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PURPOSE

The Plan Review Construction guide is designed to be used as a tool for a business owner who wishes to build a new retail food facility, convert an existing space into a retail food facility, or remodel an existing licensed facility. Following the guide section by section, an applicant can compile all of the appropriate documents for the plan review application and construct a facility that will meet the minimum standards of the Minnesota Food Code.

For additional information regarding the plan review process, please visit the MDA website at: www.mda.state.mn.us/planreview

When a plan review is required

Minnesota Rule 4626.1720 outlines when a plan review is required for a retail food facility. Per the rule, a plan review is required before beginning:

- Construction of a food establishment.
- Conversion of an existing structure for use as a food establishment.
- Extensive remodeling of a food establishment or a change of type of food establishment or food operation.

Understanding what is an extensive remodel or change in food operation is important. Here are some examples of when plan review is, and is not, required.

When plan review is required:

- Changing the layout of the food preparation or service area. This includes moving equipment or cabinetry.
- Changing the menu that results in new cooking equipment to be installed.
- Changing the plumbing fixtures that results in moving or adding sinks.
- Replacing room finish materials with something that has not been pre-approved by the regulatory authority.

When plan review is not required:

- Replacing like-for-like equipment. An example of this would be replacing an old refrigeration unit with a new refrigeration unit in the same footprint.
- Moving or replacing non-food related equipment. An example of this would be changing signs or doing exterior work.
- Replacing like-for-like room finishes. An example of this is removing old FRP and replacing it with new FRP.

Change of ownership:

Instead of constructing a new food facility some operators consider purchasing an existing facility to start their new food business. If the new firm is taking over ownership of an existing facility that is currently operating and there is no change in the menu, equipment, or facility layout then no plan review is required.

Alternatively, there are a number of different circumstances in which a new operator purchases an existing firm that will require a formal plan review. Some situations that may require plan review include:

- Purchasing a facility that is currently operating but changing the menu, equipment, or facility layout.
- Purchasing a facility that was previously licensed by MDA or another agency but has been closed for a period of time.

CONTACT INFORMATION

The MDA Retail Plan Review Team can be reached directly at 651-201-6194 or at MDA.Plan.Review@state.mn.us.

Contacting the plan review team via email or phone are both acceptable and the response time is the same. Leaving a detailed message on the plan review phone will help us direct you to the individual who can best answer your questions. If you have any questions outside of the plan review that relate to licensing, please contact our licensing liaison at 651-201-6062.

Additional information can be found on the MDA website at www.mda.state.mn.us/planreview.
LICENSING PROCESS

Any firm or individual who is regularly engaged in the sale of food must obtain a license prior to operation. Retail Food Handlers are licensed under Minnesota Statute 28A. A plan review must be completed for many firms before operation. For a Retail Food Handler, the typical licensing process is as follows:

- A potential business owner creates a business plan to sell food that is regulated by the Minnesota Department of Agriculture (MDA).
- The new business owner contacts their area inspector or the MDA licensing liaison to inquire about the process of obtaining a license.
- If the firm's activities require a plan review, the inspector or licensing liaison directs the applicant to the plan review team for further consultation.
- The applicant reviews the plan review guide, compiles all of the appropriate information, and submits a complete application to the MDA's plan review team.
- The plan review officer and the applicant work through the packet of information to ensure that the facility will be constructed in compliance with all state rules and statutes.
- Once the review is complete, construction of the facility may begin. The firm must construct their facility based on the parameters outlined in the plan review approval letter.
- Before an inspection can be scheduled, the inspector will review the facility’s documentation to ensure that it was constructed according to the parameters of the approval letter and that all other associated approvals have been granted (building, plumbing, electrical, etc.).
- As completion of the project gets closer, the firm must reach out to their area inspector to schedule a pre-operational inspection.
- After the inspection has been completed, a license application is provided to the firm to submit with their license fee to the MDA.
- The inspector will approve the firm to sell food and the business may begin operating at that time.
- The firm will receive the paper copy of their license within 3-6 weeks.
- It is recommended that a firm maintain a copy of the various approval documents.

