are required for hot holding and display of potentially hazardous menu items. Use of extension cords will not be approved.
 - e. Cold Holding: Mechanical refrigeration will be required for cold holding and display of potentially hazardous ingredients and menu items. Portable or tabletop models using ice as the cold holding methods may only be used for non-potentially hazardous products.
 - f. Finishes: The minimum floor finish is tile, concrete or hardwood in a three foot zone under and around the buffet set-ups. Carpet will not be approved. Open structure ceiling will not be approved.
 - g. Plumbing: All liquid waste must be discharged through an approved sanitary waste drain. Discharges into buckets or containers will not be approved. Open site floor drain(s) must be specified for equipment that requires sanitary discharge.
13. Other Food Service Facilities: Churches, test kitchens and other operations need to submit a written proposal explaining the usage of the facility for plan review and possible permit exemption.
14. Non-traditional Methods of Serving Food (such as but not limited to trains, boats, body buffets): Proposals that include non-traditional methods of serving food will require advanced submittal and approval. These operations may be subject to additional requirements.
15. Non-food Service Facilities (such as but not limited to hair salons, spas, pet shops): Proposals that include the installation of a non-food service facility within a food service facility will require physical separation by means of full walls and a solid tight fitting, self-closing door. The area proposed must not interfere with the food service operations or food service storage. In addition, a provision for separate HVAC (heating, ventilation and air conditioning) systems may be required.
16. Grocery Food Service: There are additional requirements for retail facilities that handle food and grocery including convenience, specialty stores, and drug stores. Equipment and storage requirements will be dependent on the food and beverage handling activities.
- a. Sharing common areas for utensil washing and food preparation between departments will not be approved. Separate fixtures such as three-compartment sinks, hand sinks, food preparation sinks, food preparation

- worktables and refrigeration coolers (walk-in and reach-in coolers) are required for each processing area.
- b. The flow of food from receiving to the various departments must be routed so as to avoid passing through areas of food preparation and utensil washing.
 - c. Food processing areas require physical separation from potential sources of contamination such as, stock areas that have open receiving doors, balers, compactors, overhead utility and sewer lines.
 - d. Receiving and storage shelving must be provided. Heavy-duty metal racking is required for all H-frame style shelving. Wood or particleboard inserts will not be approved for food and beverage storage. The use of pallets is to be restricted to receiving and temporary storage purposes only and requires pallet-moving equipment. NSF dunnage racks must be specified for dry, refrigerated and frozen storage areas.
 - e. Retail sales shelving and gondolas must allow for a minimum of four-inch clearance above the finished floor. Kick plates and kick bases are not approved.
 - f. A separate storage room with signage will be needed to physically separate food and beverage storage from automotive supplies and other hazardous chemicals.
 - g. Refer to Section X. Room and Area Finishes Subsection H. Retail Processing Room and Area Finishes.

III. Refrigeration

A. Food Service Refrigerators and Storage Freezers

Refrigeration and freezers are required to maintain potentially hazardous foods at or below 41°F and 0°F respectively. These units must meet NSF standard #7 design specifications for the intended use as specified by the manufacturer.

Refrigeration units that do not comply with current NSF standard #7 or were manufactured before April 1, 1998, will not be approved.

Household refrigeration and freezers, including chest freezers, “dorm” refrigerators, etc., are not approved for retail food service use. Beverage display coolers and glass door merchandisers are not approved for storing potentially hazardous food and will not be approved for use in the food service area.

Calculation of the minimum amount of refrigeration and freezer space required is based on the menu and food preparation procedures. Additional refrigeration will be required when catering or banquet operations are proposed. Refrigeration and freezer equipment must be located in the direction of the food flow starting at receiving and storage. A minimum 6-foot x 6-foot walk-in cooler will be required whenever cooking equipment requiring an exhaust hood is proposed.

All shelving must meet NSF standards. In addition, shelving installed in refrigerators or walk-in units must be rated for use in high moisture environments. Wood, zinc, galvanized or chrome finishes or solid shelving cannot be used in refrigeration units.

B. Walk-In Coolers and Walk-In Freezers

Units must be located within the facility and near delivery/receiving areas. Use of remote outdoor walk-in refrigerators or freezers are not approved. All walk-in units must be accessible from inside the building. These units must be specifically designed for outdoor installation. Walk-in cooler condensate may not discharge outdoors and must be directed to an open site drain within the building. Condensate pumps will not be permitted in any installation.

The space between the top of a walk-in unit and the ceiling must be closed off. Enclose the area with either fixed or removable vertical panels. Storage is not permitted on top of units. Air space above the walk-in units will be needed. A receiving walk-in cooler will be required in facilities with remote receiving or loading dock areas. A separate walk-in cooler will be needed for beer keg, case liquor and wine storage. The use of food walk-in coolers for alcohol storage will not be allowed.

A separate additional walk-in cooler will be required for menus that involve the following:

- Extensive thawing
- Advanced preparation
- Extensive cooling
- Batch cooking

A blast chiller may be substituted for this requirement in operations doing extensive cooling.

C. Reach-In Refrigerators and Freezers

Reach-in refrigerators and freezers are always required for storage of food during food preparation and assembly. These units must be located within food preparation areas. Under-the-counter units may be utilized for working supplies only, and will not be approved for receiving or cooling purposes.

D. Refrigerated Work Stations

Refrigerated make-up tables are required when the menu includes the assembly of potentially hazardous foods. This unit must be located across from cookline or in assembly areas such as sandwich, pizza, salad, and multiple ingredient menu items. A refrigerated room and/or walk-in cooler will be required when there is extensive or continuous cutting, sawing and/or grinding of raw meats, poultry and/or fish.

