



Construction/Remodeling Guidelines

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Projects that Require Plan Review

1. **New Construction:** A building that is newly constructed or a conversion of an existing building that was not used as a food establishment beforehand.
2. **Remodel or Addition:** The extensive remodeling of a food establishment or a significant change that the regulatory authority determines that plans and specifications are necessary to ensure compliance.

Plans must be submitted to the Anoka County Health Department at a minimum of **30 days** prior to any construction, extensive remodeling or conversion of a food establishment.

Please contact the Anoka County Health Department at **763-324-4260** to start the plan review process.

General Equipment Information

1. Certain food and beverage equipment must be certified or classified for sanitation by the American National Standards institute (ANSI). Equipment that require this certificate include:
 - Manual Warewashing Sinks
 - Mechanical Warewashing Equipment
 - Mechanical Refrigeration Units
 - Walk-Freezers
 - Hot Holding Equipment
 - Cooking Equipment
 - Ice Machines
 - Mechanical Slicers
 - Mechanical Tenderizers and Grinders
 - Food Preparation Surfaces
2. Food-contact surfaces must be certified or classified for sanitation by the American National Standards institute (ANSI).
3. Primary food preparation surfaces (tables/counters) must be safe, durable, nonabsorbent, sufficient in weight and thickness to with stain repeated warewashing, smooth, easily cleanable and resistant to decomposition.
4. All countertop equipment must be installed so it is easily cleanable and movable. If the equipment is not easily movable it must be sealed to the counter or installed on 4 inches legs.
5. All floor mounted equipment must be installed on approved legs (6 inches) or casters; this includes cabinetry mounted on the floor equipment. **Enclosed bases are not allowed.**
6. Wood is not approved in food contact and storage areas of the food establishment. All exposed wood areas of the fabricated food/beverage service counters/cabinetry, including any interior areas, must be covered with at least a pressure laminated plastic material.
7. If hard grain decor wood (e.g. oak) is used, it must be properly sealed with a polyurethane varnish-like material.

8. If scoop-type ice cream (frozen products) or similarly dispensed foods are served, a running water dipper well is required to store dispensing utensils. Empty bins or buckets of stagnant water are not allowed for storage of in-use dispensing utensils.

Structural

1. Smooth, durable and non-absorbent materials for floors, walls, and ceilings in areas where food/drink is prepared or stored, where utensils/equipment are washed or stored, in walk-in freezers and refrigerators, in toilet rooms, janitors' areas, in opened food storage, food service areas, where garbage or refuse is stored, or similar areas.
 - a. Approved Flooring Materials Examples: Quarry tile, ceramic tile, terrazzo or similar and Vinyl Protect All.
 - b. Approved Wall Finishes: Ceramic tile, fiberglass reinforced panels, or stainless steel. No painted walls or fiber or peg board materials are permitted. Washable paint walls may be acceptable in dry storage areas where products are in original packaging and not opened.
 - c. Approve Ceiling Surfaces: Light colored, non-fissured, washable surface required. Acceptable surfaces include solid vinyl lay-in tile or washable painted gypsum ceiling.
2. Plastic laminate "Formica" surfaces are not acceptable on counters or tables in food preparation areas.
3. The installation of equipment on curbing will be acceptable with the following:
 - a. Solid masonry curbing;
 - b. Seamless equipment fabrication;
 - c. Continuous adhesive applied to the curbing during installation.
4. In kitchens, wait stations, bars, storage rooms, janitorial areas and toilet rooms the wall-floor juncture must be covered using the same material as the floor finish **cut tile does not meet the requirement for covered base**.
5. Install a covered base at all floor-wall junctions. Select and install covered base according to manufacturer's specifications. Figure 1 shows correct and incorrect positioning of covered base tile relative to flooring surface.