CONTENTS OF A PLAN

Information that is submitted as part of the plan review process is crucial to the success of the project. Submitting complete information will help speed up the process. The contents of the plan must include:

- A detailed description of the project.
- A detailed menu or list of food to be sold.
- The proposed layout drawn to scale with the food equipment locations, including employee rest rooms, water heater, and mop sink.
- The type of finish materials of the floors, walls, and ceiling for the facility.
- An equipment list.
- Equipment specification sheets.
- Countertop and cabinetry shop drawings.
- Unique well number and certificate of compliance for the septic system, if applicable.
- Any other information required.

Being detailed about your operation is helpful to the plan review officer. The more information that is provided at the beginning of the process will better ensure the process goes smoothly.
MENU

The menu (list of food items to be sold) is an important part of the plan review process. The menu helps to determine whether the equipment and physical facilities will meet the needs of the business. A detailed menu must be included with the submitted plan review application materials. This document should include all alcoholic and non-alcoholic beverages, as well as all prepared and packaged food items. Menus may simply consist of a general list of food items that will be sold and should include a brief summary of necessary preparation steps for each item, if applicable. All licensed food facilities have a menu.

FLOOR PLAN

A detailed floor plan (layout) must be submitted for review. The floor plan can be in the form of an architectural blue print or a hand-drawn sketch. Either way, the floor plan must be drawn to scale. It must identify all of the rooms within the establishment. Additionally, the location of all equipment, hand washing sinks, warewashing sinks, food preparation sinks, mop sinks, storage areas, restrooms, and floor drains should be included.

The facility layout is an important part to the plan review process. Ensuring that the layout includes everything used within the facility, including all cabinetry, will help the plan review officer approve your plan in a timely manner.

ROOM FINISHES

A Room Finish Schedule form is part of the plan review application and must be submitted for review. Complete this form by listing the proposed materials for all floor, cove base, wall, and ceiling surfaces in the facility. Ensure that each area where food is stored, prepared, or washed is included on the form in addition to areas for customer self-service, toilet rooms, janitorial rooms, and equipment warewashing areas. The finishes for each room will be reviewed from a risk-based stand point by the consideration of the menu, equipment, and intended purpose of each space. In general, room finishes must be smooth, nonabsorbent, durable, and easily cleanable. Exceptions to the room finish guidelines listed below will be reviewed on a case by case basis.

FLOORS

Floors shall be constructed of smooth, durable, nonabsorbent, grease-resistant, and easily cleanable materials that have been approved by the regulatory authority. Examples of approved floor finishes are quarry tile, ceramic tile, porcelain tile, terrazzo, and a poured flooring system.

Tile Floors

Tile is a commonly proposed floor finish in retail food establishments. Approved tile floor options include quarry tile, ceramic tile, and porcelain tile. Tile grout should be made of a durable material for ease of cleaning and maintenance. The manufacturer’s specifications must be followed during the installation process.

Poured Flooring Systems

A poured flooring system is a multi component flooring product that is installed in a specific manner at a minimum installation thickness of 1/8”-1/4” depending on the product. This type of flooring is not a sealant or a coating. If a poured flooring system is proposed for installation, a specification sheet must be submitted for review that includes technical information about the product. The specification sheet should include the installation thickness, service temperature range, common application settings, water absorption level, and a statement from the manufacturer recommending installation in a food facility. A sample of the product may also be required to be submitted for evaluation prior to approval. Examples of poured flooring system materials, include but are not limited to, epoxy resin, polyurethane concrete, urethane, urethane concrete, and methacrylate.