E. Refrigerated Display Cases

Refrigerated display cases are required for the display and holding of potentially hazardous foods under refrigeration and are not intended for food assembly such as sandwich making.

F. Cold Buffet and Salad Bars

Cold buffet and salad bars are required to be mechanically refrigerated. The use of ice or frozen inserts is not approved for cold holding of potentially hazardous foods. See section IID (12) for additional requirements.

G. Refrigerated Beverage and Frozen Food Merchandisers

Refrigerated beverage and frozen food merchandisers are only to be utilized for customer self-service and are to be located in the retail sales area. Beverage display coolers shall not be used to store potentially hazardous foods. Ice cream novelty freezers are not approved for storing items other than ice cream products and frozen novelties.

IV. Storage

A. Storage Rooms

1. **General:** The minimum space required is twenty five (25) percent of total food service areas, based on wall-to-wall dimensions (square footage). When calculating dry storage square footage must consist of useable space. Areas that include desks or utilities such as electric panels, fire protection equipment, water meters, RPZ units, water heaters or furnaces cannot be included in the calculation of dry storage space and must be separated from dry storage area. Square footage calculations cannot include wall-hung shelving. Indicate on plans, the size & positioning shelving units. Dry storage is not permitted on top of the walk-in units, restrooms, or in space between ceiling, roof deck or hallways. Storage room(s), not on the main level, must be accessible by means of approved stairs way or elevator. The use of ladders will not be approved. Off site storage facilities will not be approved.
2. **Dry Storage Room:** Specify the location of the receiving door that will be adjacent to the dry storage room. Restrict deliveries from entering areas of food preparation and utensil washing. Locate shelving, dunnage racks and beverage system equipment in the dry storage room. Indicate on the plans the dry storage calculations utilizing the formula from the plan review form. Provisions for remote dry storage must meet all applicable storage requirements and must be accessible from the interior of the building.
3. **Liquor & Beverage Storage Room:** Specify a liquor storage room separate from food storage. The storage space must be a minimum of thirty-five (35) percent of the bar area. Office and bar cabinetry will not be considered as part of the liquor storage calculations.

Indicate on the plans the liquor storage calculations utilizing the formula from the plan review form.

4. Shelving: Storage shelving and dunnage racks must meet NSF standards. Wood, laminate, "closet" style shelving and wood pallets are not approved. Shelving proposed for high moisture environments such as walk-in refrigerators and dish washing areas must be corrosion resistant. The use of chrome or solid shelves will not be approved in walk-in coolers or other high moisture areas. All shelves must maintain a minimum of six (6) inch clearance above the finished floor. Shelves used for the storage of bulk items such as oil, potatoes, onions, grain products, etc should be specified as heavy duty. High-density storage shelving may be utilized to maximize available floor space.
5. Dunnage racks: Dunnage racks are required when storing case products, heavy containers and bulk items. Keg racks must be provided.

B. Storage Locations

1. Cooking Utensils: Specify provision and location of shelving for clean cooking utensils, equipment, glassware and dishware. Specify wall shelves, pot racks or smart walls over equipment such as three-compartment sink and worktables. Do not extend shelving over hand sinks.
2. Clean Linen: Specify provision and location of shelving for clean linens.
3. Maintenance Equipment: Specify provision and location for storage of maintenance equipment and cleaning supplies.
 - a. Heavy-duty mop rack must be provided and located over the janitorial sink to allow wet mops to drip-dry into the sink basin.
 - b. Heavy-duty broom racks must be provided to store brooms and other dry maintenance equipment in or adjacent janitorial area.
 - c. NSF shelving must be provided and located at each janitorial station to store cleaning supplies. The use of pegboard is not approved.
4. Solid Fuels (Interior Storage): Specify provision and location for firewood, wood chips, and charcoal storage to be separated from food service and dry storage areas. Elevate items at least six inches off the floor and 24 inches away from walls using approved racks.
5. Solid Fuels (Exterior Storage): Specify provision and location for firewood, wood chips, and charcoal storage if planned to be stored on the exterior of building.
 - a. Provide a fenced area, which meets enclosure requirements for garbage and grease. (See Section XII).

- b. Elevate firewood, wood chips and charcoal at least six inches off the ground using approved storage racks. Allow at least 24 inches of clearance from adjacent building wall(s).

C. Millwork and Case Work

Indicate the following specifications for millwork intended for food and beverage service, front and rear service counters, storage cabinets, buffet, wait station, and restroom(s) including but not limited to:

- Counter Tops: Stainless steel or solid surfaces. Plastic laminate and tile are not permitted. The counter top height for self-service food and beverage stations must be specified at 34 inches above the finished floor.
- Shelving: Solid or open wire stainless steel shelving. Plastic laminate and wood are not permitted.
- Base Cabinet: Six-inch stainless steel legs or open-to-floor design and construction.
- Traditional cabinet bases, removable kick bases or kick plates are not permitted.

Counter tops where drop-in cold and hot holding equipment is proposed must be modified and fitted using stainless steel flanges.

V. Employee Areas, Restrooms and Hand sinks

A. Employee Area

1. Personal Belongings: Specify a coat rack, coat hooks or other suitable facilities for employees to store coats and other personal belongings. Lockers may be installed in a designated area away from food. Mount lockers six inches above the floor, and secure to the wall without legs.
2. Dressing Rooms and Employee Restrooms: If provided, the dressing rooms must be located separate from utensil washing, food preparation, storage area and restrooms. If provided, employee restrooms must be designated as separate male and female facilities compliant with state and local plumbing codes.
3. Break Area: If provided, the break stations should be located in the dining room or an area separate from utensil washing, food preparation, and storage areas.

