

General Food Establishment Plan Review Guidelines For Food Service Operators in Milwaukee, WI

This construction guide is designed to help you submit an accurate and complete plan for review. It does not list every requirement for new or remodeled establishments, but may help you understand the food service requirements listed in the Wisconsin Food Code

http://docs.legis.wisconsin.gov/code/admin_code/dhs/110/196_.pdf

The plan review and preinspection process will help ensure that your food establishment meets food safety requirements and will help you establish an organized, safer, and more efficient method for preparing food. A plan that is submitted and complete allows the plan review process to proceed, which may reduce time and money spent on improper equipment, materials or other items that are costly to correct and delay opening your establishment.

Food license applications are processed by the License Division of the Milwaukee City Clerk's Office: www.milwaukee.gov/license (414) 286-2238.

Information required to complete plan review includes:

- Proposed menu, including expected number of meals served per day and number of deliveries per week.
- Equipment schedules and list of equipment to be installed (make/model).
- Floor plan drawn to scale showing the location and label for all equipment, plumbing, electrical, ventilation, and storage:
 - Food preparation sinks and food preparation counters.
 - Drains, the grease trap, utility/mop sink, backflow prevention devices/methods, and location of all plumbing drains and water lines.
 - Handwashing sinks and warewashing equipment, including the hot water heater.
 - Equipment for cooking, hot holding, and cold holding of food, beverages and ice.
 - Ventilation equipment.
 - Label all food and beverage storage areas, including back stock, self-service areas, etc.
 - Label all chemical, equipment, garbage, restrooms, employee-use areas, outer openings (windows/doors).
- Site plan showing location of business in building; location of building on site, including street names; and location of any outside food or beverage serving areas or equipment (grill, tiki bar, grease traps, dumpsters, well, septic system, etc.).
- Source of water supply (if private well, must submit most recent water test results).
- Method of sewage and grease disposal.
- Finish materials schedule for all surfaces (floors, walls, ceilings, sinks, counters, shelving, etc.) in the establishment.
- Copies of Conditional Letters of Approval.

Your set of plans must show and specify the following in detail:

HANDWASHING SINKS

Conveniently located, properly supplied handwashing sinks are required in food and beverage preparation or dispensing areas, warewashing areas, and restrooms so food workers will wash their hands as needed.

The number of required hand sinks is based on the layout and size of the facility, number of food employees, and menu.

Label the locations of all handwashing sinks on the plan.

- Must be conveniently located and only used for handwashing.
- Must provide water under pressure and at a temperature of at least 85-110°F through a mixing valve or combination faucet.
- Fixtures must be non-hand operated to prevent recontamination of hands. Wrist paddles, elbow paddles, foot or knee pedals, photo-eye or single wand/lever off top of faucet if long enough are typical examples. Metered faucets must provide water for at least 15 seconds without the need to reactivate the faucet. Ensure proper clearance between faucet handles and backsplash to allow proper activation.
- Soap, single-use disposable towels, a hand wash sign, and a trash container must be provided. Non-heated air-knife, high velocity hand dryers are also acceptable for hand drying.
- Must be located to avoid contamination and be accessible at all times. If unpackaged food or clean equipment and utensils are within 18 inches of the hand sink, the food or equipment must be protected from splash by use of a splash guard attached to the hand sink that extends at least as high as the faucet outlet and is made of durable, cleanable, nonabsorbent material, such as stainless steel or plastic.

FOOD PREPARATION AREAS

Adequate surface area must be provided for handling and preparing raw meat, fish, and poultry if animal products are served.

Label all food preparation areas on the plan. Include the surface finishes (such as stainless steel, solid surface) for each area.

- Work surfaces used for food preparation must be made of stainless steel or other smooth, easily cleanable, durable, corrosion-resistant material.
- If the menu has products that require washing produce, rapid thawing, or rapid cooling (ice bath), a food preparation sink separate from utensil-washing sinks must be installed. This sink must be finished with an indirect (air-gapped) waste drain.

