Plan Review Requirements

Community Development Department
Code Enforcement & Public Health Division
5200 85th Avenue North / Brooklyn Park, MN 55443
Phone: (763) 493-8070

Welcome to Brooklyn Park. Thank you for your interest in opening or remodeling your food establishment in our city. The enclosed packet includes information you will need to get started. A meeting with our division is recommended before you submit final plans.

1. **Plans and Equipment Specifications Submittal**
   A complete set of plans, to-scale, must be submitted to the Environmental Health Division for review. Plan submittals should include:

   - Site
   - Building
   - Floor (equipment layout)
   - Elevation drawings
   - Finish schedules
   - Plumbing
   - Mechanical (including kitchen ventilation and makeup air)
   - Electrical
   - Fire protection

2. **Equipment Specifications**
   Specification sheets of all equipment (including water heaters) must be provided. Shop drawings must be submitted for all custom equipment. All custom equipment must be approved by a food equipment testing agencies to NSF, ETL, UL standards.

3. **Menu and Flow Diagram**
   A menu and food flow diagram must be provided. Equipment must support all types of food activities (storage, preparation, cooking, cooling, serving, etc.)

4. **Application and Fee Submittal**
   The application included in this packet must be completely filled out and submitted with the appropriate fee for the health portion of the plan review. The plan review cannot be completed until all required items are submitted. The specific requirements are listed on the following page.

5. **Food Service Construction Guide**
   The construction guide includes general requirements for a commercial food establishment and will answer many of your construction and design questions.

6. **Food Establishment License**
   The license application and fee is not due until two weeks before opening your establishment. Please contact the licensing division at (763) 493-8182 if you have licensing questions or to request additional licenses for selling beer, wine, and/or liquor.

7. **Other Permits- Building, Mechanical, Plumbing, Electrical, and Fire**
A building permit is required to build or demolish any wall or structure. Installation of HVAC, electrical or plumbing fixtures also requires a permit. Please contact a representative from building inspections at (763) 488-6379 to determine which "construction trades permits" are required.

8. **Food Manager Certification when required**
Proof of manager certification and state license, or registration in an approved course is required.

Note: ***Before beginning the plan review process, please check with the Planning Division at (763) 493-8057 to make sure the property is properly zoned for the type of establishment you are proposing.***

Please allow at least ten (10) working days to complete the plan review process. Failure to provide any of the required submittals at the onset of the plan review submittal may delay the plan review process. If changes are proposed after plans have been approved by this Division, additional plans indicating changes must be submitted in writing and approval must be received from the health authority.

Please contact the Code Enforcement & Public Health at (763) 493-8070 if you have questions or to schedule a pre-plan meeting. We look forward to working with you.

Plan Review Application

Community Development Department
Code Enforcement & Public Health Division
5200 85th Avenue North / Brooklyn Park, MN 55443
Phone: (763) 493-8070 / Fax: (763) 493-8391

ESTBALISHMENT INFORMATION

Name of Establishment _____ *Phone Number* _____

Name of Business _____ *Address* _____

Type of Establishment: Sit Down____ Take-Out____ Catering____ Delivery____ Grocery ____

Wholesale ____ Liquor Service _____ Mobile Food Vehicle _____

Owner's Name _____ *Owner's Phone Number* _____

Owner's Address _____

Owner's email _____

PLAN INFORMATION

Blue Prints Submitted By: Owner ____ Contractor ____ Architect ____ Supplier _____

Application's name _____ *Phone Number* _____

Address _____ *Email* _____

ARCHITECT INFORMATION

Firm Name _____ *Architect's Name* _____

Address _____

Phone number _____ *Email* _____

FEES

New Establishment – 150% of License Fee Remodel (Same establishment & same owner) – 100% of License Fee

PROJECT INFORMATION

Type of Work: New Construction _____ Remodel ____

Valuation of Work (Related to food services, not including land) $ _____

Estimated Start Date _____ *Estimated Completion Date* _____

OPERATIONS INFORMATION

Hours of Operation: Sun _____ Mon _____ Tues _____ Weds _____ Thurs _____ Fri _____ Sat _____

Seating Capacity _____ Number of Staff _____ Total square feet of facility _____

Number of food deliveries per week: Frozen _____ Refrigerated _____ Dry _____ Liquor _____

Applicant's Signature: _____ ***Date:*** _____

OFFICE USE ONLY

Date Received _____ Date Approved _____ Plan Reviewer Sign _____

Food License Application

Community Development Department
Code Enforcement & Public Health Division
5200 85th Avenue North / Brooklyn Park, MN 55443
Phone: (763) 493-8070 / Fax: (763) 493-8391

GOVERNMENT DATA PRACTICES ACT - TENNESSON WARNING:
The data you supply on this form will be used to process the license you are applying for. You are not legally required to provide this data, but we will not be able to process the license without it. The data will constitute a public record if and when the license is granted.

The following information is required. All applications are subject to a 10-day approval period.

- *License Period: January 1st –December 31st*
- *Completed application / License Fee*
- *Is worker's compensation coverage required?* _____ *Yes* _____ *No*
- *Minnesota Tax Identification Number*
- *Type of Food License*:

  ☐ Food Type 1 ☐ Food Type 2 ☐ Food Type 3 ☐ Season Food ☐ Food Institution ☐ Limited Institution
  ☐ Pre-Packaged Institution ☐ Large Grocery ☐ Small Grocery ☐ Pre-Packaged Grocery ☐ Vending
- *Additional Facility (e.g. Bar, Coffee Shop, Catering, etc)* _____

The undersigned hereby makes application to the City of Brooklyn Park, Hennepin County, Minnesota, for license subject to the laws of the State of Minnesota and of the City of Brooklyn Park.

*Name of Food Establishment:*_____ _____

*Doing Business As:*_____

Local Address: _____
Street City Zip Code

Onsite Manager: _____ *Business Phone #:*_____

Emergency Contact: _____*Emergency Phone #:*_____

Onsite Email (for food recalls, emergencies): _____

Business Owner: _____*Owner Phone #:* _____

Address: _____
Street City Zip Code

Email: _____

Is this a partnership? ☐ Yes ☐ No Is this a corporation? ☐ Yes ☐ No

If yes, attach a list of the names, addresses, and percent of interest of each.

If this is not a corporation or partnership, is this a: ☐ church ☐ a school ☐ an individual ☐ other (please specify):

_____

Are all special assessments and real estate taxes paid in full for the property where the business is located? ☐ Yes ☐ No

Applicant's Signature: _____***Date:***_____

CITY USE ONLY - Approvals:

Public Health _____*Fire*_____ *Police*_____ ***APPROVED: { } YES { } NO***

SIGNATURE:_____ ***DATE:***_____

MINNESOTA BUSINESS TAX IDENTIFICATION/
SOCIAL SECURITY NUMBER

Pursuant to 2011 Minnesota Statute, Chapter 270C DEPARTMENT OF REVENUE, (section 270C.72 TAX CLEARANCE; ISSUANCE OF LICENSES), the licensing authority is required to provide to the Minnesota Commissioner of Revenue your Minnesota business tax identification number and the social security number of each license applicant.

Under the Minnesota Government Data Practices Act and the Federal Privacy Act of 1974, we are required to advise you of the following regarding the use of this information:

- This information may be used to deny the issuance or renewal of your license in the event you owe Minnesota sales, employer's withholding or motor vehicle excise taxes;
- Upon receiving the information, the licensing authority will supply it only to the Minnesota Department of Revenue. However, under the Federal Exchange of Information Agreement, the Department of Revenue may supply this information to the Internal Revenue Service;
- **FAILURE TO SUPPLY THIS INFORMATION MAY JEOPARDIZE OR DELAY THE PROCESSING OF YOUR LICENSE ISSUANCE OR RENEWAL APPLICATION.**

Please supply the following information and return along with your application to the licensing authority.

Applicant's Full Name	
Applicant's Address	
City, State & Zip	
Applicant's Social Security Number	
Position (Officer, Partner, Etc.)	
Business Name	
Business Address	
City, State & Zip	
Minnesota Tax Identification Number	
Signature	Date

CERTIFICATION OF COMPLIANCE
MINNESOTA WORKERS' COMPENSATION LAW COVERAGE

(FORM MUST ACCOMPANY LICENSE OR PERMIT APPLICATION)

Minnesota Statute Section 176.182 requires every state and local licensing agency to withhold the issuance or renewal of a license or permit to operate a business or engage in an activity in Minnesota until the applicant presents acceptable evidence of compliance with the workers' compensation insurance coverage requirement of MSS Chapter 176. The information required is: the name of the insurance company, the policy number, and dates of coverage or the permit to self-insure. This information will be collected by the licensing agency and retained in their files.

This information is required by law and licenses and permits to operate a business may not be issued or renewed if it is not provided and/or is falsely reported. Furthermore, if this information is not provided and/or falsely stated, it may result in a $2,000 penalty assessed against the applicant by the Commissioner of the Department of Labor and Industry.