B. Restrooms

1. Number: Specify separate male and female public restrooms compliant with state and local plumbing codes. Public access to restrooms through food preparation or utensil washing areas is prohibited.

2. Location: Restrooms must be conveniently placed and accessible to employees. Restrooms must also be located no more than 100 feet from the food service on the same floor.
3. Doors: Specify solid, tight-fitting, self-closing doors.
4. Toilets and Urinals: Fixtures must meet current and applicable codes and standards. Toilets must have open front toilet seat(s) with no lid(s). Urinals that are waterless are not approved.
5. Lavatory Sinks: Fixtures must meet current code. The installation of cabinetry and plastic laminate surfaces are not approved. Laundry tubs may not be used as hand washing sinks. Lavatory sinks must be provided and located within the restroom.
6. Ventilation: Specify mechanical ventilation for restrooms.
7. Dispensers: Each lavatory must have dispensed soap and paper towel dispensers. Cloth towels, including rolled towels, are not approved.
8. Water Supply: Specify each lavatory with hot and cold water under pressure by means of a mixing valve. Specify blade handled standard faucets. Only touch-free low voltage or direct hardwired units will be approved. Battery activated and metered faucets are not permitted.
9. Waste and Sanitary Containers: Specify covered metal waste containers for refuse. Specify sanitary containers with lids for the disposal of feminine hygiene products.
10. Diaper Changing: If diaper-changing stations are provided, additional waste containers with lids for soiled diaper disposal are required.

C. Hand Sinks

1. Location: Provide NSF approved traditional sized stainless steel wall-hung hand sinks. Temporary, economy sized or space saving hand sinks will not be approved. Hand sinks must be located in areas of food preparation, utensil washing, areas of assembly and dispensing. Bar style hand washing sink(s) are also required in bar areas. Hand sinks must be accessible and visible to employees with a minimum 24 inches frontal access. Hand washing sinks installed in counter tops will not be approved. Sinks located behind open doors or in corner locations will not be approved.
2. Design: Battery operated faucets or self-metered faucets will not be approved. Indicate provision of blade-handled faucets, touch-free low voltage or direct hardwired units.
3. Dispensers: Specify dispensed soap and paper towel dispensers at each hand sink. A waste receptacle must be located near the sink. The use of common cloth towels is not

permitted. The use of mechanical hot air hand drying devices is not approved in food service areas.

4. First Aid Station: If installed first aid kit(s) are to be located at or near hand sink(s). These kits may not be located over food preparation areas, preparation sinks or utensil washing areas.
5. Splash Guards: Specify an eight-inch high stainless steel splashguard the width of the basin when a hand washing sink is located less than 18 inches from food service equipment.

VI. Plumbing

Specify all plumbing to be in compliance with the Illinois State Plumbing Code and local requirements. For more information on plumbing requirements you should contact the Oak park Building Department at 708.358.5430.

A. Water Supply

Provide potable water under pressure to satisfy the needs of the food service establishment.

B. Grease Interceptors

The Oak Park Building Department determines the number and size of any grease traps, grease interceptors or basins. If required, one of the following installation methods must be met:

- An outside grease basin.
- An interior grease interceptor. Recess the grease trap into the floor in the following manner:
 - The lid must be flush with the floor.
 - Inlets and outlets must be a minimum of four inches in diameter.
 - The grease interceptor must be easily accessible for maintenance and cleaning. Locate grease interceptor as to not interfere with the legs of the three-compartment sink or other fixed equipment.

C. Janitorial Sinks

1. Design: A minimum 48-inch x 30-inch janitorial closet with a prefabricated 24-inch x 24-inch floor style mop sink is required for general clean up activities. Specify a minimum of 18 inches open floor space adjacent to the mop sink. Installation of a tiled curb area or laundry tub will not be approved. Provide hot and cold water, under pressure, with a mixing faucet and approved backflow protection.

2. Location: Janitorial stations must be conveniently located for clean up and maintenance of food service areas. The janitorial station(s) must be physically separated from food service, preparation and utensil washing areas by full height walls. The sink must be accessible for use during food service operations and must be located within 100 feet of the establishment and on the same floor. More than one janitorial station may be necessary, depending on the size of the facility and type of food service operation.
3. Water Heater: Water heaters suspended above the janitorial sinks must maintain a minimum clearance of 80 inches above the finished floor to the bottom of the support shelf.
4. Water Softeners and Filter Systems: Install systems so they do not interfere with access to the janitorial fixtures.

D. Overhead Sewer Lines

Exposed waste lines and roof drains shall not be located directly above food preparation, display, storage and utensil washing areas.

E. Potable Water Backflow Protection

1. Faucets: Faucets that have pre-rinse sprayers must have an in-line backflow preventer. "Y" connection for multiple hose attachments will not be permitted. Installation of "T" connections or saddle valves will not be permitted. Faucets may not be modified to adapt any chemical dispensing system.
2. Vacuum Breakers: Vacuum breakers are required on waterlines servicing washing machines, threaded faucets and other applications deemed necessary in accordance with state and local plumbing codes.
3. Backflow Preventers: Double check valves with intermediate atmospheric vents are required on waterlines that service equipment that have the potential of becoming submerged. (i.e. pot fillers, spray hoses, pasta cookers, steam tables). Reduced pressure zone backflow preventer (RPZ) are required whenever high or low hazard chemical are connected to the potable water supply (i.e. chemical dispensing systems at mop sink, three-compartment sink and laundry). Specify the installation of a separate dedicated water line for each chemical dispensing system.
4. Carbonators: Backflow protection must be installed on the carbonator(s) and be in compliance with ASSE Standard #1022 and NSF Standard #17.