DISHWASHING FACILITIES

A properly sized and supplied three-compartment sink (minimum) or commercial ANSI/NSF dish machine is required to safely wash multi-use kitchen utensils, food preparation equipment, serving ware, and related utensils. Proper dishwashing procedure is to wash, rinse, sanitize and air dry.

Label the location of the dishwashing sinks and machines on the plans. Include the mechanical specifications for all warewashing equipment.

Sinks:

- Must be smooth, easily cleanable, nonabsorbent, and durable.
- Must have rounded (coved) corners, be smooth, and have no welded seams.
- Must be large enough to allow immersion of largest equipment and utensils.
- Must have self-draining drain boards at each side of the three-compartment sink to accommodate soiled and clean items. Drain racks may also be used. Drain boards/racks must be of sufficient capacity to separately store all clean and dirty dishes at peak times. Air drying of all items is required after dishwashing.
- To facilitate thorough cleaning, a four-compartment sink is recommended where heavy volume or grease-producing activities occur.

DISHWASHING FACILITIES
(continued from previous page)

Dishwashing machines:

- Must be National Sanitation Foundation (NSF) certified or equivalent with an appropriate data information plate.
- Must be air-gapped (or other approved cross-connection protection method) to the waste drain.
- Must follow Department of Safety and Professional Services (DSPS) requirements for ventilation.
- May require pre-wash sink prior to dishwasher for heavily soiled items to ensure thorough cleaning.
- Must automatically dispense detergents and sanitizers.
 - Automatic detergent, sanitizer, or other chemical faucet dispensers (pre-mix wall mount stations) shall be protected from backflow or backsiphonage.
- **Chemical Sanitization:** Dishwashing machines that use a *chemical* sanitizer must be equipped with a device that audibly or visually indicates when more sanitizer needs to be added. Sanitizing testing materials (test strips) to adequately measure the chemical sanitizer must be available and used.
- **High Temp Sanitization:** Dishwashing machines that use a *hot water* sanitizing step must have a booster heater, or be connected to an approved hot water recirculating system that is capable of maintaining the rinse water at 165°F for stationary rack systems, and 180°F for all other machines. Final dish surface temperature must reach 160°F as indicated by an irreversible registering temperature indicator (waterproof min/max thermometer, thermolabels). Hot water sanitizing machines must have an accurate pressure gauge and thermometer to indicate proper water flow pressures and temperatures. Unless required by another agency, high temperature dish machines should not flow into the grease interceptor.
- Prewash sinks (first compartment of four-compartment sink or sink before dishwasher) shall not be used as handwashing sinks in newly licensed food establishments.

UTILITY OR MOP SINK

At least one mop sink or curbed cleaning facility with a floor drain must be provided for cleaning mops or the disposal of similar liquid wastes.

Label the location of the designated cleaning area and mop sink on the plans.

- Disposal of mop water into toilets or urinals is not allowed for newly licensed food establishments.
- A designated area is required for the proper storage and air-drying of mops, brooms, and other cleaning equipment.

COLD HOLDING FOOD STORAGE OR DISPLAY- REFRIGERATION AND FREEZERS

Adequate cold holding is an essential element in food safety. In order to quickly and safely cool potentially hazardous foods and to store foods for extended periods of time, cold holding equipment must be available in sufficient quantity with enough storage space.

Domestic-type refrigeration or freezer units are not acceptable in food establishments because they do not have sufficient capacity, are not easily cleanable, and do not withstand the usage associated with a commercial food establishment.

ANSI or NSF Standard 7-approved cold holding equipment is required.

Note the location of all refrigerated equipment on the plans. Include the mechanical specifications for each piece of cold holding equipment.