Full Name (Last, First, Middle)	
Doing Business As: (Business name if different than your name)	
Business Address	
City, State, Zip	Phone ( )

I am not required to have workers' compensation liability coverage because:

- ☐ I have no employees.
- ☐ I am self-insured (include permit to self-insure).
- ☐ I have no employees who are covered by the workers' compensation law (these include: spouse, parents, children and certain farm employees).

I certify that the information provided above is accurate and complete.

Signature	Date

OR

Insurance Company Name (**NOT** the insurance agent)	
Policy Number	
Dates of Coverage	

I certify that the information provided above is accurate and complete and that a valid workers' compensation policy will be kept in effect at all times as required by law.

Signature	Date

License and Permit Fees

Community Development Department
Code Enforcement & Public Health Division
5200 85th Avenue North / Brooklyn Park, MN 55443
Phone: (763) 493-8070 / Fax: (763) 493-8391

Establishment Type	2015
Food Type I (FD-1) - High level of food preparation, diverse menus, large amounts of potentially hazardous foods, holding foods for long periods of time, or complex food processing. • Full service/sit down restaurants, full menu cafeterias, buffet restaurants, catering kitchens, and similar.	$660
Food Type II (FD-2) – Moderate level of food preparation, moderate menu, limited potentially hazardous foods, or foods held and served for a limited time. • Fast food, take out, pizza delivery, delis, drive-ins, ice cream shops, donut shops, limited or catered cafeterias, bakeries and similar.	$550
Food Type III (FD-3) – Limited food preparation, simple menus, little or no potentially hazardous foods, or foods only served for a short period time. • Coffee Carts and Coffee-Only Shops, Bars, Concession Stands, Snack Stands, Continental Breakfasts, and similar.	$395
Food Grocery – Prepackaged foods or the sale of foods to be consumed off site. • Large Grocery **(FD-GL)** - Larger Grocery store. • Small Grocery **(FD-GS)** - Smaller grocery stores, Convenience Stores, Markets, and similar. • Limited Pre-packaged **(FD-PP)** - Video Stores, Gift Shops, Candy racks, and similar. • Vending Machines **(FD-VEND)** ○ Nuts only **(FD-VEN1)**	 $945 $330 $85 $25 $10
Food Institution - Daycares, and Preschools, Churches • Full Operation **(FD-INF)** - Full Kitchen. • Limited Operation **(FD-INL)** - Catered or Snacks Only. • Pre-Packaged **(FD-INP)** *no charge for places of worship and non-profit organizations*	 $425 $225 $115
Food Institution – Schools • Full Operation **(FD-INFS)** - Full Kitchen. • Limited Operation **(FD-INLS)** - Catered or Snacks Only.	 $470 $240

Additional Food Facility – A separate area of food or beverage preparation. May include bars, receiving areas, catering activities, or additional food establishments. • Per additional Type I or II facility, Large Grocery facility. • Per additional Type III or Small Grocery facility. * The higher rate facility is considered the main facility and each other type is an additional facility.	 $200 $100
Seasonal Food (FD-SEAS) - Establishment continuously open for 6 business months or less in a calendar year. • ½ the license fee (min. $75)	½ license fee
Itinerant Food (FD-INT) – Each stand, booth, cart, or table. • First Day. ○ Pre-packaged food only • Each Additional Day. • Additional stand(s) by the same owner at the same event.	 $75 $50 $15 $45
Food Vehicle (FD-VEH) – Vehicles, trailers, or carts used for the preparation, sale, and/or delivery of foods. • Full operation- Food preparation, includes cooking facilities **(FD-VEHF)** • Limited operation- Moderate food preparation, includes warming or holding units **(FD-VEHL)** • Pre-packaged; pre-packaged foods **(FD-VEHP)** • Additional vehicle.	 $150 $110 $90 $75
Lodging (LODG) – An establishment where sleeping accommodations are let out to the public. • Base Fee • Per Unit Fee (Maximum of $1,100)	 $160 $5.00
Pool (SP-IN, SP-OUT) – Pools, hot tubs, spas, wading pools, and special purpose pools, and similar. • First pool • **Additional pool in the same room or fenced area.**	 $360 in $275 out $330 in $225 out
Body Art- An Establishment where body are is conducted • Base fee	$250

Body and Massage • Enterprise • Therapist • Background Check (one-time fee)	 $125 $25 $100
Refuse Haulers (RH) • First vehicle • Additional Vehicle	 $115 $55
Plan Review – Fee collected for reviewing construction documents for a new or remodeled food establishment, bed and breakfast, lodging facility, body art, massage.	*New:* 150% *Remodel:* 100% of License
Additional Inspection Fee **(More than 1 re-inspection)**	$120
Signs Temporary- each (limits apply)…….. Nonresidential Zoning Districts Wall sign…… Free standing, Monument……. Residential Zoning Districts Wall Sign…… Free Standing, Monument…….. * Failure to obtain sign permit…… Sign Storage/Retrieval Fee Less than 5 sq. ft……. 5 sq. ft or more……	 $75 $90 $150 $90 $150 Fee doubled $15 $40
Abatement Fees Abatement Costs: • $0 - $999…….. • $1,000 - $4,999……. • $5,000 - $9,999……. • $10,000 - $14,999……. • $15,000 or more…… • Abatement of inoperable/junk vehicle……..	 $150 $400 $750 $1,250 $1,500 $150

Building Permit Application

Community Development Department
Building Inspections Division
5200 85th Avenue North / Brooklyn Park, MN 55443
Phone: (763) 488-6379 / Fax: (763) 493-8171
4/15 www.brooklynpark.org

GOVERNMENT DATA PRACTICES ACT - TENNESSON WARNING:
The data you supply on this form will be used to process the permit you are applying for. You are not legally required to provide this data, but we will not be able to process the permit without it. The data will constitute a public record if and when the permit is granted.

*Site Address:*_____*Date:*_____

Business or Tenant Name: _____

Contractor/Applicant Name:_____License #_____

*Applicant is: Owner*_____ *Contractor*_____ *Other*_____

*Address:*_____*Phone #*_____

*Permit Type: Residential*_____ *Commercial*_____ *New*_____ *Add / Alt*_____ *TI*_____

Work Description:_____

*Construction Code: IBC*_____ *IRC*_____ ***Valuation of Work $:***_____

I hereby apply for a building permit and I acknowledge that the information above is complete and accurate; that the work will be done in accordance with the ordinances of the City of Brooklyn Park and with the Minnesota State Building Code; that I understand this is not a permit but an application for a permit and work is not to start without a permit; that the work will be in accordance with the approved plans, specifications and codes.

Payment method: □ *Cash* □ *Check* □ *Credit Card*

*Print Name*_____ ***Signature***_____

□ Check box if pre-1978 residential structure and provide EPA certificate for lead paint activities. (2010 MN statute 326B.106 subd. 13 & 14) Licensed residential building contractor, residential remodeler, or roofer must provide a copy of their EPA certificate when working on pre-1978 residential structures.

Office Use:

*Valuation $*_____ *Site*_____ *Construction Type*_____*Occupancy* _____

*Permit Fee $*_____ *Footing/Fdtn.*_____ *Sprinklers*_____ *Sq Ft*_____

*Plan Review $*_____ *Poured Wall*_____ ***Approvals:*** *C.O. Yes No*

*Surcharge $*_____ *Framing*_____ *Building*_____

_____*SAC $*_____ *Insulation*_____ *Planning*_____

_____*WAC$*_____ *Wallboard*_____ *Health*_____

*Connection $*_____ *Stucco/Lath*_____ *Engineering*_____

*License $*_____ *Photos*_____ *O&M*_____

*Investigation $*_____ *Other*_____ *Fire*_____

Total $_____ *Final*_____ *Bonds*_____

	ADDN-C		*BPPC-C NEW*		*BPRPR-R*		*GARA-R*		*RSW*
	ADDN-R		*BPPC-R*		*BSMT*		*POOL-C*		*RW*
	BPNPC-C		*BPPC-R NEW*		*DECK-C*		*POOL-R*		*RWIN*
	BPNPC-R		*BPRD*		*DECK-R*		*RR*		*RWR*
	BPPC-C		*BPRPR-C*		*GARA-C*		*RRW*		*WST*

*Permit Approved By:*_____ *Date:*_____ *Permit #:*_____

Minnesota Department of Health
Food Manager Certification:
Courses and Exams

- **Search for a course or exam near you:**
  Training Courses for Food Manager Certification

This list identifies providers of food manager training and examinations known to the Minnesota Department of Health (MDH) and the Minnesota Department of Agriculture (MDA). This is not an endorsement of any of these providers.

The MDH administers the state food manager certification program for the MDH, the MDA and for local agencies. For more information contact the Minnesota Department of Health, Food Manager Certification or the Minnesota Department of Agriculture, Dairy & Food Inspection program.

Approved Food Manager Certification Exams

- National Restaurant Association
  ServSafe Examination© by the Educational Foundation of the National Restaurant Association.
- Prometric
  Certified Professional Food Managers Examination by Prometric.
- National Registry of Food Safety Professionals
  Food Safety Manager Certification Examination by National Registry of Food Safety Professionals.
- 360 Training/Learn2Serv.com
  Food Safety Manager Exam by 360 Training/Learn2Serv.com
  Please Note: All online exams must be taken at a proctored location. Please contact 360 Training/Learn2Serv.com for the proctored locations near you.