F. Indirect Waste Connections

1. Equipment Fixture Drains: Provide open-site indirect waste connections by means of floor sinks or through the floor hub drains for all drain lines that service dish washing

machines, utensil washing sinks, pot washing sinks, pre-rinse sinks, silverware sinks, bar sinks, utility dump sinks, soda dispensers, ice machines, steam tables, pasta cookers, ice bins, salad bars, dipper wells, walk-in refrigerator or freezer condensate and other similar fixtures.

- a. An indirect connection discharges waste through an air gap into the sewer. Do not directly connect or submerge drain lines into the sewer system.
 - b. The drain piping from any fixture to the air gap must not exceed five linear feet and must be in the same room. All open site drains must be visible for inspection. Installation of any open site drains within walls is not approved. Condensate pumps or after market evaporator devices are not approved.
 - c. Each fixture will require a separate drain line to the open site floor sink. Indirect waste drains must be installed in the floor. To prevent overflows and splashing, specify floor sinks or floor hub drains for high volume discharges such as three-compartment sink, food preparation sink, dishwasher. Power wash sinks will require the installation of an additional floor sink.
 - d. Drain lines shall not discharge to sinks, buckets, and other food service equipment or to the exterior of building.
 - e. Trench drains are only permitted for installation at icemakers, steam jacketed kettles and tilt skillet. The trench must be constructed of prefabricated stainless steel having a two-inch integral flange no longer than three feet with a stainless steel grate.
 - f. Dishwasher and glasswasher drain lines are to bypass the grease line.
2. Garbage Grinders: Where utilized, the commercial garbage disposal unit will be restricted to specified sinks such as the pre-rinse sink of the mechanical dish washing station. Installation will require that the underground waste line servicing the garbage grinder bypass the grease line.

G. Direct Connections

Janitorial sinks, hand sinks and lavatory sinks shall be directly connected to the public sewer system.

H. Floor Drains

1. Floor drains should be located in high moisture areas. Floor drains or trench drains may not be installed in the fryer area of the cookline or in walk-in refrigeration units.
2. Drain lines for iced chicken or seafood discharge must be indirectly connected to an open site floor hub drain located outside of the refrigeration unit.

VII. Sanitizing Equipment

A. Hot Water System

1. **Minimum Size:** A 40-gallon storage capacity water heater is the minimum required. Secondary hot water heater systems must also provide a minimum storage capacity of 40 gallons. If the hot water heater is suspended, the platform must provide a minimum of 80-inch clearance above the floor. Heat-on-demand units, battery operated or hot water systems that do not provide any storage capacity will not be approved.
2. **Dish Washing Machine Demand:** Facilities using a commercial dish washing machine must provide additional hot water supply at the required temperature and volume to meet the maximum demand for the make and model of machine.

B. Manual Utensil Washing

1. **General Requirements:**
 - a. A three-compartment sink with two integral drain boards is required for all food service installation offering open food or beverage.
 - b. The faucet of the three-compartment sink must be capable of reaching and filling all bins.
 - c. A mechanical dish machine may not be a substitute for a three-compartment sink.
 - d. Provide and locate stainless steel shelving unit over three-compartment sink for the storage of clean food service equipment, glassware and racks.
 - e. Cleaning supplies are to be stored on approved storage racks or dollies below three-compartment sink.
 - f. If a pre-rinse sprayer for the three-compartment sink is provided, it must be installed at the faucet and provided with approved backflow protection.
 - g. Specify lever style drain stopper for three-compartment sink.
2. **Design:** A standard three-compartment in-line, stainless steel sink with two integral drain boards is required for all facilities that conduct utensil washing. Drop-in bins, built-in sinks, or corner style models will not be approved. Install the sink in a location that will minimize potential cross-contamination to or from the janitorial station or food preparation areas. Power assisted pot washing sinks are approved.
3. **Size:** Each compartment must be large enough to submerge the largest item to be washed. Drain boards are determined by the size of the bin dimensions. Drain boards shall be of equal size. Power assisted pot washing sinks are designed with oversized wash compartment. The drain boards must equal the dimensions of the rinse and sanitize compartments. These sinks require the installation of an additional floor sink or hub drain.

C. Mechanical Utensil Washing

1. General Requirements

- a. Specify a pre-rinse sink at the soiled dish station to rinse soiled utensils before loading the dish machine. The soiled dish landing and clean dish landing must be equal dimensions.
- b. Provide and locate shelving for the storage of clean food service equipment, glassware and racks.
- c. The installation of a shared manual three-compartment sink drain board and mechanical dish machine drain board will not be approved.
- d. Temperature gauges are to be specified for the wash, rinse and final rinse cycles.
- e. Specify undercounter style dish machines will be installed with six-inch legs and located adjacent to the three-compartment sink.

2. Chemical Sanitizing Machines

- a. A sanitizer alert system, which includes a visual and audible alarm, designed and approved for the specific machine is required to warn the user when the sanitizer supply has been depleted.
- b. Specify additional shelving for air-drying food service equipment and utensil after being washed in a low-temperature machine.
- c. Specify shelving, dollies or brackets for storage of chemical containers.
- d. Provide a Type-II (NFPA) exhaust hood to effectively remove steam and vapors at any chemical dish machine. This requirement does not apply to undercounter style dishwashers.

3. Hot-Water Sanitizing Machines

- a. A pressure gauge is required to monitor the water pressure. The flow pressure is to be 15 to 25 pounds per square inch (PSI) at the final rinse.
- b. Provide a Type-II (NFPA) exhaust hood to effectively remove steam and vapors at any hot water dish machine. This requirement does not apply to undercounter style dishwashers.