- Refrigeration units must be capable of maintaining cold food to an internal temperature of 41°F or below when used for potentially hazardous foods.
 - Includes salad bars, cold food bars, prep top coolers, and/or similar top opening coolers.
- Freezers must maintain frozen food frozen.
- All cold holding units must be provided with a thermometer, accurate to plus or minus 3°F, in easy-to-see location in warmest part of the unit.
- Shelving must be smooth, nonabsorbent, easily cleanable, and allow airflow. Wood or foil-covered shelving is not acceptable.
- The interiors of cold holding units must be smooth, nonabsorbent, and easily cleanable; all joints must be sealed.
- Condensate water from cold holding units must be drained with an air gap to an evaporator pan or floor drain. Floor drains for walk-ins cannot be directly connected to sanitary water disposal system.
- Walk-in refrigerators may be required when there is a need for long-term storage of potentially hazardous foods or when the menu includes foods that are cooled, such as pasta salads, soups, and roasts.
- Reach-in refrigerators are designed for short-term storage of potentially hazardous foods and should not be used to cool hot, potentially hazardous foods.
- Refrigerated worktables are to provide easy access to foods during assembly. They are not to be used for long-term storage or for cooling of hot, potentially hazardous food.
- The number and type of refrigeration units required are determined by the menu, flow of operation, food handling steps (such as cooling and thawing practices), and quantity and frequency of deliveries.
- Refrigeration storage must maintain proper storage order of raw animal foods (meats, fish, poultry, eggs, etc.) to prevent cross-contamination of ready-to-eat foods.

COOKING AND HOT FOOD STORAGE OR DISPLAY

Adequate cooking and hot holding equipment must be provided and must meet ANSI or NSF standards.

Include the location and specifications of all cooking and hot holding equipment on the plan.

- All cooking equipment must be constructed to be safe, durable, and easily cleanable.
- Reheating equipment must be able to rapidly reheat TCS (time/temperature control for safety of foods) to 165°F.
 - All hot storage or display facilities must:
 - Be capable of maintaining hot food at an internal temperature of 135°F or above and
 - Be provided with a thermometer accurate to plus or minus 3°F.

For temperature verification of hot and cold food temperatures, a food-probe thermometer accurate to plus or minus 2°F must be available with a range of 0-220°F. If thin meats, such as filets, chicken patties, hot dogs, and hamburgers, are prepared, a thin probe thermometer for measuring the internal temperature of the product is required.

VENTILATION, HOODS AND DUCTS

Hood exhaust systems are required to remove moisture and cooking by-products (smoke, steam, grease, vapors, and heat). Insufficient removal of by-products and moisture may lead to flammability, cleanability, or contamination issues.

Note the location of ventilation units on the plans. Include the mechanical specifications.

- Ventilation for cooking equipment and toilet rooms must be designed and installed in accordance with mechanical and fire codes.
- All rooms must have sufficient make-up air and exhaust ventilation to keep them free of excessive heat, steam, condensation, vapors, odors, smoke, and fumes.
- Filters or other grease-extracting equipment must be designed to be readily removable for cleaning and replacement, if not designed to be cleaned in place.
- Gas connections need to be installed as specified by manufacturer (flexible or ridge piping depending on whether on casters or non-movable). Quick disconnects are recommended for convenience.
- Fire suppression requirements are regulated by the local fire codes.

EQUIPMENT

All display cases, counters, shelves, tables, refrigeration, sinks, utensils, grills, griddles, fryers, ice machines, steam tables, slicers, grinders, food processors and other equipment used in connection with the preparation, service, and display of food must be made of non-toxic materials and be constructed and installed to be easy to clean and maintain.

Include the specifications of all pieces of equipment and note location of equipment on the plans.