Please note: The examination must have been taken within the 36 months directly preceding the date of application for an initial Minnesota Food Manager Certificate.

651-201-5000 Phone
888-345-0823 Toll-free

Information on this website is available in alternative formats upon request.

Updated Friday, 19-Oct-2012 16:14:05 CDT

Minnesota Department of Health
Food Manager Certification
Food, Pools & Lodging Services Section
P.O. Box 64495
St. Paul, Minnesota 55164-0495
(651) 201-4500
TTY (651) 201-5797
www.health.state.mn.us/divs/eh/food/fmc/applications.html

State of Minnesota Food Manager Certification
Initial Application

Before this application can be processed, all questions must be answered in their entirety. This application must be accompanied by a **nonrefundable $35 Certification Fee**, made payable to the Minnesota Department of Health, using a cashier's check, money order or personal check. Do not send cash. **Submit application to the above address.**

Applicant Information (Required):

Name: _____
(Last) (First) (Full Middle Name)

Mailing Address:_____
(Street/P.O. Box) (Apt #)

_____
(City) (State) (Zip Code)

County: _____ **Contact Phone Number:**_____

Social Security Number: _____-_____-_____ **(Required)**
Under Minnesota law, all licensing agencies must require applicants for licenses or certificates to provide their social security numbers.

Certification Exam Information (Required): A copy of the exam certificate must be provided.

The exam certificate is accepted as far back as three years. If your exam certificate is more than three years old, but has not expired you are only required to take one of the approved four hour refresher/recertification courses. If your exam certificate has expired you will need to retake the whole course and exam.

If you no longer have the exam certificate, first try to get a copy of the certificate or other proof of having passed the exam from the organization, company or school that conducted the course of the exam you took. If that does not work, contact the organization that provided the exam.

Organization	Name of Exam	Telephone
Educational Foundation of the National Restaurant Association	Serv Safe	1-800-765-2122
Prometric	Certified Professional Food Manager	1-800-624-2736
National Registry of Food Safety Professionals or Professional Testing, Inc.	Food Safety Manager Certification	1-800-446-0257
360 Training/Learn2Serv.com	Food Safety Manager Exam	1-888-360-8764

Please Complete the Reverse Side of Application ►

For Office Use Only:
Date Received: _____

Amount: $ _____Check #: _____

Approved: Yes_____ No_____

Employment Information: (Please fill this in only if you work at a food establishment)

Establishment Name:_____

Establishment Address:_____
(Street/P.O. Box) (Apt #)

_____
(City) (State) (Zip)

County:_____ **Work Telephone No.:**_____

Establishment License Number (if known, not required) _____
Type of Establishment:

☐ Bakery
☐ Bar
☐ Convenience Store
☐ Day Care
☐ Grocery Store
☐ Restaurant/Fast Food
☐ School
☐ Specialty Food Market
☐ Camps
☐ Catering
☐ Hotel/Motel
☐ Other (please describe):
_____

Notice to individuals applying for Food Manager Certification in the State of Minnesota
The commissioner of health will use information provided in this application to determine if you meet the requirements for food manager certification. Before the commissioner issues a certificate to you, Minnesota Statutes, section 270.72, subdivision 4, requires you to supply your social security number. Other than the social security number, you are not legally required to provide the requested information. However, submitting false information is grounds for denying your application or suspending, revoking or taking other disciplinary action against your certificate, if issued. Failure to provided **required** information may delay the processing of your application and may be grounds for denying your application.

Under Minnesota Statutes, section 13.41, information you provide on this application, except for your name and address, is private data while pending. However, in circumstances authorized or required by law, it may be disclosed to others, including the Attorney General's Office, the Department of Revenue, and persons contacted for purpose of verification or investigation. If the matter of your certification becomes contested, the information submitted in this application may become public. Once you are certified, the information, except for your social security number, becomes public data and will be part of the agency's permanent files.

Notice: The issuance of a dishonored check to this department will require a service charge of $30 per check as in Minnesota Statutes, section 604.113, subd. 2 (a). Additional civil penalties may be imposed for nonpayment.

To request this application in another format, call 651-201-4500.

Before mailing, check to be sure that your application materials include the following:

____ 1. Completed and signed application form
____ 2. Copy of your exam certificate
____ 3. Check or money order made payable to the MDH for $35

Incomplete applications will be returned to the applicant.

I certify that the information provided and submitted on this application is accurate and complete:

Signature:_____ **Date**: _____

10/19/12

Food Establishment

Construction Guide

A guide to owners, architects, contractors, food service consultants, and equipment dealers in the proper design and construction of food service establishments.

City of Brooklyn Park
Community Development Department
Code Enforcement & Public Health
5200 – 85th Avenue North
Brooklyn Park, MN 55443
(763) 493-8070 Fax: (763) 493-8391

(Revised guide based on the original document developed in 1995 by a committee of Environmental Health Directors of Minnesota)

Revised 02/2014

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PURPOSE

The purposes of this guide are to provide assistance to owners, architects, food service consultants, equipment dealers and contractors in designing food service establishments, which meet the construction requirements, and to answer some of the most commonly asked questions. Proper design will avoid errors and prevent costly changes after construction has started. ***This is NOT a plan review, nor is it a comprehensive list of all regulations and requirements. Additional requirements may be stipulated after review of the proposed facility, menu, layout, equipment, and site.***

The use of commercial products or trade names are indicated "™" and do not imply endorsement by the Health Authority nor bias against those not mentioned.

FIELD INSPECTIONS

An approved set of plans must be maintained at the construction site until final inspection and approval by the Health Authority. Representatives of the Health Authority may make on-site inspections of the facility construction/remodeling or equipment installation. No field changes may be made without approval of the Health Authority.

Plumbing rough in, pre-opening, and opening inspections are required. Additional Inspections or field consultations may be obtained by calling the Health Authority. Contact the Health Authority at least 48 hours before the requested inspection time to schedule an appointment for an inspection.

NO FOOD WILL BE PERMITTED ON THE PREMISES UNTIL FINAL INSPECTION, AND APPROVAL TO OPERATE HAS BEEN ISSUED BY THE HEALTH AUTHORITY. IT IS A VIOLATION OF FOOD REGULATIONS TO OPERATE A FOOD ESTABLISHMENT WITHOUT A LICENSE.

EQUIPMENT

1. All food equipment must be constructed to conform to applicable NSF standards regarding design, materials, workmanship, and installation

Installation

1. Table-Mounted equipment shall be installed in one of the following methods:
    a. Sealed to the counter of shelf; or
    b. Mounted on legs meeting NSF standards (Appendix I) of sufficient height to ensure a minimum 4 inches of unobstructed clearance beneath the unit; or
    c. Designed to be portable (i.e. weighing less than 30 pounds) and equipped with:
        (1) flexible utility connections, adequate in length to clean around and behind the equipment, or
        (2) flexible utility connections and quick disconnects; restrain cables on equipment where needed.

2. Floor-Mounted equipment shall be installed in one of the following methods:
    a. Mounted on legs meeting NSF standards (Appendix I) of sufficient height to ensure a minimum 6 inches of unobstructed clearance beneath the unit; or
    b. Installed with casters, rollers, or gliders to permit the unit to be easily moved by one person; or
    c. Sealed to the floor or raised masonry base (Appendix II) if the equipment is designed for such installation. (Cooking equipment not permitted).

Units installed under item “b” shall be constructed with:

(1) flexible utility connections, adequate in length to clean around and behind the equipment, or
(2) flexible utility connections and quick disconnects.

Raised floor platforms are not approved when equipment is installed directly over inaccessible waste containers or where equipment cannot be adequately sealed in place as stated above.

3. Reach-in refrigerators and freezers shall be installed on legs or castors meeting NSF standards.

4. A minimum width of 36 inches of aisle space shall be provided in kitchen and wait station design. When there are two opposing workstations, a space of 42 inches is recommended.

5. The space between the ceiling and the top of the walk-in refrigerator or freezer shall be effectively closed with a fixed or removable panel. The panel shall be louvered to provide ventilation if the refrigeration compressor is on top.

6. Water-cooled equipment is not recommended with on-site sewage disposal (septic) systems.

Food Prep Area

1. A separate food preparation sink is required consisting at a minimum of a 1-compartment sink with integral drain board, or a table with an integral sink, or an adjacent stainless steel, food-contact work surface. If both vegetables and meat/fish/poultry will be prepared, a 2-compartment sink with integral drain boards on each end may be required.

2. A minimum of one (1) hand-washing sink easily accessible to all employees in food preparation areas. The number of hand sinks required is determined by a number of factors, including size of facility and employee accessibility. She HAND WASHING FACILITIES for requirements.

Refrigeration

MECHANICAL REFRIGERATION IS REQUIRED TO MAINTAIN ALLPOTENTIALLY HAZARDOUS FOODS AT 41 DEGREES F. OR BELOW. EQUIPMENT MUST MEET THE NSF STANDARDS.

The following requirements must be met:

1. All refrigerated prep table and salad bar units must maintain potentially hazardous foods at the required temperature of 41 degrees F. or below.