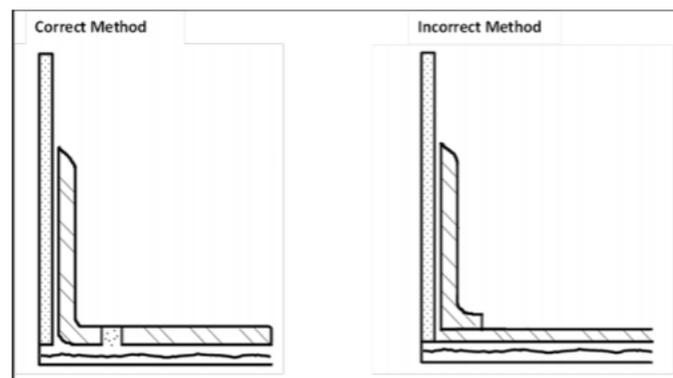


Figure 1

6. Grout must be water, grease and chemical resistant such as Hydroment™ or epoxy, not exceeding ¼ inch wide and as flush as possible.

Refrigeration

1. Adequate refrigeration must be of adequate size and location applicable to food handling. Food may not be stored on the floor of refrigeration units.
2. Mechanical refrigeration must be certified or classified for sanitation by the American National Standards institute (ANSI). Freezers do not have to meet this requirement.
3. All refrigeration units must hold food at 41 degrees F or less. Freezers must keep foods frozen.
4. Ambient air thermometers must be provided for all refrigeration units.

Handwashing

1. An adequate number and conveniently located handwashing sinks must be located in serving, cooking, food preparation, utensil cleansing, and toilet rooms. Handwashing sinks must be installed to allow easy access for all employees who are preparing or dispensing food and beverages, conducting warewashing or using the toilet room.
2. Hand washing facilities must include mounted dispensable soap and single-service paper towels or other approved drying device.
3. Each hand washing sink must be equipped to provide water at a temperature to allow handwashing for at least 15 seconds through a mixing valve or combination faucet. A self-closing, slow-closing, or metering faucet must provide a flow of water for at least 15 seconds without the need to reactivate the faucet.
4. Splash guards may be required on handwashing sinks to limit potential contamination of food, clean equipment, and single-service and single-use articles.

Food Preparation

1. A food preparation sink with drain board must be provided for rinsing food or obtaining water used as an ingredient. (Three-compartment sinks and hand sinks may NOT be used for food preparation)
2. Produce and/or preparation area must be provided, each separate and adequately sized. Approved surfaces such as stainless steel required.

Equipment/Utensil Washing

1. A 3-compartment sink with integral drain boards provided for washing equipment too large for the dish machine.

2. Low temperature dish machines provided with a visual or audible warning device to warn the operator when the sanitizing agent is depleted.
3. All dish machines must be provided with adequate ventilation, if required.
4. Under counter dish machines installed with 6-inch legs or casters to enable cleaning.
5. Adequate soiled and clean dish receiving areas. Cross-contamination sources eliminated.
6. A chemical test kit or maximum reading thermometer must be provided to determine the strength of the sanitizing agent or temperature of hot water sanitizing rinse. A testing method must be provided for each different type of sanitizer used onsite.

Ventilation

1. Design and install ventilation systems according to the Minnesota Rules, chapter 1346.
2. Removable baffle type filters must be installed in the mechanical kitchen exhaust canopy systems. Wire mesh filters are not designed nor approved for canopies that exhaust grease vapors.
3. Fans, including ceiling fans, not allowed in certain areas due to cleaning issues, part and pieces on fans, and interference with the establishment ventilation system.

Storage Facilities

1. Adequate dry storage area must be provided.
2. Shelving provided to store foods at least 6 inches off the floor.

Lighting

1. At least 50-foot candles of light must be provided in all food preparation areas and where employee safety is a factor.
2. At least 20-foot candles of light in consumer self-service areas, inside equipment, toilet rooms, areas used for handwashing, warewashing and utensil storage areas.
3. At least 10-foot candles in walk-in coolers, walk-in freezers or dry storage areas.
4. All light fixtures where there is exposed food, clean equipment, utensils and linen or unwrapped single service and single use articles must be of shatter resistant material or shielded from shattering.

Water, Plumbing, Electrical

1. The floor sinks and/or standpipes must be eliminated and either standard floor drains or funnel type floor drains provided.