- Equipment and utensils must be designed and constructed of non-toxic, durable materials that are safe, corrosion-resistant, nonabsorbent, easily cleanable, and able to withstand repeated washing and sanitizing. Equipment must be American National Standards Institute (ANSI) certified [such as National Sanitation Foundation (NSF), or United Laboratory-Sanitation (UL-S)], when appropriate.
- Identify custom fabricated equipment with the name and address of the fabricator. Shop drawings must be provided for custom fabricated equipment, indicating the construction details.
- Table-mounted equipment that is not easily movable must be sealed to the counter or elevated at least four inches.
- Floor-mounted food equipment that is not easily movable or on casters must be sealed to the floor, elevated on wheels or legs with a minimum height of six inches, or installed with sufficient space around the equipment to allow cleaning in place.
- Equipment standards also apply to dry storage shelving and shelving located in walk-in refrigerators and freezers, counters and cabinetry (not to be installed with enclosed hollow bases).
- Wood and natural wicker may not be used as a food-contact surface, except close-grained hardwood may be used for items such as cutting blocks, cutting boards, baker's tables, rolling pins, or salad bowls.
- Beverage tubing and cold-plate beverage cooling devices must not be installed in contact with stored ice that is intended for consumption.
- Aisles and working spaces between units of equipment and walls shall be unobstructed and of sufficient width to permit employees to perform their duties readily without contamination of food or food-contact surfaces by clothing or personal contact. All easily moveable storage equipment, such as pallets, racks, and dollies, shall be positioned to provide accessibility to working areas.
- A mechanical washer and dryer must be provided if linens (other than wiping cloths) are washed on site and must be located to prevent contamination of food, equipment, utensils, single service items, clean linens, etc.
- Additional surface material considerations:
 - Non-food-contact surfaces exposed to splash, spillage, soiling or that require frequent cleaning shall be constructed of a corrosion-resistant, nonabsorbent, and smooth material.
 - Food/beverage contact surfaces must be food/water grade.
 - Finished (sealed) hardwood may be acceptable on a limited basis for decorative purposes on service and display area equipment.

CUSTOMER SELF-SERVICE

Self-service displays of unpackaged foods or utensils must be protected from contamination by the customer.

Label the location of all customer self-service areas, such as buffets, salad bars, and bulk food dispensers, on the plans.

- Soft drink machines for self-service and refilling must be designed to prevent contact with the lip-contact surface of glasses or cups.
- Adequate sneeze shields on display cases must be installed at all displays of unpackaged foods accessible for service by the customer. Shields must be constructed of transparent material – tempered glass, safety glass, or shatter-resistant plastic. The exposed ends of the salad bar/buffet must be protected from contamination by patrons by installing full-length side shields or panels.
- Consumer self-service operations for ready-to-eat foods shall be provided with suitable utensils or effective dispensing methods that protect the food from contamination.
- A sign must be conspicuously posted advising the consumer to use the utensil provided. The dispensing utensil must be secured in a manner that precludes the potential for consumer contamination. It is recommended to post a placard in self-service food areas instructing the customer to use the tissues or tongs provided.
- A notice must be posted at the self-service food area to notify consumers that soiled tableware and single-service utensils may not be re-used. For example: "Please take a clean plate for each trip to the salad bar."
- Approved dispensers shall be installed for proper storage and dispensing of single-service items (e.g., cups, straws, toothpicks).

STORAGE

Food storage areas must be constructed so that food and equipment are stored off the floor and protected from potential sources of contamination.

Include the dimensions and locations of storage rooms on the plans. Include the type (painted wood, metal) and square footage of shelving.

- Food, clean utensils and equipment, linens, and single-service articles must be stored at least six inches above the floor and may not be stored in locker rooms, mechanical rooms, restrooms, areas used for garbage storage, under unshielded sewer or leaking water lines, under stairwells or in other areas with potential contamination.
- All chemicals and cleaning equipment must be stored away from food and food-contact equipment storage and be labeled to indicate contents.
- All exposed surfaces of cabinetry and shelving must be finished with a smooth, nonabsorbent, corrosion-resistant, easily cleanable surface. Bare wood shelving is not permitted.
- Shelving over sinks or near water sources must be made from water-impervious materials, such as metal.
- The size of storage area required is determined by the amount of equipment, the menu, and the frequency of deliveries.
- Provide a separate approved area for the temporary storage of products held for return, including damaged, spoiled or recalled products

EMPLOYEE AREAS

Note the location of employee areas on the plan review.