2. Each refrigeration and freezer unit must have attached thermometers. (Integrally mounted thermometers are required by NSF standards.)

3. Condensate from refrigeration equipment must be drained to a floor drain located outside of the unit, or must be self-contained.

4. the location of refrigeration compressors, other than self-contained units, if any, must be identified in the plans.

Special Equipment

1. Custom equipment must be constructed by a fabricator (Appendix IV) listed by an approved third party testing agency (millwork fabricators may not be listed).

2. Dipperwells, with running water, are required when bulk ice cream is dispensed. A dipperwell may also be required for other in-use food scoops, which are not appropriately stored in the food product. The dipperwell shall be located adjacent to the proposed area of use. The water line shall have an approved air gap (See Utilities). The dipperwell shall be indirectly wasted to a floor drain with a trapped waste line.

3. Single-service articles: approved dispensers must be installed for proper storage and dispensing of unwrapped single-service items (i.e. cups, straws, toothpicks, etc).

4. If a shelf or other equipment (e.g. cheesmelter) is installed over cooking equipment, an angled or coved deflector constructed of stainless steel shall be installed and must be equivalent to NSF standards.

Display Equipment

1. Salad bars, espresso service, food and beverage carts, steam tables, etc., must meet NSF standards. Special provisions for storage and cleaning may be required for portable equipment (e.g. espresso carts).

2. Salad bars shall consist of mechanical refrigeration and approved food shields. Salad bars shall be located on a quarry tile floor (or equivalent), and recommended extending 3 feet beyond or around the edge of the salad bar, and shall be indirectly wasted to a floor drain (exception: portable equipment may not required a floor drain).

3. Food on display for self-service or otherwise shall be protected from consumer contamination by using easily cleanable counter protector devices, display cases, and similar equipment. These devices shall be designed and installed to intercept the direct line between the mouth of the customer and foods on display of the 4 foot 6 inch or 5-foot intercept for open foods. Scaled drawing of this equipment must be submitted to the Health Authority for approval.

4. Self-service beverage dispensers may be push-button operated. Cup trip activated dispensers must prevent lip contact.

Bar Facilities

1. At least one (1) hand-washing sink is required and must be equipped with fingernail brush, dispensable soap and single service towel dispenser. Clean glassware, ice bins, and food preparation areas shall be protected from contamination with an 8 to 12 inch high, stainless steel splash shield with rolled or smooth finished edges, or by an 18-inch separation space.

2. All refrigeration units must meet NSF standards for the intended use, such as storage of non-potentially hazardous pre-packaged food, or canned or bottled products only, or potentially hazardous open foods, etc. All coolers under the bar shall be on casters or 6-inch legs meeting NSF standards. If casters are used, space must be available to pull out and clean behind the unit.

3. A glass washer, or 3-compartment sink with two integral drain boards, is required for utensil washing. A separate dump sink is required. If a 4-compartment sink is used, the first compartment may be used as the dump sink.

4. Lighting must be properly shielded and provide at least 70 foot-candles of illumination of food contact and dishwashing surfaces, including under-counter areas. Adequate light for cleaning shall be provided.

5. Ice bins shall be equipped with protective covers constructed to meet NSF requirements, and must be self-draining into an indirect waste drain in compliance with the Minnesota Plumbing Code. Ice for

consumption shall be stored separately from ice used for cooling bottles and condiments. Portable waste drains must have a false bottom with drain.

6. Separate drop-in cold plates in ice bins for cooling of beverage lines are not permitted. All cold plates shall be integrally formed into the unit.

7. Liquor storage requirements are the same as for dry food storage rooms. If bar dispensing equipment is installed in the liquor storeroom, finish requirements are the same as for FOOD PREPARATION areas. A floor drain is recommended in this area.

8. All overhead glass storage must be shielded or separated from customers on the bottom, front, and sides.

9. All interior surfaces of the bar must be covered with either FRP, NSF or approved high-pressure laminate.

10. Bar construction shall be a minimum of 2 x 4 water-resistant wood enclosing all plumbing and electrical utilities. A sanitary, integral coved base constructed of the same material as the floor is required.

11. Outdoor bars.

Beverage Dispensing Equipment

1. Beverage lines extending through a floor or wall must be installed through a conduit. When through a floor, the conduit must extend at least 4 inches above the floor. The conduit shall be sealed with a smooth, cleanable material. Beverage lines shall be installed so that all parts are at least 6 inches off the floor at all times. Horizontal runs shall be minimized.

2. CO_2, syrup, and all other pressurized cylinders, whether full or empty, must be chained or secured to prevent tipping. Fixed bulk tanks shall be installed at least 6 inches above the floor on legs. Syrup containers shall be stored on a metal rack 6 inches off the floor.

3. Beverage dispensing guns and drains may not be installed directly over food, ice, or clean glassware. They must be property drained.

4. Approved stainless steel backflow preventers must be installed on post-mix carbonated beverage systems. Approved units:
    - Watts Regulator – Model No. 9BD
    - Carmun Industries – Model No. 77-6050-00
    - Chudnow – Model No. S470 D-VV

    A backflow preventer must be located in the water line between the pump and the carbonator. However, in units that have the pump within an enclosure along with the carbonator, the backflow preventer must be located in an accessible and visible location outside the enclosure. There may be no capper tubing used after the backflow preventer. A Watts 9D or similar must be placed on the water supply line to the unit.

Wait Stations/Cabinetry within the food service area

1. In all areas where food equipment involves heat or moisture, or where food comes in contact with the surface, a stainless steel finish or solid surfacing, or approved equivalent material is required. All service counters and other millwork surfaces shall be protected with stainless steel, plastic laminate or approved solid surface material covering all exposed wood (interior and exterior). Finished

hardwood may be acceptable, on a limited basis for decorative purposes on service and display area equipment.

2. Cut outs in millwork must be sealed by the fabricator in an approved method, such as plastic grommets, etc.

3. All counters must be on 6-inch stainless steel legs meeting NSF standards, or on a solid masonry base. **ENCLOSED HOLLOW BASES ARE NOT PERMITTED.**

4. Ice bins must be equipped with protective covers and shall be self-draining into an indirect waste. Waste drain lines shall be insulated.

5. Food prep sinks or 3-compartiment sinks may not be installed in plastic laminated counters.

6. Solid surfaces for food-contact, such as Corian ™ or Gilbraltor ™, must be constructed by a fabricator listed by an approved third-party testing agency.

ROOM AND AREA FINISHES

Food Preparation and Dishwashing Areas

1. Floor: Floors must be constructed of smooth, durable, non-absorbent, grease-resistant, and easily cleanable material, such as quarry tile, ceramic tile, or terrazzo. Grout shall be a water-resistant material, such as Hydroment ™ or epoxy, not exceeding ¼ inch wide, and installed flush with the tile (brushed grout). Abrasive and non-skid quarry tile is only permitted in walkways and is not permitted beneath equipment.

   Floor drains shall be provided in floors that are to be water-flushed for cleaning, or receive discharges of water or other liquid waste from equipment. Floor drains and clean-outs must be mounted flush with the floor and out of the traffic area. Floor drains may be required by specific food service equipment (i.e. tilting steam kettles, 3 compartment sinks). Floor sinks, if installed, must be easily accessible for cleaning. Tell-tale drains are required for sinks for preparation and equipment washing (i.e. hand wash sinks do not require tell-tail drains).

2. Base: The floor-to-wall juncture must be constructed with a minimum 4-inch bull nose base with a minimum ¼ inch radius cove as an integral part of the flooring material. The base must be consistent with the flooring material. A stainless steel coved base may be acceptable.

3. Wall: Walls must be smooth, washable, non-absorbent, light-colored, and made from materials such as ceramic tile, stainless steel, structural glazed block, fiberglass reinforced panels (FRP), or equivalent. Grout used must be flush with the tile and water resistant. FRP must be installed according to the manufacturer's specifications to the walls with no voids present. (This procedure requires the use of a ¼ inch notched trowel to apply adhesive over the entire surface, and the installation of proper batten strips and fasteners). The finish material must be applied from floor to ceiling, or a minimum 8 feet in height in cooking and dish machine areas, and a minimum 5 feet from the floor in other areas.

   Approved insulated stainless steel or fire-rated materials (as required by MN mechanical code) shall be installed in accordance with NSF standards behind cooking lines from 1-inch above the bottom of the exhaust hood to overlapping the top of the base. Ceramic tile may be permitted under certain circumstances. Refer to the local building official for fire rating requirement.

   It is strongly recommended that areas subject to extensive moisture or splash have wall substrate constructed of a water-resistant material, such as cement board or equivalent. Such areas include a 3-compartment sink, pre-rinse arm station, janitorial station, or the soiled dish side of a dish machine.

4. Ceiling: Ceilings must be smooth, non-absorbent, light-colored, and capable of withstanding frequent cleaning. Smooth, vinyl-clad ceiling tiles or painted sheetrock may be used. Fissured, perforated or rough ceiling tile is not permitted.

Dry Storage Room

1. Floor: Floors must be constructed of a minimum of 1/8 inch vinyl composition tile or other durable, non-absorbent, easily cleanable material.