Other Approved Flooring

Other approved flooring finishes may include, but are not limited to, vinyl or composite vinyl. Vinyl flooring may be approved for installation if the manufacturer’s specifications allow it for the intended use and it meets NSF Standard 52. Composite vinyl flooring like Protect All may also be approved for installation depending on the intended use and the installation location. If a firm chooses to propose one of these flooring finishes or a different product, the manufacturer’s
technical specifications must be submitted for approval. A sample of the product may also be required.

**Unapproved Flooring**

Unapproved flooring finishes include, but are not limited to, sealed concrete, vinyl (sheet and tile), and carpet. These finishes are not approved for installation in kitchens, deli areas, food preparation rooms, dishwashing areas, janitorial areas, or any other room of an establishment as determined by the regulatory authority.

**COVE BASE**

A cove base with a radius transition must be installed at all floor/wall junctures. Typically, the cove base finish shall be the same as the approved floor material in each area of the facility. Stainless steel and vinyl screed cove base that has been provided by the manufacturer is approved for walk-in cooler and walk-in freezer installations.

**Cove Base Installation**

**WALLS**

In general, wall finishes must be made of smooth, nonabsorbent, and easily cleanable materials. Commonly approved wall finish materials include painted sheetrock, stainless steel, fiberglass-reinforced plastic (FRP), and ceramic tile. Certain areas of a facility, such as dry storage rooms or food preparation areas, may require different wall finishes. Refer to the information below for the minimum required wall finishes in specific areas of a retail food establishment.

**Dry Storage Areas**

Dry storage rooms and other non-splash areas of a retail food establishment may have painted sheetrock or epoxy painted concrete block as minimum wall finish materials.

**Food Preparation Areas**

Food preparation rooms and other splash areas of a retail food establishment where there are hand sinks, warewashing, or mop sinks require the installation of FRP, ceramic tile, or stainless steel on the wall as a minimum finish.

**Cooking Equipment**

Insulated stainless steel panels, stainless steel sheets, or ceramic tile must be installed on the walls near cooking equipment. The material must extend from the cove base up to the ventilation hood. FRP is not approved for installation behind cooking equipment.

**CEILINGS**

In a retail food establishment the general requirements for ceiling finishes are that they must be smooth, nonabsorbent, and easily cleanable. In areas where a food employee is operating, approved ceiling finish materials include smooth vinyl coated tiles or painted sheetrock. The permitted finish must be installed in food preparation areas, warewashing rooms, storage rooms, and other areas as required. Exposed studs, joists, and structural ceilings are permitted in bar and retail areas where no open food is handled aside from beverage service. Fissured, perforated, or rough acoustical ceiling tiles are not permitted for installation in food service areas.
## ROOM FINISH SCHEDULE SUMMARY

<table>
<thead>
<tr>
<th>Legend</th>
<th>Food Prep and Warewashing</th>
</tr>
</thead>
<tbody>
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<td>Approved</td>
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</tr>
<tr>
<td>Not Approved</td>
<td>NO</td>
</tr>
<tr>
<td>Pre-Approval Required</td>
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</table>

### Floor Finish Summary

<table>
<thead>
<tr>
<th>Food Prep and Warewashing</th>
<th>Dry Storage</th>
<th>Walk-In Cooler, Walk-In Freezer</th>
<th>Tap/Tasting Room, Customer Facing Service Area</th>
<th>Customer Self-Service Areas</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poured Flooring System</td>
<td>YES</td>
<td>YES</td>
<td>YES</td>
<td>YES</td>
</tr>
<tr>
<td>Quarry/Ceramic/Porcelain Tile</td>
<td>YES</td>
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<td>YES</td>
</tr>
<tr>
<td>Composite Vinyl</td>
<td>YES</td>
<td>YES</td>
<td>YES</td>
<td>YES</td>
</tr>
<tr>
<td>Vinyl (Sheet or Tile)</td>
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<td>NO</td>
<td>NO</td>
</tr>
<tr>
<td>Laminate</td>
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</tr>
<tr>
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<td>NO</td>
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</tr>
<tr>
<td>Carpet</td>
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### Cove Base Finish Summary