- Lockers or other suitable facilities away from food preparation areas must be provided for the storage of employee possessions.
- Dressing areas must be provided in the establishment if the employees regularly change their clothes in the establishment.
- A separate area away from food preparation and warewashing areas should be designated if employees are not allowed to eat in the dining room.

DELIVERY AND CATERING (ON OR OFF PREMISES)

Include quantities and material specifications for all transportation and temperature control for delivery and catering equipment.

Also include plans and equipment used for handwashing availability.

- Containers and temperature-control equipment of adequate quantity and construction, such as commercial, insulated carriers, must be available to safely transport potentially hazardous foods off site.
- Electric hot holding equipment must be used to maintain proper temperatures of hot, potentially hazardous foods off site.
- Mechanical cold holding units, or ice, must be available to maintain the proper temperature of cold, potentially hazardous foods.
- Transportation vehicles must be adequate in size and repair to transport foods without contamination and with minimal time in transit.
- Handwashing units must be available for offsite food preparation or service.
- A proper Consumer Advisory is required for all animal products that are served raw or undercooked.

OUTER OPENINGS – PEST CONTROL

Label the location of all doors and windows that open to the outside.

- Windows or doors must be kept closed or must be protected against the entry of insects and rodents by 16 mesh to 1-inch screens, properly designed air curtains, or other effective means.
- Outer opening doors must be equipped with adequate self-closing devices and vermin-resistant thresholds.
- Openings from the establishment to the outdoors must be protected against the entry of vermin by filling or closing holes and other gaps along floors, walls, and ceilings.
- Establishment must be pest free.

GARBAGE AND REFUSE

Include the location of the outdoor refuse area on the site plan.

- Receptacles for refuse, recyclables, returnables and materials containing food residue must be durable, cleanable, insect and rodent resistant, leak proof, and nonabsorbent.
- Receptacles used outside the food service establishment must be designed and constructed to have tight-fitting lids, doors or covers. The outdoor storage surface for refuse must be constructed of nonabsorbent material, such as sealed concrete or asphalt, and must be smooth, durable, and sloped to drain.
- Garbage and refuse must be located away from food, equipment, utensils, linens, and single-use articles and must be maintained so that a public health hazard or nuisance is not created.
- Ideally, outdoor garbage receptacles should be located near a hose bibb with hot water to facilitate periodic cleaning and should drain to the grease interceptor. Contact the building department to see if this is an option in your area.

RESTROOMS

Properly designed, adequately stocked, accessible, and well-maintained restrooms must be available at all times for employees.

Indicate the location and surface finishes of all restrooms in the facility.

- At least one restroom is required for employee use. Additional toilet facilities may be required by national, state, or municipal building codes.
- If establishment is carryout or has customer seating, restrooms must be provided for customers. Public access to the restrooms may not be through food preparation areas or areas where unpackaged foods are stored.
- Restrooms must be provided with tight-fitting, self-closing doors, adequate forced-air ventilation, trash receptacles, and approved handwashing sinks. Where Z-type entrances are used, self-closing doors are not required.
- Restrooms used by women require covered garbage containers for disposal of sanitary items.
- Handicap-accessible restrooms are required by DSPS.

WATER SUPPLY

Include the water source and hot water tank size and location on the plans.

Label all locations of nondrinking water (such as fire protection or air conditioning systems) on the plans.

- Potable water for the needs of the food establishment must be provided from a public water system or from a source constructed, maintained, and operated according to Chapter NR 809, Wisconsin Administrative Code.
- Adequate supply of water under pressure must be provided to all plumbing fixtures.
- All water, including hot water, must be sufficient to meet the peak water demands throughout the food establishment. The number of sinks, type and frequency of dishwashing, menu, and other factors determine hot water needs.
- A drinking water system must be flushed and disinfected before being placed into service after construction, repair, contamination, or modification.
- Nondrinking water may only be used as approved by the health department and may only be used for non-food purposes, such as air conditioning, equipment cooling, fire protection, and irrigation. All piping used for nondrinking water must be clearly and durably identified.
- If the establishment is not on a municipal water system, a recent water test result will need to be verified as safe prior to opening the establishment.