2. Base: The floor-to-wall juncture must be constructed with a minimum 4-inch bull nose base with a minimum ¼ inch radius cove as a finish part of the flooring material. The base should be consistent with the flooring material.

3. Wall: Walls must be constructed with a smooth, light-colored finish capable of being easily cleanable. Simi-gloss painted sheetrock (water or oil-based) may be utilized.

4. Ceiling: Ceilings must be smooth, light-colored, and easily cleanable.

Walk-in Refrigerators/Freezers

1. The interior finish of walk-in coolers or freezers must meet NSF standards.

2. Walk-in coolers or freezers installed without prefabricated floors may have a terrazzo or quarry tile floor or equivalent. In beer coolers, diamond plate aluminum is recommended as an acceptable finish using ¼ inch radius and welded seams. An insulated floor is required for walk-in freezers.

3. Base: A base is required which should be either coved stainless steel, coved vinyl screed flush with the floor or a material matching the finish of the cooler floor. Vinyl bases are not acceptable. A quarry tile base may only be used when placed against a rigid foam filled cooler/freezer wall with the screed securely fastened to the floor. The base must provide a ¼ inch radius at the floor juncture and be sealed to the floor.

4. Shelving must meet NSF standards for refrigerated storage use and be corrosion resistant.

5. All condensate drainage lines must be plumbed with rigid piping, a plumbing trap, and an air gap to an approved floor drain outside of the walk-in cooler.

Janitorial Station

Janitorial station room finishes shall meet the same requirements as stated for the FOOD PREPARATION area.

A mop sink, not in a room requiring complete approved finishes, shall have a quarry tile floor to a minimum of three (3) feet and an approved wall finish to a minimum of five (5) feet high surrounding the sink and three (3) feet in front and to the sides.

Wait Areas

1. Floor: The floor material underneath and extending outward a minimum of 3 feet from the counter at any food pick-up station, or station equipped with plumbing must be constructed of durable, non-absorbent and easily cleanable material.

   Wait stations without plumbing connections and limited type of services may use the dining room finishes upon Health Authority approval.

2. Base: The floor-to-wall juncture must be constructed with a minimum 4-inch bull nose base with a minimum ¼ inch radius cove flush with the flooring material. The base must be consistent with the flooring material

3. Wall: Walls must be non-absorbent, easily cleanable, and durable.

4. Ceiling: Ceilings must be smooth, light-colored, and easily cleanable, except wait stations within a dining room where the dining room ceiling finish may be appropriate.

Bars

1. Floor and Base: Floor and base materials must meet the same requirements as FOOD PREPARATION area.

2. Wall: The interior of the bar wall must be covered with either FRP or high-pressure plastic laminate.

3. Ceiling: Ceilings must be smooth, non-absorbent, and washable.

4. Bar Structure: The bar must be constructed with minimum 2x4 water-resistant wood enclosing all utilities. A sanitary, integral coved base constructed of the same material as the floor is required.

Dining Rooms

Floors may be covered by carpeting, provided it is commercial, closely woven construction or other safe and sanitary material.

Customer Self Service Areas (Buffets and Salad Bars) (see page 19)

STORAGE FACILITIES

Space Provided

1. Adequate space must be provided for "dry" storage purposes, including food, single-service articles and utensils. This area must be equipped with approved shelving for storage purposes. This does not include areas where only desks, equipment, ladders, or other non-food related items may be placed.

2. Additional storage space must be provided for single-service articles at establishments providing extensive take-out food items.

3. Additional storage space must be provided for the storage of liquor and beverages.

4. Soiled utensils, equipment and linen must be stored in a designated area to prevent contamination of food, equipment, single-use items, etc.

5. A designated storage area must be provided for chemicals separate from food and supplies by either spacing or partitioning. The required janitorial sink area is recommended for storage of chemicals.

6. A designated storage area must be provided for refuse and recyclable materials, separated food and supply areas.

Shelving

1. All shelving must meet NSF standards and be listed by an approved third-party testing agency. Shelving used in areas subject to moisture, corrosion or similar environmental conditions

(refrigerators, wet utensil storage, chemical storage, etc.) must be constructed of materials resistant to these factors. Chrome-plated shelving is acceptable in all other areas.

2. For shelving that is 36 inches or less in depth, the lowest shelf must be at least 6 inches above the floor. For shelving that is greater than 36 inches in depth, the lowest shelf should be at least 12 inches above the floor.

3. In a warehouse, factory-sealed bulk packages may be stored less than 6 inches above the floor on approved dollies, racks or pallets if equipment is provided for moving these items.

4. Shelving must be installed so that clean and sanitized utensils and equipment, single-service, single-use items, and clean linen must be stored at least 6 inches above the floor in an approved clean, dry location that is not subject to splash, dust or other contamination.

HAND WASHING FACILITIES

1. A minimum of one (1) hand-washing sink that is easily accessible to all employees must be provided. The number of hand sinks required is determined by a number of factors, including size of facility, workflow, and employee accessibility. All hand washing sinks must be conveniently located to food preparation, food service, and equipment/utensil washing areas, generally within 20 feet unobstructed.

2. A splash shield may be required to protect food preparation areas, clean storage, ice bins, and similar areas. A splash shield must be constructed of stainless steel or like material and be a minimum of 8 inches high or spaced 18 inches from a protected area. It must be securely fastened to the wall and countertop or sink with an 1/8 inch radius cove.

3. Each hand-washing sink must be provided with hot (minimum 110°F) and cold water under pressure, tempered by means of a mixing valve or combination faucet. Any self-closing, slow-closing, or metering faucet used must be designed to provide a flow of water for at least 15 seconds without the need to reactivate the faucet. **Hot water temperature shall not exceed 130 degrees F.** Wrist or foot activated faucets and automatic faucets are recommended.

4. Dispensable soap, fingernail brush, and sanitary or single-use towels must be provided at each hand washing sink. Towels, if used, must be provided in permanently installed, enclosed dispensing devices conveniently located at each hand-washing sink. If disposable towels are used, waste receptacles must be conveniently located near the hand washing facilities.

5. All hand sinks must be securely mounted to the wall with the proper backing materials.

EMPLOYEE AREA

1. Sufficient locker or other suitable facilities must be provided for the orderly storage and security of employee clothing and other personal belongings away from food and equipment areas. If dressing areas are designated, the lockers or other facilities must be located within those areas. This area may not be located in areas used for food preparation, food storage, food service, dish washing, or utensil storage, except that a storage room containing only completely packaged food may be so designated if proper separation is provided.

2. A break area, if provided, must be separate from food handling and storage areas. Dining areas are acceptable, in accordance with Food Regulations.

TOILET ROOMS

1. Toilet facilities for employees must be provided, conveniently located, and accessible to employees at all times. Separate toilet rooms may be required for each gender when there are 5 or more employees present at one time. Toilet facilities for the public, if provided must be accessible without entering food preparation, food storage, or dish-washing areas. Public facilities provided within the facility may be designated for employee use.

2. Hand washing sinks must be conveniently located within, or immediately adjacent to, all toilet rooms or vestibules.

3. Toilet room must be completely enclosed and have solid, tight-fitting, self-closing doors.

4. Toilets and urinals must be equipped with anti-siphon ballcock assemblies in the tank. Flush valves must be equipped with vacuum breakers.

5. Each toilet must be equipped with an exhaust fan vented to the outside.

6. Women's toilet rooms must have a minimum of one (1) covered waste container for sanitary napkin disposal. One waste container per stall is recommended.

7. All toilet rooms must have at least one covered waste receptacle. Toilet rooms may not be used for the storage of any food or food-related materials.

8. Floor, Base, Wall and Ceiling finishes: The floor and base finishes must meet the same requirements as FOOD PREPARATION area. Required wall finish material must be at least 4 feet high. The ceilings must be sanitary and cleanable, and durable.

UTILITIES

General

1. All plumbing must be installed in accordance with the Minnesota State Plumbing Code. In municipalities where no plumbing delegation agreement exists, a copy of the plumbing plans must be submitted for review to the Minnesota Department of Health, Division of Environmental Health, and Engineering Unit.

2. Liquid waste lines from equipment (ice bins, steam tables, pop machines, etc.) must have rigid piping with traps, and an air gap or air break as required. All utility lines or pipes, such as electrical, gas, water or waste lines, must be enclosed. When necessary, exposed utility lines shall be at least ½ inch off the wall and six (6) inches above the floor, or attached to the bottom of the equipment. Where lines go through walls, the openings must be sealed. Horizontal runs must be kept to a minimum of five (5) feet. Concrete curbing may be required when bringing utilities through the floor.

Water Supply

An adequate supply of potable water to satisfy the needs of the food establishment must be provided from a municipal water supply or from a non-community public water supply meeting the requirements of the Minnesota Well Code. A permit for constructing a well is required.

Water Heater

1. A water heater meeting NSF Standards must be provided and appropriately sized for the operation. The unit must be installed on either 6-inch legs, a solid masonry base or elevated platform.

2. the water heater must be sized properly to ensure adequate hot water during all operations. Any facilities using a dish machine must provide enough hot water to meet the maximum demand for that model of machine with adequate reserve for other fixtures.