VIII. Lighting

A. Food Service Areas

Food preparation and utensil washing areas must have a minimum light intensity of 50 foot-candles.

B. Walk-In Refrigerators and Freezers

Walk-in units must have a minimum of 50 foot-candles of light throughout. Install fluorescent lights with cold-tolerant, vapor-proof ballasts or multiple incandescent fixtures. Energy saving bulbs are not designed to be used in cold environments and are not approved.

C. Storage and Restrooms

Provide a minimum of 30 foot-candles of light as measured 30 inches above the floor in storage rooms and restrooms.

D. Bars

A minimum of 50-foot candles of light, as measured 30 inches above the floor, is to be provided for clean-up purposes. Dimmer switches may be a suitable application for use in bar areas.

E. Cookline Hoods

Provide a minimum of 50 foot-candles of light as measured six inches above the cooking surface. Provide protective light globes on lighting.

F. Light Fixture Protection

Protective lenses, light tube with end caps and safety-coated bulbs are required for light fixtures over food preparation, food service, food and beverage storage and utensil washing areas. Exposed bulbs will not be approved in walk-in units, cookline hoods, menu boards, any food service, storage or janitorial areas. Track, can, and pendent lighting fixtures must encase the bulb leaving only the face of the bulb exposed. Installation of halogen lighting will not be approved in any food related areas. All sodium vapor light fixtures must be installed with approved safety shut offs.

IX. Laundry

A. Location

If provided, install laundry facilities in a room separated from the food preparation, service, and storage by a solid door. Provide mechanical exhaust fan to remove heat and moisture from the room. Bi-fold doors will not be approved.

B. Clothes Dryer

If a washing machine is provided, a dryer must also be provided. Gas dryers must be properly vented to the outside.

C. Linens

Provide clean and soiled linen storage. (See Section IV, Storage Locations)

X. Room and Area Finishes

A. Utensil Washing, Food Preparation, Janitorial and Dry Storage Areas

1. Floors: Floor finishes must consist of durable, light-colored, non-absorbent, grease resistant and easily cleanable material. Dark shades such as black are not approved. Commercial grade vinyl composition flooring is the minimum grade material acceptable. The installation of painted, rolled, sealed, poured, sprayed or troweled floor products are not approved for retail food service applications.
2. Floor/Wall Juncture: A tight fitting base coving or coved radius is required at the juncture of the floor and wall. The floor finish determines the type of coving material. Tile installed on top of tile is not approved.
3. Walls: Construct walls with a smooth, durable, light-colored and easily cleanable material. Dark shades such as black are not approved. Examples of approved wall finishes include fiberglass reinforced panels (FRP), ceramic tile and stainless steel. Painted drywall will only be considered on non-moisture exposed wall surfaces four feet above the finished floor. Smooth painted concrete masonry block will only be considered on non-moisture exposed walls. The use of vinyl wall covering, carpet and/or chicken wire walls will not be permitted.
4. Ceilings: Install smooth, durable, non-absorbent light-colored ceilings; such as vinyl clad gypsum board, non-acoustical lay-in panels. Dark shades such as black are not approved. Open structure ceiling, exposed utility pipes, duct work, conduit and overhead sewer lines are not permitted over areas where food and beverage are being prepared, handled, assembled and stored. The use of vinyl wall covering and/or carpet will not be permitted. Food service and storage areas must have a finished ceiling height of seven foot six inches minimum. Standard ceiling height is eight feet.
5. Doors: Install solid wood cored or metal doors in all food and food related areas including restrooms, janitorial and laundry rooms. Hollow cored, pocket or bi-fold

doors are not approved. Doors to restrooms must be self-closing. Wood trim in food service areas are not approved.

B. Cookline

Stainless steel wall finishes must be provided behind and adjacent to cookline equipment and other equipment that produces excessive heat or steam. Install the stainless steel from the bottom edge of the hood to the top of the finished floor.

C. Walk-In Refrigerators or Freezers

1. Floor: Finishes must meet the minimum criteria listed in Section X, A 1. In addition, pre-fabricated flooring such as stainless steel or diamond-plate aluminum is approved and will be required in certain applications such as beer coolers. Galvanized steel, sealed concrete and wood are not approved.
2. Floor/Wall Juncture: Interior and exterior floor/wall junctions must be tightly sealed by means of screed, grout or silicone radius.
3. Walls: Wall panels must be NSF approved. Fiberglass reinforced panels (FRP), painted and wood will not be approved for either interior or exterior installations.
4. Ceiling: Pebbled galvanized/aluminum panels meet the minimum code standard. White coated ceilings are available and should be considered to increase overall illumination.

D. Bar, Beverage Stations, Wait Stations, Buffets and Salad Bars

1. Floors: Floor finishes must consist of durable, light-colored, non-absorbent, grease resistant and easily cleanable material. Approved floor finishes must be installed under the fixtures and extend a minimum of three feet beyond the station.
2. Floor/Wall Junctures: Base coving or coved radius is required at the floor and wall juncture. Kick plates will not be approved.
3. Walls: Walls must meet standards outlined in Section X. A. 3., including the interior bar wall surfaces and undersides of the bar counter tops. Dark shades such as black will not be approved. Examples of wall materials include FRP, ceramic tile and stainless steel. Exposed joints, studs or other support structures will not be permitted.
4. Ceilings: Install smooth, durable, non-absorbent light-colored ceilings; such as vinyl clad gypsum board, non-acoustical lay-in panels or painted drywall. Dark shades such as black are not approved. An open structure ceiling, exposed utility pipes, duct work, conduit and overhead sewer lines are not permitted over areas where food and beverage are being prepared, handled, and assembled.