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<th>Dry Storage</th>
<th>Walk-In Cooler, Walk-In Freezer</th>
<th>Tap/Tasting Room, Customer Facing Service Area</th>
<th>Customer Self-Service Areas</th>
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</thead>
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<tr>
<td>Poured Flooring System</td>
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<td>YES</td>
<td>YES</td>
<td>YES</td>
</tr>
<tr>
<td>Quarry/Ceramic/Porcelain Tile</td>
<td>YES</td>
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<td>YES</td>
<td>YES</td>
</tr>
<tr>
<td>Composite Vinyl</td>
<td>YES</td>
<td>YES</td>
<td>YES</td>
<td>YES</td>
</tr>
<tr>
<td>Stainless Steel</td>
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<td>PAR</td>
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<tr>
<td>Screed</td>
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<td>NO</td>
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<td>Wood</td>
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<td>4” Vinyl Base</td>
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<td>YES</td>
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<tr>
<td>Coved Transition Strip</td>
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### Wall Finish Summary

<table>
<thead>
<tr>
<th>Food Prep and Warewashing</th>
<th>Dry Storage</th>
<th>Walk-In Cooler, Walk-In Freezer</th>
<th>Tap/Tasting Room, Customer Facing Service Area</th>
<th>Customer Self-Service Areas</th>
</tr>
</thead>
<tbody>
<tr>
<td>FRP</td>
<td>YES</td>
<td>YES</td>
<td>NO</td>
<td>YES</td>
</tr>
<tr>
<td>Ceramic Tile</td>
<td>YES</td>
<td>YES</td>
<td>NO</td>
<td>YES</td>
</tr>
<tr>
<td>Stainless Steel</td>
<td>YES</td>
<td>YES</td>
<td>NO</td>
<td>YES</td>
</tr>
<tr>
<td>Painted Sheetrock</td>
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<td>NO</td>
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</tr>
<tr>
<td>Cooler/Freezer Panels</td>
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<td>YES</td>
<td>YES</td>
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</tr>
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## Ceiling Finish Summary

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<th>Ceiling Finish Summary</th>
<th>Food Prep and Warewashing</th>
<th>Dry Storage</th>
<th>Walk-In Cooler, Walk-In Freezer</th>
<th>Tap/Tasting Room, Customer Facing Service Area</th>
<th>Customer Self-Service Areas</th>
</tr>
</thead>
<tbody>
<tr>
<td>Painted Sheetrock</td>
<td>YES</td>
<td>YES</td>
<td>NO</td>
<td>YES</td>
<td>YES</td>
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<tr>
<td>Vinyl Coated Tiles</td>
<td>YES</td>
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<td>NO</td>
<td>YES</td>
<td>YES</td>
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<tr>
<td>Non-Galvanized Metal</td>
<td>YES</td>
<td>YES</td>
<td>NO</td>
<td>YES</td>
<td>YES</td>
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<tr>
<td>Cooler/Freezer Panels</td>
<td>YES</td>
<td>YES</td>
<td>YES</td>
<td>NO</td>
<td>NO</td>
</tr>
<tr>
<td>Structural</td>
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<td>PAR</td>
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<tr>
<td>PVC Plastic Panels</td>
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<td>YES</td>
<td>NO</td>
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<td>YES</td>
</tr>
<tr>
<td>Plexiglass</td>
<td>YES</td>
<td>YES</td>
<td>NO</td>
<td>YES</td>
<td>YES</td>
</tr>
<tr>
<td>Wood</td>
<td>NO</td>
<td>PAR</td>
<td>NO</td>
<td>PAR</td>
<td>PAR</td>
</tr>
</tbody>
</table>

---

## EQUIPMENT

### EQUIPMENT DESIGN AND CONSTRUCTION

The most common certification programs for equipment are:

<table>
<thead>
<tr>
<th>Certification Program</th>
<th>Mark</th>
</tr>
</thead>
<tbody>
<tr>
<td>Certification Program</td>
<td></td>
</tr>
<tr>
<td>NSF International (NSF)</td>
<td><img src="image" alt="NSF" /></td>
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<tr>
<td>Intertek</td>
<td><img src="image" alt="ETL" /></td>
</tr>
<tr>
<td>Marked “ETL Sanitation Listed”</td>
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</tr>
<tr>
<td>Underwriters Laboratory (UL)</td>
<td><img src="image" alt="UL" /></td>
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<tr>
<td>Marked “Classified UL EPH”</td>
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<tr>
<td>Canadian Standards Association (CSA)</td>
<td><img src="image" alt="CSA" /></td>
</tr>
<tr>
<td>Marked “CSA Sanitation to NSF/ANSI”</td>
<td></td>
</tr>
<tr>
<td>National Automatic Merchandising Association</td>
<td><img src="image" alt="Nama Listed" /></td>
</tr>
<tr>
<td>Baking Industry Sanitation Standards Committee</td>
<td><img src="image" alt="Baking Industry" /></td>
</tr>
</tbody>
</table>
A. The following equipment, including types of equipment listed in this part that are custom fabricated, must be certified or classified for sanitation by an American National Standards Institute (ANSI) accredited certification program for food service equipment:

- manual warewashing sinks;
- mechanical warewashing equipment;
- mechanical refrigeration units except for units or equipment designed and used to maintain food in a frozen state;
- walk-in freezers;
- food hot-holding equipment;
- cooking equipment, except for microwave ovens and toasters;
- ice machines;
- mechanical slicers;
- mechanical tenderizers and grinders; and
- food preparation surfaces including sinks used for food preparation.

B. Exhaust hoods must meet the requirements in the Minnesota Mechanical Code, Minnesota Rules, chapter 1346.

C. Vending machines and machines used to dispense water or food must be certified or classified for sanitation by an ANSI-accredited certification program or be accredited to meet the standards of the National Automatic Merchandising Association (NAMA) specified in NAMA Standard for the Sanitary Design and Construction of Food and Beverage Vending Machines.

D. Vending machines that vend water must meet the standards in Minnesota Rules parts 1550.3200 to 1550.3320.

E. If a standard developed by an ANSI-accredited standards developer is not available for a piece of equipment specified in item A, the equipment must:

- be designed for commercial use;
- be durable, smooth, and easily cleanable;
- be readily accessible for cleaning; and
- have food-contact surfaces that are not toxic.

F. Used equipment may be approved as part of your plan if it:

- Met existing applicable standards when it was manufactured.
- Is in good repair.
- Is easy to clean.
- Has non-toxic food-contact surfaces.
- Does not pose a health hazard.
- Is approved by the regulatory authority.

G. Equipment should not be changed or altered from its original design.

**SINKS**

**Handwashing Sinks**

Provide enough handwashing sinks to meet the needs of the establishment. Install handwashing sinks to provide easy access for all employees who are preparing food, dispensing food or beverages, conducting warewashing, and using the restroom.

Each handwashing sink must be provided with hot and cold water under pressure through a mixing valve or combination faucet. MDA may require splash guards at handwashing sinks to limit contamination of food, beverages, clean equipment, or single-use items.

Handwashing sinks must not be used for purposes other than handwashing.
Manual Warewashing Sinks
If the plans do not include a dishwasher, provide a sink with at least three compartments and drainboards on each end. Each compartment must be large enough to allow immersion of the largest utensil or piece of equipment used in the operation. All compartments and the drainboards must be part of the same piece of equipment. Additional drainboards, utensil racks, or tables may also be required for storing soiled and clean equipment and utensils. The warewashing sink must be supplied with water under pressure with a mixing valve. A warewashing sink must not be used for handwashing or dumping mop water.