SEWAGE DISPOSAL

Indicate wastewater disposal method (sewer or onsite septic system) on the plans.

- All sewage and wastewater must be disposed into a public sewage system or an individual onsite sewage disposal system that complies with state laws and regulations. Onsite sewage systems will need approval from local zoning and/or plumbing departments before use for a food establishment.

PLUMBING

All water entering the food establishment for food or drinking purposes must be from an approved potable source and delivered through approved plumbing materials.

Include the plumbing schedule and location of all drains and water lines on plans. Also include the size and location of the grease trap.

- Plumbing must be sized, installed, and maintained in a safe manner and according to local, state, and federal codes.
- All utility and sewer lines must be installed so they cannot contaminate foods or food-contact surfaces.
- If unpackaged food or clean equipment and utensils are within 18 inches of any sink fixture, the food or equipment must be protected from splash by use of a splashguard attached to the sink that extends at least as high as the faucet outlet and is made of durable, cleanable, nonabsorbent material, such as stainless steel or plastic.
- Condensate from refrigeration equipment shall be drained to a floor drain located outside of the unit or shall be equipped with an evaporator pan. Floor drains for walk-in coolers cannot be directly connected to a sanitary water disposal system.
- Floor drains must be easily accessible for maintenance and cleaning and be equipped with proper strainers.
- Floor sinks must be properly placed so that all equipment with liquid waste is properly drained. All floor sinks must be readily accessible for inspection, cleaning, and maintenance. They are to be flush with the floor surface.
- In order to prevent blockage of the sewer system due to accumulated grease and oils from a food establishment, many wastewater treatment agencies or city building departments require the installation of grease traps that must be easily accessible for cleaning and maintenance.

BACKFLOW AND BACKSIPHONAGE PREVENTION

Backflow prevention devices or methods are necessary to protect the public water system from backsiphonage of wastewater from the establishment. Backflow prevention also helps protect the establishment from the backflow of sewage into warewashing sinks, food prep sinks, ice machines, ice bins, dipper wells, thermalizers, beverage dispensers, espresso machines, and similar types of equipment. Backflow prevention devices must meet American Society of Safety Engineers (ASSE) standards.

List all types and label locations of backflow prevention devices or methods.

- The supply lines or fittings for every plumbing fixture must be installed so as to prevent backflow. This also includes all hose bibs, ice cream dipper wells, and water supply lines to carbonators.
- Air-gapped inlets: All water inlets (such as faucets) must have an air gap between the water supply and the flood-level rim of the plumbing fixture. The air gap must be at least twice the diameter of the water supply inlet and may not be less than one inch.
- Submerged inlets: Any inlet that does not have an approved air gap is a submerged inlet and must have a vacuum breaker or other approved backflow prevention device (double-check valves, reduced pressure zone backflow preventers). Common submerged inlets include faucets used with hose attachments, toilets, urinals, warewashing machines with automatic detergent and/or sanitizer dispensers, chemical faucet dispensers (pre-mix wall-mounted stations) and garbage disposals.
- Outlets: Equipment and fixtures used for the storage, preparation, and handling of food, including ice, must discharge through an indirect waste pipe by means of an air gap. Food equipment such as ice machines, ice bins, espresso machines, food preparation sinks; dipper wells, refrigeration units (including walk-in coolers and freezers), steam tables, thermalizers, and salad bars must be indirectly drained to the waste system.

FLOORS, WALLS AND CEILINGS

The finish materials for floors, walls, ceilings, partitions, and half walls in all food preparation areas, food storage areas, dishwashing, garbage areas, walk-in cooler/freezer units, and toilet rooms must be smooth, durable, and easily cleanable and should be light colored to increase ability to observe and clean soiled areas.

Floors, walls and ceilings in high-use, heated, or moist areas must also be nonabsorbent (corrosion resistant if metal) to withstand moisture, repeated cleaning, grease, and chemicals.