5. Millwork: Counter/cabinetry must meet standards outlined in Section IV, C.

E. Restrooms

1. Floors: Floor finishes must consist of durable, light-colored, waterproof, grease resistant and easily cleanable material. Rugs or carpet will not be permitted.
2. Floor/Wall Junctures: Floor/Wall junctures must be tightly sealed. Wood base will not be permitted.
3. Walls: Construct walls with a smooth, durable, easily cleanable, light-colored material. Wall finishes behind fixtures such as lavatory sinks; toilets and urinals must be non-absorbent materials such as FRP or ceramic tile. Wood, painted drywall, plastic laminate, wallpaper and galvanized steel will not be permitted four feet up from the finished floor. Stall dividers must be constructed using durable and corrosion resistant materials. Galvanized finishes or wood structures will not be approved.
4. Ceilings: Ceilings are to be durable, smooth, non-absorbent and light-colored material. Open ceiling structure is not approved.

F. Delivery, Receiving, Vestibules and Basements

Any area used for a combination of previously defined activities such as delivery areas, stairwells, hallways, indoor firewood storage, vestibules and basements must meet the more stringent requirements imposed on the adjacent area.

G. Summary of Room and Area Finishes

1. Floors: Quarry tile and quarry tile base coving is a standard for retail food service. The minimum floor finish is vinyl composition tile (VCT) with rubber or vinyl base cove. Stairs, if present, must meet specified commercial floor covering standards. Safety treads if used must be durable and easily cleanable.
2. Floor/Wall Junctures: A coved radius and a tight seal are required at the floor/wall juncture.
3. Walls: Stainless steel is the standard finish approved for installation behind and adjacent to any cooking or heat producing equipment. Ceramic tile and FRP are standard finishes for all other food service areas. Any painted wall sections will require a semi or high-gloss finish. FRP may not be painted. The use of flat, eggshell, matte, or satin finishes is not approved. Corner guards one and one half to two inches in width constructed of stainless steel, aluminum, or fiberglass must be installed in high traffic areas.

4. Ceiling: Drop-in smooth, non-fissured, vinyl-clad gypsum board panels or painted drywall with a light-colored semi-gloss, washable finish are the standards for ceiling finishes.

H. Grocery – Retail Processing Room and Area Finishes

1. Floors: (See section X, A1.). Sealed concrete using an acrylic based sealer will be approved in walk-in freezers in lieu of tile.
2. Floor/Wall Junctures: (See section X, A2.). Substitute diamond plate aluminum tightly wrapped around a 2 x 6 or 2 x 8 in lieu of using traditional cove tile base.
3. Walls: (See section X, A3.). FRP or walk-in cooler panels is the industry standard for grocery installations.
4. Ceiling: (See section X, A4.). Install smooth, durable, non-absorbent, light colored panels. Open structure is not permitted.

I. Grocery – Receiving, Stock and Back Storage Area Finishes

1. Floors: Sealed concrete using water-based sealer will meet the minimum requirements. White sanitation lines will be required twelve inches from the wall to designate a non-storage area.
2. Floor/Wall Junctures: Floor wall junctures must be tightly sealed.
3. Walls: At a minimum, walls 18 inches below the roof deck shall be painted with a white semi-gloss paint.
4. Ceiling: Open structure will meet the minimum requirements.

XI. Insect, Rodent and Pest Bird Control

A. Building

1. All food service areas including waitress stations and beverage (bar) areas must be fully enclosed. (See section XV for requirements pertaining to outside beverage service areas.) Proposals that include openable doors and movable walls such as garage/barn-style doors will require physical separation by means of walls, glass between the food and beverage stations and open-air dining and service areas.
2. Building vents are to be covered with a minimum of eight-mesh per inch wire screen.
3. Seal openings into the foundation and exterior walls around pipes, wires or conduits.

B. Entry, Receiving and Exit Doors

1. All exterior doors must be solid, self-closing and tight fitting. Designated exit doors must open outward. Light shall not be visible beneath door sweeps or around doorways. Thresholds, door sweeps, and weather stripping are required to prevent the entrance of insects and rodents. If a screen door is proposed, an interior vestibule with a commercial metal screen door may be installed. Screen doors must open outward and be self-closing and tight-fitting.
2. Garage-style delivery doors (vertically opened) must be protected against the entry of pests using appropriate weather stripping and seals. The installation of an overhead air curtain may be required.

C. Windows

1. All openable windows, except drive-thru or walk-up windows, shall be screened with at least 16-mesh per inch wire screening.
2. All service windows such as drive-thru or walk-up windows shall be equipped with hands-free automatic devices. Manual closing devices such as sliding windows, gravity or ball bearing closures are not approved.

XII. Garbage and Grease

A. Garbage Containers, Dumpsters and Grease Containers

1. Each food service facility is responsible for contracting with a garbage and/or grease disposal service, securing a storage location and determining the frequency for pick-up.
2. Waste compactors must be located outside. The compactor opening may not be located in food processing areas.
3. Balers may be located within the building, but not in food service areas.
4. Grease collection systems may not be located in utensil washing, food preparation and food service areas.
5. Recycled materials are considered garbage and must be stored and disposed of in the same manner.

B. Enclosures

Provide a detailed drawing and/or picture of the exterior garbage area. The location of the exterior equipment such as dumpsters for refuse collection and recycling containers shall be

screened from public view on three sides by a solid wall or fence at least six feet in height and on the fourth side by a solid gate at least five feet in height. And constructed in such a manner and of such materials so as to be rodent proof.