When mechanical warewashing equipment is allowed in lieu of a three compartment sink, a three compartment sink is also recommended. A food establishment relying solely on mechanical warewashing equipment, may be required to cease food preparation and service operations, until malfunctioning or broken mechanical warewashing equipment is properly repaired.

FOOD PREPARATION SINKS
If the proposed menu calls for a food preparation process that requires washing or thawing food in a sink, include a separate sink for food preparation only, in submitted plans. A food preparation sink is required to wash raw produce, prior to slicing or cutting. The sink must be designed for use as a food preparation sink.

SERVICE SINKS
Provide at least one service sink or curbed floor drain with a faucet. Install the service sink in a location that provides easy access for all employees who are cleaning mops or disposing of mop water. The plan should include a way to store mops between uses so that they do not soil or damage walls, equipment, or supplies. The service sink must not be used for any other purpose.

OTHER SINKS
The sinks listed above have use limitations. Other commonly used sinks in a food establishment may include:

- Dump sink—for bars, blender drinks, or espresso operations. Sink may have a pitcher rinser.
- Dipper well sink—for in-use utensils such as ice cream scoops.

Minnesota Rules, parts 4626.0275, 4626.0300, 4626.0315, 4626.0320, 4626.0505, 4626.0680, 4626.0685, 4626.0780, 4626.0955, 4626.1080, 4626.1095, 4626.1110, 4626.1540, 4626.1860

WAREWASHING EQUIPMENT
Include specifications and proposed locations for all commercial dishwashers in submitted plans. Drainboards, utensil racks or tables are required for storing soiled and clean equipment and utensils. Undercounter dishwashers must be installed on six-inch legs, casters, or skids. When mechanical warewashing equipment is allowed in lieu of the required three compartment sink, the mechanical warewashing equipment must be capable of accommodating the largest piece of equipment to be washed, rinsed and sanitized.

<table>
<thead>
<tr>
<th>Requirements</th>
<th>Chemical Sanitizing</th>
<th>Hot Water Sanitizing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sanitizer alarm</td>
<td>Audible or visual indicator of low sanitizer level</td>
<td>Not required</td>
</tr>
<tr>
<td>Minimum space for drying</td>
<td>Five racks</td>
<td>Three racks</td>
</tr>
<tr>
<td>Pre-cleaning area</td>
<td>Spray sink, garbage disposal or other means for disposal of garbage</td>
<td></td>
</tr>
<tr>
<td>Internal dividers (conveyor-type machines)</td>
<td>Baffles, curtains or other internal dividers to keep wash and rinse water separate</td>
<td></td>
</tr>
<tr>
<td>Interlocking door device (ventless dishmachines)</td>
<td>Prevents the door from opening until the vent cycle operation is complete</td>
<td>May be an additional accessory for the machine</td>
</tr>
</tbody>
</table>
MECHANICAL VENTILATION REQUIREMENTS

Some cooking equipment requires a commercial kitchen hood ventilation system designed to capture and remove contaminate such as grease-laden vapors, smoke, fumes, excessive heat, steam, condensation, odors, etc. Commercial kitchen ventilation systems must meet the requirements of the Minnesota Mechanical and Fuel Gas Code, Minnesota Rules, chapter 1346. Hoods shall be Type I or Type II based on the equipment and activities in the facility.

Makeup air must be provided by mechanical means and the exhaust and makeup air systems must be electrically interlocked to ensure that makeup air is provided whenever the exhaust system is in operation.

Type I ventilation hoods must be provided with an approved automatic fire suppression system unless the fire inspector and building official provide documentation indicating it is not required. Type I hoods should be designed to prevent grease or condensation from draining or dripping onto food, equipment, utensils, walls, ceilings, linens, and single-service articles. Grease filters or grease extractors used in a hood must be designed to be either readily removable for cleaning or replacing, or designed to be cleaned in place.