2. Exposed electrical lines must be minimized. Exposed lines must be smooth and cleanable (not flexible metal conduit/Greenfield).
3. Floor drains must be located so drain lines from equipment will not impede equipment on casters.
4. Beverage line conduits must extend at least three inches above the finished floor elevation. The annular opening between the beverage lines and the conduit pipe must be sealed and provided with a cleanable finish the ends of the conduit pipe must be sealed with a PVC cap. **Beverages lines must be enclosed within a cleanable chase or conduit. Exposed beverage lines must be minimized.**
5. When the beverage dispenser is installed on legs cutouts for tubing or drain lines in the beverage station countertop should be sleeved through the countertop and 1/2" above the top to prevent any spillage from leaking into the base cabinet.
6. Provide a pressure type back flow preventer upstream from the control valve on the carbonator of the post-mix beverage system.
7. All piping must be under the floor or in the walls (no surface mounted/horizontal piping).
8. Equipment which have drains must be properly plumbed to the sanitary sewer. This includes walk-in refrigeration units, ice machines, dipper wells, steam tables, etc.
9. Include specifications for water heaters in submitted plans. Water heaters must be adequately sized to meet peak hot water demands of the food establishment.

Maintenance

1. Hoses, electrical conduits, plumbing and drain lines underneath equipment must be installed to be up off the floor to facilitate housekeeping activities.
2. All annular openings around pipes and other conduits where they pass through the walls and floors must be sealed (caulked).
3. All natural gas food service equipment should be provided with quick utility disconnect valves to facilitate housekeeping activities and ease of maintenance.
4. Care must be taken that floor drains are located at the front or exposed edge of equipment so as to facilitate housekeeping activities.
5. A tank rack of approved design must be provided for the soft drink tanks or boxes and the carbon dioxide cylinders must be properly secured off the floor.
6. Janitorial sink provided in readily accessible area. Janitors sink equipped with vacuum breaker/anti-siphonage device. Maintenance and supply racks provided.
7. Separate storage for detergents, degreasers, and all other types of chemical/toxic products. This are must be segregated away from food preparation, and food equipment storage areas.

8. Linen stored on approved shelves at least 6 inches above the floor and separate from soiled linen areas and chemicals.

Employee Areas/Restrooms

1. The doors to the restrooms within the kitchen must be self-closing. Mechanical ventilation must be provided.
2. Adequate facilities must be provided for orderly storage of employees' clothing and personal belongings.
3. Employees' personal belongings, chemicals and maintenance supplies must be stored separate from and below food, clean equipment and single service supplies. A sufficient number of employee lockers should be provided to accommodate the maximum number of employees on duty at any one time. The lockers should be of the sloped top design and be sized to provide adequate security for bulky winter street clothes. The lockers must be installed as follows:
 - a. Installation atop a solid masonry base; or
 - b. On legs not less than six inches off the floor; or
 - c. Anchored to the wall and off the floor a minimum distance of not less than six inches.

Garbage Areas

1. The walls and floor of the refuse enclosure area must be durable and impervious to grease, moisture and soil. **Seal the concrete floor in the trash area by applying epoxy resin paint or a polyurethane concrete sealer.**
2. When there is an enclosed garbage/refuse room it must be equipped with hot and cold running water and a floor drain. Interior garbage rooms should be maintained at a temperature of 50 degrees F. or above. Exhaust ventilation must be provided to the exterior of the building.
3. Refuse bins must have tight-fitting lids and be rodent and insect proof.

Insect/Rodent Control

1. All exterior doors must be self-closing and pest proof.
2. Insect lights and pest controls may not be located over or directly near food and equipment storage and handling areas.

Bar/Lounge Areas

1. All food and beverage service equipment, including millwork, must be certified or classified for sanitation by the American National Standards institute (ANSI).
2. Bar equipment installed so as to facilitate cleaning. No liquor or pop guns or lines located in or over potable ice.
3. Bars must be provided with separate hand washing facilities, a dump sink, warewashing facilities, splash and spray protection, and properly located speed rails, drip trays and waste lines.