C. Garbage Area

1. Outside: Specify outside garbage dumpsters, containers and compactors to be located on smooth surfaces such as concrete or machine-laid asphalt. Grass or gravel will not be approved. This area must be large enough to accommodate standard size containers. Specify grease containers to be located on a concrete surface or provide containers with casters.
2. Interior Garbage Storage Rooms: A solid, tight-fitting, self-closing door must separate garbage area from all food service areas. Interior garbage storage areas must be ventilated by means of a separate exhaust system having a minimum of three air exchanges per hour. Another alternative is to provide a separate thermostatically controlled room that maintains a minimum temperature of 41° F at all times.
3. Covered Garbage Storage Areas: This area shall be designed to reflect a minimum three-foot opening between enclosure walls and the overhead covering on two sides with screening material of eight-mesh per inch. Another alternative is to provide a perforated metal vertical roll-down garage door to promote airflow. Garbage areas with partial overhead coverage must minimize the exposure of open structure and overhead rafters to prevent roosting and harborage of pest birds.

D. Garbage Area Finishes

1. Proposed garbage enclosure must be constructed with durable, non-absorbent materials and washable interior finishes able to withstand frequent cleaning (i.e. painted concrete masonry units or fencing).
2. Proposed interior garbage storage rooms must be constructed with durable, nonabsorbent and washable materials able to withstand frequent cleaning on interior walls and ceiling. (i.e. FRP).

XIII. Exhaust Hood Ventilation for Equipment

A. Exhaust Plans Submittal

1. Complete an Exhaust Plan Review Form for each new exhaust system installation or modification to existing systems for review and approval (one form per hood).
2. Submit exhaust plans and specifications indicating the type of equipment being proposed for installation under the cookline exhaust hood

3. For factory-engineered ventilation systems, complete the Exhaust Plan Review Form and attach performance specifications.
4. Exhaust systems must be installed in accordance with all municipal, county, state, fire and building department requirements.

B. When Exhaust Hoods Are Required

Type I hoods are required for food service equipment that produce smoke, greaseladen vapors, particulate matter, and odors. A Type I hood is defined as a stainless steel hood certified by UL, NFPA, and NSF with a fire suppression system. Type I hood must also meet factory engineered performance standards. Examples of equipment requiring this type of hood include but not limited to stoves, ranges, fryers, ovens, broilers, hot plates (except induction cookers), and salamanders.

Type II hoods are required for all food service equipment that produces steam, mist, heat and vapors. A Type II hood is defined as a stainless steel hood certified by UL, NFPA, NSF and usually do not require a fire suppression system. Type II hoods must meet minimum performance standards. Examples of equipment requiring this type of hood include but not limited to pizza ovens, gas convection ovens, pasta cookers, conveyor ovens, ban maries, kettles and undercounter style dishwashers.

C. Type of Exhaust Hood

General: Exhaust hood installations must be NSF approved, stainless steel and credentialed by recognized agencies. Black iron, galvanized, painted steel hoods do not meet current standards and must be upgraded to meet all applicable codes.

1. Canopy Hood: This is a standard wall-hung hood. Wall-hung canopy hoods must be designed as an overhead hood that completely covers the equipment it is intended to serve. The hood must overhang all underlying equipment by at least 12 inches on all open sides.
2. Island Canopy Hoods: Island hoods are open on all sides. They must be designed as an overhead hood that completely covers the equipment it is intended to serve. The hood must overhang all underlying equipment by at least 12 inches.
3. Ventilators: This hood is often referred to as a “low sidewall hood”. Ventilator noncanopy hoods must be designed as a wall hood that has a maximum height of three feet above the cooking surface. Ventilators are exempt from 12-inch overhang requirements.
4. Water Wash Hoods: Water wash hood systems are designed with a self-cleaning washing system. They must include the following additional requirements:

- a. Provide a floor sink within five feet of the hood for discharge. The drain line must be routed through the grease trap. A separate grease trap for the hood system may be required.
- b. Exposed horizontal piping must not be installed below the filter bank.
- c. Install a reduced pressure zone backflow preventer (RPZ) on the potable water supply line that serves the hood. Locate the RPZ so it is accessible for inspection must not be installed above the ceiling panels.

D. Size of the Exhaust Hood

The size of the exhaust hood is determined by the overall length of the equipment to be located under the hood. Specify end walls or stainless steel side skirts at each end of the hood, or provide a 12-inch overhang on all exposed sides of the hood.

Ventilators also known as low sidewall hoods are exempt from this requirement. When providing a 12-inch overhang the fire suppression compartment is not included as part of this overhang calculation.

E. Performance

Factory engineered exhaust systems must comply with manufactures performance standards. Systems that are not factory engineered must maintain a minimum of 50 feet per minute (FPM) capture velocity at a height of six inches above the cooking surface.

F. Exhaust Ducts

1. Exhaust: Kitchen exhaust systems must be designed and constructed to exhaust air through duct(s) directly to the outside atmosphere in a safe and nuisance-free manner. Non-rooftop exhaust ducts and duct-less systems will require written approval from local building and fire department authorities prior to health department review.
2. Number: Multiple takeoff ducts are required for all hoods 10 feet or more in length.
3. Velocity: Duct air velocity must be a minimum of 1,500 FPM, with a maximum of 2,200 FPM.
4. Interference With Other Fuel-Burning Equipment: Oil or gas-fired furnaces and water heaters must be located in designated utility room separated from the kitchen and food service areas. Ductwork for the exhaust system may not crossconnect with utility ducts.

G. Exhaust Baffles

1. Size: Before entering the ductwork, all exhaust air must pass through approved, removable baffle filters or grease extractors. Calculate the appropriate number of

baffles/extractors needed based on the length of the filter bank and the size of the baffles/extractors.