The commercial kitchen ventilation hood and installation must be approved by the building official. In areas that do not have a local building official, the ventilation plans and specifications must be prepared by a Minnesota licensed professional engineer or architect and submitted to the MDA (regulatory authority). The licensed engineer or architect of record is responsible for the final inspection and ensuring compliance with the applicable mechanical code requirements. Specifications and proposed locations for ventilation hoods must be submitted with the facility plans.

Recirculating (ventless) hoods, commercial cooking recirculating systems and ventless dishwashers must be listed as meeting UL710B and installed according to the Minnesota Mechanical Code and manufacturer’s instructions. Ventless cooking equipment and dishwashers must be approved by the local building official and licensing authority prior to installation. Maintenance must be performed in accordance with the manufacturer’s instruction manual.

Some commercial dishwashers require a Type II hood system to exhaust heat and moisture. Undercounter electric dishwashers are not required to have a hood system.

EQUIPMENT NUMBERS AND CAPACITY

Provide adequate mechanical equipment to support the cooking, heating, ventilation, and hot and cold holding needs of the intended menu. Install and use equipment as intended by the manufacturer.

Consider the following equipment needs and requirements:

- Mechanical refrigeration and freezer capacity to maintain cold food at safe temperatures and rapidly cool hot food as necessary.
- Hot food holding equipment to maintain hot food at safe temperatures after cooking.
- Food shields, display cases, food packaging or other effective means to protect food from contamination.
- Heavy food equipment that sits on the counter and is not easily movable must be elevated on 4-inch legs or sealed to the counter.
- Heavy floor equipment which is not easily movable must be installed on 6-inch legs or casters, or sealed to the floor.
- Provide adequate storage areas and approved storage shelving to store food, equipment, utensils, linens, and single-service items at least 6-inches off the floor.
- Shelving in refrigeration equipment must be corrosion-resistant.
- If refrigeration equipment, such as a walk-in cooler or freezer, does not come with an evaporator pan, the condensate must be discharged to a nearby floor drain.
- Walk-in refrigeration units installed outside should be designed for extra structural loads from snow and ice.
WATER HEATER

Include specifications and proposed locations for commercial water heaters (traditional and tankless) in submitted plans. Water heaters must be adequately sized to meet the peak hot water demands of the food establishment.

Food establishments with a limited menu may only need a 40-gallon water heater. A large grocery store with several food preparation areas may require a water heating system sufficient to generate hundreds of gallons of hot water per hour.

Tankless water heaters should be installed and maintained following the manufacturer’s use and maintenance instructions. Consult the manufacturer to determine adequate sizing and proper number of units.

CABINETS AND COUNTERTOPS

CABINETS

Cabinets are often used throughout an establishment to provide storage for equipment and utensils. When selecting or constructing cabinets, be sure that they are made of stainless, high-pressure laminate, or another material that is smooth, non-porous, and easily cleanable. A laminate cabinet can have no exposed wood anywhere on the unit, including interior surfaces. Cut outs for items such as beverage lines must be sealed.

Sometimes the top of a cabinet will double as a food preparation surface. In that case, the top must be made of stainless steel or a seamless, solid surface material, such as Corian. Cabinets that are not easily movable must be installed on 6-inch legs to allow for cleaning underneath. Hollow bases are not allowed.

COUNTERTOPS

Countertops can be used for activities such as preparing food, storing clean or soiled utensils, holding dispensing equipment, or displaying baked goods. The menu that is being offered and the activity that is taking place within the facility will dictate the material requirements for the countertops. Review the information below to better identify what countertop material meets the needs of the facility.

Area Descriptions

Customer Service Counter – Also known as the “checkout counter,” this is the counter where customers pay for their food purchases. Little to no preparation takes place on this counter.

Customer Self-Service Counter – This counter is where equipment and food is provided for the customer to dispense or receive themselves without the help of a food employee.