Specify finish materials for all floors (including walk-in refrigeration units), walls, and ceilings.

- Floor materials considered smooth, nonabsorbent, easily cleanable and durable include:
 - Quarry, terrazzo, or ceramic tile, sealed concrete, commercial-grade sheet vinyl with grease resistant finish.
- Carpet and other absorbent flooring is not allowed in food preparation or serving areas, refrigeration areas, food storage areas, restroom facilities, or refuse storage. Carpet provided must be closely woven and easily cleanable. Wood floors in dining areas must be sealed to facilitate cleaning.
- Mats and duckboards must be removable and easily cleanable.
- Wall materials considered smooth, nonabsorbent, easily cleanable:
 - Stainless steel, FRP (Fiberglass-reinforced plastic), ceramic tile, and gloss or semi-gloss enamel paint
- Wall materials such as unsealed brick, concrete block, rough plaster, grooved paneling, and wallpaper are difficult to clean and/or lack durability.
- Walls below any hood shall be covered with ceramic wall tile or stainless steel, properly installed from the base of the hood to the coved baseboard.
- If a shelf or other equipment (such as a salamander heater or cheese melter) will be installed over cooking equipment, an angled or coved deflector constructed of stainless steel shall be installed according to NSF standards.
- Floor and wall junctures shall be coved and closed to no larger than 1 mm (1/32 inch).
- Where water flush cleaning methods are used, floors shall be provided with drains and be graded to drain, and the floor and wall junctures shall be coved and sealed.
- Ceiling materials considered smooth, nonabsorbent, easily cleanable:
 - Washable vinyl tiles, FRP, gloss or semi-gloss enamel paint.
- Acoustical ceiling materials can be used in dining rooms. These are not smooth, nonabsorbent or easily cleanable so are not approved in most other food establishment areas.
- Backsplashes behind sinks and dishwashing equipment must be made of nonabsorbent material. Suitable wall coverings in these areas include sealed metal flashing, sealed FRP, and ceramic tile. Painted drywall is not acceptable in high-moisture areas. The water-resistant material should extend at least three feet above counters and at least six feet above the floor.
- Utility service lines and pipes may not be unnecessarily exposed, and must be installed so they do not obstruct or prevent cleaning of the floors, walls, or ceilings. Exposed horizontal utility service lines and pipes may not be installed on the floor.
- All junctures between the wall surface and the edges of attached equipment as well as all annular openings around pipes or other conduits where they pass through walls and floor shall be sealed with an approved caulk/sealing compound.
- Studs, joists and rafters shall not be exposed in food preparation areas, equipment-washing and utensil-washing areas, storage areas, vestibules, and toilet rooms.

LIGHTING

Adequate levels of shielded light are essential in food preparation areas to protect the food, ensure the adequacy of cleanup operations, and reduce accidental injury to the food worker.

- All lights must be shielded, coated, or otherwise shatter resistant in areas where there is exposed food, clean equipment, utensils, linens, or unwrapped single-use articles.
- Shielding can include a complete outer cover for the fixture, shatterproof bulb, or light tube with secure fit into end caps.

OTHER CONSIDERATIONS

No home kitchen or adjacent living or sleeping quarters

- A private home, a room used as living or sleeping quarters, or an area directly opening into a room used as living or sleeping quarters may not be used for conducting food establishment operations. Such areas must be separated by complete partitioning and solid self-closing doors.

Outside food/beverage areas

- Outside bar and grilling areas must meet food code standards (handwashing, ice storage, materials, equipment, etc.). Additional permits and inspections may be required.

Banquet facilities

- Banquet facilities must meet code requirements based on extent of food handling conducted on the premises. If prepared offsite, food must be from an approved source (properly licensed food establishment).

Shared facilities, multiple licensed food establishments on premises

- In cases of shared facilities, when a single premise is used by multiple food establishments with different owners/operators (carts, incubator/commissary kitchens, etc.), each food establishment must have its own food establishment license and certified food manager.