2. Design: Baffles or extractors must be installed at a 45-degree angle and shall be sized appropriately to fit the hood. Spacers may be needed to eliminate any gaps between baffles. Installation of spacers over grease-producing equipment is not approved.
3. Type: Baffles or extractors specified must be of the same type so they will not adversely affect the static pressure of the total system. Mesh filters are not approved for Type I hoods.
4. Installation: Baffles or extractors must be installed vertically to channel grease accumulation to the collection container.

H. Exhaust Fan

1. Specifications: The fan specifications (make and model) must be compatible with the exhaust system.
2. Location: Exhaust fans must be located to discharge to the outside atmosphere in a safe and nuisance free manner.

I. Make-Up Air

1. Balanced Air Flow: Exhaust systems with air removal capacity of over 1,500 cubic feet per minute (CFM) must be provided with sufficient make-up air equal to or slightly less than the total CFM to be exhausted. The complete HVAC system and cookline exhaust system with make-up air must be operable at the time of balancing and testing.
2. Tempering: Make-up air must be tempered (i.e. heated to room temperature.)

Hood Construction Criteria

1. The hood material must be stainless steel.
2. The maximum distance between the bottom edge of hood and the floor is seven feet.
3. The maximum height of the bottom edge of the hood above the cooking surface is four feet.
4. The minimum height of the hood itself is 24 inches.
5. The minimum static pressure is one-half inch.

6. Hoods located less than 18 inches from the ceiling or wall must be closed with approved material to the ceiling and wall.
7. The minimum distances between the lowest edge of a baffle or extractor and the cooking or heating surface are:
 - a. Three feet for exposed or unexposed flame units.
 - b. Four feet for charcoal.
8. Provide a minimum of 50-foot candles of light in the hood to be measured six inches above the cooking surface. Protective light globes must be provided on lighting.
9. Fire suppression tanks may not be located over sinks or food preparation equipment.
10. Horizontal runs of exposed piping or fusible links of the fire protection system below the filter bank in the hood or the make-up air plenum will not be approved. Exposed piping/conduit on the exterior of the exhaust hood must be spaced one-half inch to one inch away from all surfaces.
11. Fire suppression piping must be of easily cleanable material such as stainless steel or chrome.
12. Plumbing and electrical conduit must be concealed behind wall.
13. Exposed gas lines must be elevated six inches to 18 inches above the finished floor and spaced one-half inch to one inch away from all surfaces.
14. Obstructions such as shelving or pot racks shall not be installed between the cooking equipment and the ventilation filter bank.
15. Air intakes must be located at least 10 feet away from any exhaust outlet or vent. Insulation must not be applied on the interior of the ductwork.
16. Final approval of the overall exhaust system must be obtained. A hood-cleaning schedule may be requested. The schedule should indicate methods of cleaning, and the time interval between cleanings.

XIV. Outdoor Beverage Service Area

A. Plans

Separate plans for outdoor beverage service areas must be submitted to the Oak Park Health Department for review and approval before any construction may begin. Restrictions limiting outdoor bar service may be imposed in addition to the specifications and requirements contained in this document.

B. Beverage Prep

Outside food preparation will not be permitted. All lemons, limes, etc., must be cut inside the permanent establishment. Only a minimal number of liquor bottles may be stocked in this area. Opened bottles shall not be left outside overnight. Ice cream drinks and drinks mixed with a blender will not be approved.

C. Equipment

1. Bar equipment must meet NSF Standards and installation requirements. Provisions for bar equipment storage during the off-season must be specified.
2. Beverage Dispensers: Permanently installed beverage dispensers are not approved. Only canned and bottled beverages may be used. A single tapper installed with casters may be used to dispense beer. Tabletop frozen beverage dispensers are approved only when using pre-packaged mix.
3. Ice: Ice for consumption shall be stored separately from ice used for cooling bottle and cans. Where ice is used, an approved "ice caddy" that meets NSF standards must be provided. The ice caddy unit shall be used for transporting the ice from the icemaker to the ice bin. The ice bin is for storing and dispensing ice safely to the customer. The ice bin must be designed with a self-closing, retractable lid.
4. Dish Washing: Dish machines and three-compartment sinks are not approved for outdoor installation. Glassware must be properly protected during periods of storage. Glassware may not be displayed. The use of disposable single service items is recommended. All glasses, unused single service items, condiments, etc., must be returned to the inside permanent establishment at the end of each day.

D. Construction

1. Overhead Protection: A roof is required over the entire bar service area. The interior ceiling finish must be smooth, durable and easily cleanable. Open structure, thatched, or cloth coverings will not be permitted.
2. Interior Surfaces: Interior bar walls, die wall finishes, back bar wall, and undersides of bar countertops must be constructed of smooth, durable, non-absorbent, easily cleanable materials such as FRP, tile, or stainless steel. Bare wood is not permitted.
3. Floor Finish: Interior bar floor finishes must be smooth, durable, non-absorbent, and easily cleanable hard tile. Bare or sealed concrete, or concrete overlays, will not be permitted.

4. Lighting: All bar areas must be provided with at least 50-foot candles of light for clean up purposes. Lighting must be equipped with protective shielding. Neon lights, beer signs, or other fixtures are not approved above the bar as these are frequently used as nesting sites for birds.

E. Plumbing

The outside bar must be provided with an approved water supply and connected to the sanitary sewer. All plumbing shall be installed in accordance with the Illinois State Plumbing Code. At least one bar hand sink and an utility/dump sink must be provided and installed in the bar area. Both sinks must be permanently plumbed.