Front Bar – This is the counter where customers order and are served drinks. There may be seating on the customer side. An approved tap tower may be installed on top of the counter where drinks are poured but no food or drink preparation takes place on the countertop itself.

Back Counter/Bar – This counter is mounted on the back wall. It may have several uses, such as storage for food or equipment, as well as providing a surface for food preparation if it meets the material requirements.

Sales Floor – The sales floor is where customers routinely walk and shop. It is not a food preparation space but does have customer self-service and food display areas.

Food Preparation Surface – This countertop is used for handling, packaging, or preparing food. The highest level of finish materials are required in this area for cleaning and sanitation purposes.

Material Descriptions

Stainless Steel – Stainless steel countertops can be used for many applications within a retail food facility. They are acceptable for food preparation, and the storage of food and equipment. All food preparation countertops must be ANSI accredited for food safety.
Solid Surface – Solid surfaces include approved granite, quartz, marble, or Corian. These surfaces can be used in areas with high moisture, drop-in hot holding inserts, and indirect contact during food preparation. A solid surface countertop must be ANSI accredited for food safety if used as a food contact surface.

High Pressure Laminate – High pressure laminate countertops are used in a multitude of applications including the storage of self-service equipment, countertop equipment, or drop-in hand sinks. Cutting, slicing, or chopping on a laminate surface is not allowed. Laminate surfaces must not be exposed to excessive moisture, objects hotter than 275 degrees, or sustained heat above 150 degrees.

Wood – Wood shall not be used in a food preparation area, except for wood-top baker’s tables and cutting boards conforming to ANSI standards. Wood can be used for front bar tops if sealed with a water resistant epoxy or polyurethane.

*Other Material* – A number of other materials may be used as a countertop in different scenarios. Specifications for a different material must be submitted for review prior to approval.

UTILITIES

Specific information about the source of the water supply and sewage disposal, along with the water heater and any other utilities must be submitted with the plans.

Utility service lines and pipes must not be unnecessarily exposed. Enclose utility service lines and pipes, including beverage lines, when possible. Install utilities so they do not obstruct or prevent cleaning of the floors, walls and ceilings.

PLUMBING AND WASTEWATER DISPOSAL

The Minnesota Plumbing Code requires that plans and specifications be submitted to and approved by the Minnesota Department of Labor and Industry (DLI) or delegated local agency prior to any plumbing work or the construction of any new plumbing system. Plumbing plans must be submitted by a Minnesota licensed plumber to the MN Department of Labor and Industry, Plumbing Plan Review and Inspection, 443 Lafayette Road N., St. Paul, Minnesota 55155-4343. Go to the DLI website at www.dli.mn.gov for an application and instructions.

Your plumbing and/or waste disposal plans must be approved by the appropriate regulatory agency prior to receiving a license from the MDA. In areas that do not have a local inspection department or building official, plumbing inspections are conducted by a DLI plumbing inspector.

WATER SUPPLY

Identify the source of water on the plan review application. Indicate whether the water source is municipal water or from a well. Provide an adequate supply of water to meet the needs of the operation.

Several different terms (e.g., drinking water, potable water, and fresh water) are used to describe water that is approved and safe for use in a food establishment. Use only drinking water from an approved source according to Minnesota Rules, chapter 4714, plumbing code; chapter 4720, public water supplies; and chapter 4725, wells and borings.

If the facility is using water from a well, it must be installed by a licensed well driller and certified by the Minnesota Department of Health (MDH). The MDH Well Management Unit will verify well construction and water quality compliance. Provide the unique well number from the well log or the well head for existing wells. The MDH will determine if the construction, location, and quality of the water supply is in compliance with the applicable Minnesota Well Code.

SEPTIC APPROVAL

If a septic system is used for the facility, it must be approved by the appropriate regulatory authority. A current Certificate of Compliance provides evidence of septic system compliance. Contact your county for information on how to verify septic system compliance and obtain a current Certificate of Compliance.