3. Hot water must be re-circulated if the primary water heater is remotely located.

Sewer Disposal

All water-carried sewage must be disposed to a municipal sewer system or to an approved on-site (septic) sewage disposal system meeting the requirements of the Minnesota Pollution Control Agency, Chapter 7080. A permit for constructing an on-site system is required.

Grease Traps/Interceptors

Grease removal devices, where required, must be installed in accordance with the Minnesota Plumbing Code. Grease interceptors are recommended, and should be installed outdoors with access for maintenance purposes.

Janitorial Sink

1. An area must be designated for the proper storage of maintenance equipment and cleaning supplies. At least one (1) janitorial station must be provided. The janitorial station should be conveniently located for maintenance of food service areas, but must be separate from food preparation and food storage areas.

2. The janitorial sink must be accessible for use during food operations. More than one janitorial station may be necessary. The floor level, curb style sink is recommended. The sink must be connected with a drain to the sanitary sewer. Hot and cold water, under pressure, with a mixing faucet and necessary backflow protection is required. Other stationary equipment such as water heater, water softener, or water filter system must not obstruct the sink.

3. Quarry tile, or equivalent, must be installed on the floor extending at least 3 feet in all directions from the fixture. Properly installed FRP or equivalent must be installed on the wall behind the sink extending at least 8 feet high to accommodate the mop rack.

4. Facilities must be provided over the janitorial sink to permit wet mops to drip-dry. A broom rack must be provided to elevate items such as brooms, dust pans, etc. off the floor.

5. Corrosion-resistant shelving must be provided in the area of the janitorial station for the storage of cleaning supplies.

Overhead Sewer Lines

1. Sewage and waste lines may not be located directly above food preparation, food display, food storage, or dish washing and storage areas.

2. If sewer lines must be installed over the areas listed above, they must be equipped with a functional seamless pan or gutter which is open at the ends and pitched to carry any leakage away from the food or utensil areas.

Potable Water Backflow Protection

1. All backflow devices must be installed in accordance with the Minnesota State Plumbing Code.

2. Water inlets must have an air gap between the water inlet and the flood rim of the fixture. The air gap must be two (2) times the diameter of the water inlet or faucet. Any water inlet, faucet, etc. that

does not meet this requirement shall be considered a submerged inlet. Any water inlet to which a hose can be attached shall be considered a submerged inlet.

3. Vacuum breakers must be installed on any submerged inlet such as toilets, urinals, dish machines, garbage grinders, and any threaded water outlets.

4. Double check valves with atmospheric vents or reduced zone backflow preventers are required on any water outlet on which a vacuum breaker cannot be installed after the last shut-off valve or solenoid switch (e.g. pressure spray hoses).

5. A backflow preventer must be located in the water line between the pump and the carbonator.

6. Chemical dispensing systems must have approved backflow devices, such as Watts 800 ™ series, built in air gaps or other approved backflow protection.

Indirect Waste Connections

1. An indirect waste must discharge its waste through an air gap into the sewer system. Refrigeration equipment (including walk-in coolers and freezers), potato peelers, ice machines, steam tables, steam cookers, ice bins, salad bars, dipperwells, and other similar fixtures must be indirectly wasted through a “p” or “v” trap to a floor drain or other approved plumbing fixture (i.e. floor sink or mop sink).

2. Indirectly wasted fixtures must discharge to a floor drain located as close as possible to the fixture, but not more than 5 feet away.

3. The air gap between the indirect waste and the building drainage system subject to negative pressure must be at least twice the effective diameter of the drain served, but no less than one (1) inch. All other air gaps shall be at least one (1) inch.

4. Receptors receiving indirect waste must be installed in accessible and ventilated areas and designed and sized to prevent overflow and splashing. Drains may not be installed inside cabinets. Hub drains are prohibited.

5. Indirect waste pipes may not discharge into prep sinks or 3-compartment sinks.

6. Floor drains may not be located inside smokehouses or proof boxes.

Floor Drains: Walk-in Refrigerators/Freezers

Floor drains in walk-in refrigerators and freezers may be allowed where preparation occurs. If installed, the drain line must discharge to an indirect waste, located outside the unit.

UTENSIL WASHING AND SANITZATION

General

A minimum of one (1) hand washing sink that is easily accessible to all employees in dish washing areas must be provided.

Manual Dish Washing

1. A dish washing 3-compartment sink with integral drain boards on each end is required. The sink shall meet NSF standards. Each compartment must be large enough to allow complete immersion of the largest utensil (exception: some equipment may be properly cleaned in place as approved by the Health Authority). Each drain board must be at least as large as the largest compartment.

2. A scrapping area is required. Examples include a garbage can, scrapping block or a scrapping sink with a spray arm and either a strainer or disposal. A disposal should not be installed in a drain broad or in any compartment of a 3-compartment sink. A 4-compartment sink with a disposal in the first compartment is recommended for scrapping. The first compartment of the 4-compartment sink should be shallow to accommodate the disposal, and to ensure at least 6 inches off the floor when installation is completed.

3. When hot water is used for sanitizing, the following facilities must be provided:
    a. An integral heating device or fixture which meets NSF Standards installed in, or under, the sanitizing (third) compartment of the 3-compartment sink, capable of maintaining the water at a minimum temperature of 170 degrees F.

    b. A numerically-scaled indicating thermometer accurate to plus or minus 3 degrees F., convenient to the sink, that can be used for frequent checks of water temperature.

    c. Dish baskets of such size and design to permit complete immersion of utensils in hot water.

Mechanical Dish Washing

A dish machine is recommended and depending on the size of the operation required, for reusable dishes, flatware or glassware.

1. General requirements:
    a. All spray type dish machines shall conform to NSF Standards.

    b. A scrapping area is required. Examples include a scrapping sink, scrapping block, garbage can, or with a spray arm mounted above either a strainer or disposal.

    c. A soiled dish table of adequate size for the proper handling of soiled utensils prior to washing must be provided. The soiled dish table may not drain into the washing compartment of the dish machine. A table scupper must be installed across the entire flat section of the table to prevent soiled water and debris from draining into the wash tank.

    d. Every dish washing installation must be provided with a clean dish table. This installation shall provide room for the temporary storage of utensils and racks immediately after being removed from dish machines. Hot water sanitizing machines, except under-counter machines, require a drying space for a minimum of 3 dish racks. Chemical sanitizing machines require a drying space for a minimum of 5 dish racks, exclusive of overhead shelves. The clean dish table should be sloped to drain into the machine. In a limited food operation, separate soiled and clean areas must be provided adjacent to an under-counter machine.

    e. Easily readable, numerically-scaled, indicating thermometers, accurate to plus or minus 3 degrees F., shall be provided that indicate the temperature of the water in each tank of the machine, and the temperature of the final rinse water as it enters the manifold.

    f. A pressure regulator designed to withstand scalding temperatures must be installed so the flow pressure is approximately 20 pounds per square inch (psi).

    g. A thermometer and pressure gauge are required on the final rinse line. The pressure gauge shall be installed after the pressure regulator. The gauge cock shall be equipped with standard threads on which a pressure gauge may be attached to check flow pressure. A pressure gauge is not required for a dish machine utilizing a pumped rinse.

    h. Minimum Type II mechanical exhaust ventilation must be provided over <u>all</u> dish machines, except under-counter and bar-glass washers, to effectively remove steam and vapors. (see VENTILATION).

i. If the dish machine does not have a powered rinse, a separate 3 compartment sink will be required if larger utensils are being used in the operation.

2. Chemical sanitizing machines:
   a. Chemical sanitizing machines must meet all criteria listed under General Requirements above.

   b. A sanitizer alert system must be installed which automatically warns the user by a **warning light** in a visible location or an **audible alarm** that the sanitizer supply has been depleted.

3. Hot water sanitizing machines:
   a. Hot water sanitizing machines must meet all criteria listed under General Requirements above.

   b. A booster heater meeting the requirements of NSF Standards is required if a special high temperature water heating system is not installed to heat warm (120-140 degrees F.) water to higher temperatures in order to supple 180-195 degrees F. final rinse for the dish machine. The heater size shall be determined by the demand rinse of the dish machine.

   c. A readily visible thermometer must be installed on the service line just before the booster heater in addition to the thermometer required on the final rinse line.

   d. Installation of the water heater and the booster heater must be as close as possible to the machine so as to avoid heat loss in the lines.

   e. The hot water system must be designed so hot water is delivered to the final rinse when the rinse valve opens. For machines designed for intermittent operation, this will require special arrangements. When the length of the line from the booster to this type machine exceeds 5 feet, the system must be re-circulating.

SOLID WASTE & RECYCLABLE MATERIALS

Storage Areas

1. A sufficient area must be provided for the storage of solid waste and recyclable materials. The area must be separated from food preparation and storage areas.

2. Outside storage and handling areas must be located on a smooth, non-absorbent material such as sealed concrete. Asphalt is not recommended. Further, waste enclosures must be provided and constructed in compliance with all Zoning Regulations.

3. Liquid waste from compacting must be disposed as sewage. The drain, when installed, must be connected to the sanitary sewer and meet the local requirements.