No smoking

- Wisconsin public establishments are smoke-free.
<http://www.dhs.wisconsin.gov/tobacco/>

Consumer Advisory for menu

- Facilities that serve raw or undercooked animal products are required to provide a proper Consumer Advisory at the point of order (menu, table tent, sandwich board, or other device).

Special processes – HACCP/variance

- Certain food handling procedures (such as packaging, preserving, smoking) or menu items (such as fresh molluscan shellfish) require additional procedures and equipment.

Certified Food Manager

A certified food manager is required within six months of opening.
<http://www.milwaukee.gov/cfm>

Employee training

- Employees must be properly trained in food safety as it relates to their assigned duties (illness reporting, handwashing, preventing bare-hand contact, allergy awareness, food temperatures, cleaning and sanitizing, preventing cross-contamination, date marking, etc.).

Other requirements/agencies

- Other requirements may be applicable for your specific facility. Please check with all relevant licensing and regulatory agencies if you have any questions (building, fire, zoning, plumbing, HVAC, electrical, etc.).

Sample Layout

The Onion and Chive

Soups, salads, and sandwiches served fresh

EQUIPMENT SCHEDULE

1. Mop Sink
 2. Hot Water Heater*
 3. Dry Storage (10x12x8')*
 4. Walk-in Refrigerator (10x12x8')*
 5. Three-Compartment Sink*
 6. High-Temperature Dishwasher*
 7. Handwashing Sinks
 8. Stainless Steel Food Preparation Counter
 9. Vegetable Prep Sink (24x24x24")*
 10. Ice Machine*
 11. Two-Door Refrigerator*
 12. Sandwich Prep Table*
 13. Six Burner Stove with Type 1 Hood*
 14. Dump Sink and Fountain Drinks
 15. Salad Bar*
 16. Refuse Area
- *Mechanical and/or Size Specifications Attached

FINISH SCHEDULE

Floors:

- Kitchen: Quarry Tile
- Walk-In: Quarry Tile
- Dry Storage: Quarry Tile
- Dining: Ceramic Tile
- Refuse: Sealed Concrete
- Mop Closet: Ceramic Tile
- Customer Self-service: Ceramic Tile

Walls:

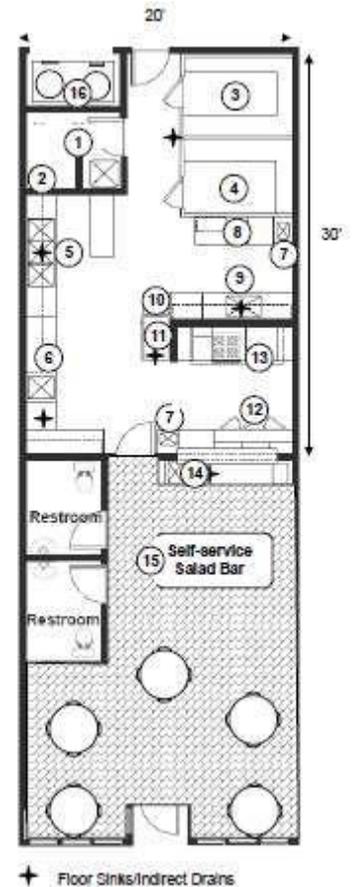
- Kitchen: Painted Wallboard with Sealed FRP 6' from floor
- Cook line: Stainless Steel
- Warewashing: Sealed FRP
- Handwashing Areas: Sealed FRP
- Dry Storage: Painted Wallboard
- Walk-in: Stainless Steel
- Mop Closet: Sealed FRP

Ceiling:

- Kitchen: Wallboard with Enamel Paint
- Dining: Suspended Acoustical Tile
- Restroom: Suspended Acoustical Tile
- Walk-in: Stainless Steel

Counters:

- Food Prep Area: Stainless Steel
- Warewashing Area: Stainless Steel
- Fountain Drinks Customer Service: Ceramic Tile



Actual plans must be drawn to scale and include all equipment and finish materials for your establishment.

City of Milwaukee Health Department



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(05/2016)