4. Interior garbage storage and refuse rooms, if utilized, must meet the same room and area finish requirements as the FOOD PREPARATION AREA, and 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 is required to the exterior of the building.

Containers

1. Sufficient containers, with tight-fitting covers, must be provided to contain any garbage, refuse, or recycling materials in a nuisance-free manner until it can be removed by a disposal company.

2. Compactors must be of tight construction, and be able to contain any liquid deposited in them. Compactors, where approved, in the food area must meet NSF standards.

LIGHTING

Illumination

1. On work surfaces or other areas in which food or beverages (other than alcoholic beverages) are prepared, or in which utensils are washed, should be provided with at least 70 foot candles measured 30 inches above the floor. This requirement includes hoods over cooking equipment.

2. The interior of walk-in coolers and freezers should be provided with at least 20 foot candles measured 30 inches above the floor. Compliance with this recommendation usually requires a minimum of 2 fixtures. Lighting in walk-in coolers must be placed so it is not obstructed by the normal storage of food on the shelves. Low temperature and electronic ballast fluorescent lights are recommended. A ballast may also be mounted on the outside top of a walk-in, with the actual light on the inside.

3. All bar sinks should be provided with at least 30-foot candles of light directly over the sink units at all times during operating hours. At least 70-foot candles of available lighting should be provided in the general bar area for cleaning.

4. All other rooms or areas should be sufficiently lighted throughout with not less than 30-foot candles, measured 30 inches above the floor

5. Food and utensil storage rooms, toilets, and dressing rooms should be provided with at least 30-foot candles of light measured 30 inches above the floor.

Breakage Protection

1. All light fixtures in food preparation, food display, food service, food storage, dish washing and utensil storage areas must be enclosed to prevent breakage. Tempered or shatterproof, coated bulbs are also acceptable.

2. Infrared or other heat lamps must be protected against breakage by a shield surrounding and extending beyond the bulb, leaving only the tempered face of the bulb exposed.

INSECT AND RODENT CONTROL

Outside Food Service Openings (drive-up, drive-through, and walk-up windows)

The counter surface of the pass-through window must be constructed so as to be smooth and easily cleanable. Window slide channels must be open-ended to provide for easy cleaning. Window shall be equipped with a self-closure device.

Delivery Doors

All delivery doors leading to the outside must be self-closing and tight-fitting. It is recommended that delivery doors be provided with an overhead curtain of air or screen door for pest control measures.

Entrance Doors

All customer doors must be self-closing and tight-fitting.

Windows

All openable windows, except self-closing pass-through windows, must be screened with at least 10-mesh per square inch screening.

Building

All foundations must be constructed to preclude the entrance of rodents. All building vents shall be covered with minimum of 16-mesh per square inch wire screen. Openings into the foundations and exterior walls for pipes, wires, or conduits must be sealed. Where conduits or pipes enter a wall, ceiling or floor, the opening around the line must be tightly sealed.

LAUNDRY FACILITIES

1. If provided, laundry facilities must be located in a separate area. Laundry operations may be conducted in a storage room containing only packaged foods. Laundry facilities may not be located in toilet rooms.

2. Laundry facilities should be installed on a reinforced curb. If a washing machine is provided, a dryer must be installed. The dryer must be vented to the outside, and in compliance with manufacturer's directions.

3. Clean and soiled linen storage: See STORAGE FACILTIES.

VENTILATION

All cooking equipment that produces grease vapors, steam, fumes, smoke or odors must be located under an exhaust ventilation system. Refer to the "Minnesota Food Equipment Ventilation Guidelines" for further information and examples of equipment requiring ventilation. Cooking or heating of meat or other grease-producing products requires a Type I hood system.

All installations must be installed in complete accordance with the Mechanical Code.

Plans

Plans submitted to the Health Authority for new ventilation systems or major modifications shall be drawn to scale and shall contain the following information:

a. Dimensions of hood(s)
b. Type of hood(s) (e.g. canopy, island, backdraft, compensating, etc.)
c. Plan with equipment locations
d. Elevation (cross section) of equipment and hood(s) drawn to scale
e. Total quantity of exhaust for each hood (cubic feet/minute)
f. Total static pressure
g. Grease filters:
    (1) Type and number
    (2) Manufacturer's recommended air velocity (feet/minute)
    (3) Net dimensions (inches)
    (4) Copy of manufacturer's catalog cut sheet
h. Duct size(s) and velocity(s)
i. Exhaust fan(s):
    (1) Type and number
    (2) Manufacturer name and model number
    (3) Volume capacity range (cubic feet/minute) at system static pressure
j. Make-up air system details:
    (1) Volume
    (2) Degree rise
k. Balance schedule

Design and Construction

1. General:
    a. The design of the exhaust system must minimize exposed bracing, channels, crevices, or other areas in which grease, dirt, and similar materials may accumulate.

    b. System must be so designed as to not interfere with normal combustion processes and/or exhaust of the combustion products from commercial cooking equipment or heating equipment.

2. Hoods:
    a. All hoods and components must be fabricated or otherwise constructed of materials that will comply with the applicable requirements of NSF Standards.

    b. All joints must be structurally sound without the use of solder. Joints and seams that are exposed on surfaces of the plenum, hood, or other portions of the system containing exhaust air must be sealed.

    c. Gutters are not required around the lower edge of the hood. Gutters, if provided, must be designed and constructed to be easily cleanable. Drip pans, when used, must be located outside of the plenum and be so arranged that grease or condensate accumulations can be easily cleanable.

    d. Lighting must be installed to provide a minimum of 70-foot candles measured at the cooking surface. Light fixtures, if located inside the hood, must be fire resistant, vapor-proof, and meet requirements of NSF Standard and UL electrical safety standards.

3. Filters and extractors:
    a. For grease (Type I) hoods, all exhausted air, before entering the ductwork, must pass through easily removable and washable grease filters, or approved extractors.

    b. Grease filters must be sized according to the manufacturer's recommendations for optimum total grease removal efficiency, optimum air movement, total quantity to be exhausted, and air velocity.

    c. Grease filters must be constructed of non-combustible materials. Grease filters must be installed in frames, racks, or holders to minimize air bypass with a continuous surface-to-surface contact between filter frames and mounting frames. Grease filters must be so installed as to be easily removable for cleaning purposes without the use of tools.

    d. Grease filters must be sized so they may pass through a dish machine or cleaned in a pot sink.

    e. Grease filters must be installed at a greater than a 45 degree angle from horizontal.

    f. Where grease extractors are used, the grease extractor reservoir must be so designed and constructed as to transport the extracted grease in a safe and nuisance-free manner to a collecting device outside the hood cavity. The collecting device must be constructed of metal and be located at least 6 inches above the floor. The collecting device must be easily removable for cleaning purposes.

4. Ducts:
    a. All ducts must be smooth, easily cleanable, durable, and made of a corrosion resistant metal.

    b. All ducts should be constructed with a minimum of bends.

c. Multiple take-off ducts are required for all hoods longer than 12 feet. When required, they must be equally spaced, but may not serve more than a 12-foot section. On all hoods having multiple take-off ducts, each duct should have a maximum radius of influence of 4 feet or less.

d. Any portion of such system having inaccessible from the duct entry must be provided with adequate cleanout openings (every 10 feet recommended). Openings must be at the sides and large enough to permit cleaning. In horizontal sections, the lower edge of the opening should not be less than 1 ½ inches from the bottom of the duct. Cleanout openings must be made of steel, and be grease-tight and water tight when in place.

5. Fans: the fan(s) must be designed and sized to remove the total quantity of exhausted air at a specified static pressure as determined by the type of hood installation and based upon the minimum requirements of the Mechanical Code.

Performance

1. The quantity required to be removed by the entire system must be determined by the open-faced area of the hood as required by the Mechanical Code. A minimum of 50 feet per minute capture velocity at the cooking surface (level) must be maintained regardless of the type of exhaust system used.
2. The velocity in a grease duct (serving a Type I hood) must be a minimum of 1,500 feet per minute with a maximum of 2,500 feet per minute.

Installation

1. The bottom edge of the canopy hood must be between 80-84 inches above the floor (OSHA). The bottom edge of the hood may not be greater than 48 inches above the cooking surface.

2. All open sides of the canopy hood must overhand all cooking surfaces by at least 6 inches. Space for utility lines must be provided behind equipment.

3. Hood and ducts must be installed with a clearance from combustible construction of at least 18 inches. Hoods must be closed (flashed) solid with approved metal to the ceiling or wall. The space from the back of the hood to walls constructed with sheetrock must be at least 3 inches. Vertical piping is permitted to provide protection as stated in the Fire Code.

4. The minimum distance between the lowest edge of a grease filter or extractor and the cooking of heating surface shall be:
   a. 2 feet or more for exposed and unexposed flame units, and
   b. at least 3.5 feet for exposed charcoal and char-broiler type fires.

6. All piping and/or electrical conduit must be installed outside the hood. Piping and/or electrical conduit must be installed inside the wall directly behind the equipment it serves. Horizontal runs of piping and/or electrical conduit must be minimized and may not exceed 5 feet in length. Gas piping may be required by the local authority to be installed on the outside of a wall.

7. Horizontal piping or fusible links are not allowed below the filter area in the hood. Horizontal piping used for fire protection purposes must be placed above the hood or in the plenum area.

Make-Up Air

1. Food equipment exhaust systems must be provided with sufficient make-up air equal to or slightly less than the total quantity to be exhausted. Make-up air must be tempered to 55 degrees F.

2. The make-up air must be introduced into the kitchen area in a manner that will not interfere with the capture characteristics of the exhaust system:
    a. create discomfort to the employees;
    b. cause hot food to cool; or
    c. interfere with refrigeration systems.

3. Make-up air must be evenly distributed along the hood perimeter if the make-up air is directly adjacent to the exhaust hood.

4. The air supplied to the kitchen and food preparation areas must be free of contamination by dust, vapors, engine exhaust or gases (i.e. short circuit of kitchen air exhaust, loading dock areas). A bird screen and filter must be provided to prevent ingress of foreign matter.

5. Fresh air intakes must be located at least 10 feet from any exhaust outlet or vent.

6. Air exhausting devices must be interlocked with make-up air controls so they cannot be operated independently.

Additional Requirements

1. All Type I hoods, plenums, and ducts above grease-producing cooking equipment must be equipped with an approved fire suppression system. Fire suppression system and other exposed plumbing within a hood must be constructed of stainless steel or chrome-plated materials with minimum exposure of pipe threads.

2. For all proposed installations that are not conventional design, a detailed review and conference with designing or construction personnel may be required to show and determine the adequacy of the system.

3. A field approval must be obtained before the ventilation contractor leaves the job site.

4. An air balance test is required to be performed by a qualified contractor. A written report from the contractor must be submitted to the Health Authority and mechanical inspector before the system is approved for use.

MINNESOTA CLEAN INDOOR AIR ACT (MCIAA)

Seating

Restaurants must designate at least 30% of the total seating capacity as a non-smoking area. If a bar has tables and seating for serving meals to more than 50 people at one time, the bar must designate at least 30% of seating capacity as a non-smoking area during times when meals are available.

Separation

Smoking and non-smoking areas must be separated by either:

1. A 4-foot wide buffer zone,
2. A physical barrier 56 inches or more high, or
3. A ventilation rate of six (6) complete air changes per hour.

Signs

1. All entrances must be posted “Smoking is prohibited except in designated areas only,” except bars without meal service must be posted “This establishment is a smoking area in its entirely.”

2. Smoking and non-smoking areas must be posted with signs, unless seating is controlled by a host or hostess.

3. All areas accessible to non-smokers (i.e. lavatories, cash registers, hallways, etc.) must be posted "No Smoking."

Employee Break Areas

1. If a break area is provided, a non-smoking area is required. The area must be 200 square feet or large enough to accommodate all non-smokers, whichever is larger. Any remaining area in the break room may be designated as smoking-permitted. Smoking and non-smoking areas must be separated by the methods listed above.

2. If the break area is less than 200 square feet, there are 3 options:
    a. designate the break area as non-smoking;
    b. provide a second break area for smoking; or
    c. alternate non-smoking and smoking-permitted break times.

CONSUMER SELF-SERVICE FOOD DISPLAYS

Consumer Self-Service (CSS) food display operations include buffets, “Happy Hour” set-ups, brunches, salad bars, smorgasbords and cafeteria lines. The following requirements must be met:

Construction Requirements

1. Approvals from the health authority are required prior to construction or initiation of self-service food display operations. Material finishes; menus and equipment specification sheets must be submitted for review.

2. All equipment must meet standards of construction for National Sanitation Foundation International (NSF). Residential equipment is prohibited.

3. All self-service beverage dispensers must prevent contact of mouth area of cup, such as a push-button operated or adequately curved lever-activated dispensers.

4. Mechanical refrigeration for cold foods is required for portable and stationary CSS food displays. A separate temperature control device must be provided.

5. A controllable heat source approved by the Fire Marshall is required for holding hot foods at 140 degrees Fahrenheit or above.

6. The floor material under a stationary self-service food display should extend three feet on the non-walled sides of the display and must be smooth, durable, easily cleanable and non-absorbent (the flooring and base shall meet the same requirements as FOOD PREPARATION areas).

7. All displayed food, tableware and utensils must be protected from contamination by the use of packaging, counter, service line, counter guards, display cases or other effective means. Serving utensils (spoons, tongs, etc.) and food containers must be of such size and configuration to prevent the handle of the serving utensils from falling into the food. The utensils and containers must be of such sanitary design and material as to be easily cleaned and sanitized.

8. All equipment lighting over the CSS food display must be shielded or enclosed, or the bulb must be constructed of shatterproof material.

9. If the self-service CSS food display is located adjacent to a wall or if the wall is exposed to splash, the wall surface must be smooth, easily cleanable, light colored and non-absorbent.

10. Any refrigeration condensate waste, ice melt or drainage from a steam table in a CSS food display must be properly discharge to a floor drain. Draining of wastewater for subsequent waste disposal into an approved receptacle may be permitted for a portable CSS food display.

11. Cooking in the dining room is permitted only when proper support equipment is provided such as: mechanical ventilation with fire suppression, approved electrical connections, hand washing provisions in the immediate area and mechanical hot and cold holding/cooking equipment.

Exception

Any CSS food displays not meeting the requirements for mechanical refrigeration and a controllable heat source must comply with the following:

- Documentation and implementation of a current approved Hazard Analysis and Critical Control Point plan ((prevention-based food safety system) for foods offered on the CSS food display;

- All food on the CSS food display must be discarded after service;
- All displayed food, tableware and utensils must be protected from contamination by the use of packaging, counter guards, display cases or other effective means.

Operation Requirements

1. All potentially hazardous cold foods must be mechanically maintained at 41 degrees F. or less, ice is not acceptable. All potentially hazardous hot foods must be maintained at 140 degrees F. or more. All frozen foods must be kept at 0 degrees F. or less.

2. Potentially hazardous food must be preheated or pre-chilled to the proper temperature before placing it on the buffet or salad bar.

3. When a food container needs refilling, removed the "old" food container and serve the fresh product in a clean pan or container.

4. Food must not be heaped above the fill line in hot/cold holding equipment. Do not overfill pans.

5. Consumers may not be allowed to use soiled tableware, including single-service articles, to obtain additional food from the display and serving equipment. Reuse of soiled tableware and single-service articles by self-service consumers returning to the service area for additional food is prohibited. A sign must be present to indicate that clean plate is required upon returning to the self-service display.

6. The handle of a dispensing utensil must be of sufficient length so as to extend beyond the rim of the container and prevent it from falling into the food. Between uses and during service, dispensing utensils shall be:
   - Stored in the food with the dispensing utensil handle extended out of the food; or
   - Stored clean and dry; or
   - Stored in a running water dipper well.

7. Storage and use of flammable liquids must comply with State Fire Code regulations.

CSS General Requirements

1. All food must be from approved sources. Home-prepared food is prohibited.

2. In the event that the ONLY use of a self-service display coincides with events such as holiday gatherings, appropriate support equipment may be obtained from rental services following guidelines listed above.

3. Temporary signs or banners advertising buffets, brunches and/or happy hours may require sign permit/approval from the municipality.

4. Approval from the local health authority must be obtained prior to initiating, providing additions, or changes to a buffet.

5. Appropriate signs shall be posted requiring the consumer to take a new, clean plate when returning to the consumer self-service display unit.

Guidelines for the Operation of an Outside Beverage Service

Definition

Outside beverage service is an area where beverages are prepared and/or served to the public out of doors. (These guidelines are intended for permanent facilities. Other provisions may apply for temporary portable bars.)

General

The operation and construction of an outside beverage service must meet the applicable requirements of the current Department of Health Rules for Requirements for Food and Beverage Establishments. Additional requirements may be imposed to protect against health hazards related to the conduct of an outside beverage service.

Plans and specifications must be submitted to the appropriate Health Agency and approved prior to construction.

Bar Service Construction and Operation

1. All beverage preparation, except restricted beverage preparation, must take place within fixed beverage service establishment.

2. Restricted beverage preparation; i.e. pre-packaged, canned, bottled or other pre-packaged beverages or snack items may be permitted in an outside beverage service area with limited facilities, (no water or sewer).

3. Limited beverage preparation; i.e., alcoholic beverages, pop and beer, dispensing, mixing, and assembly of ready to serve beverages, may be permitted in a facility that has a vermin-proof enclosure of sufficient size to accommodate the operation and is so constructed and located as to adequately protect the beverages and beverage service equipment from airborne contaminants. The restriction of the operation shall be in relation to the degree of beverage protection demonstrated by the construction and location of the enclosure.

    a. Outside Enclosures: facility must be protected from dust and windblown particulates by location, treatment of ground surfaces, or by having the establishment enclosed. The facility must be located where it is protected from possible contamination.

    b. The Health Department may restrict the type of beverages served or the method of service or preparation based on equipment limitations, commissary facilities or climatic conditions.

    c. The facility must be provided with an approved water supply and waste disposal in accordance with the Minnesota Plumbing Code.

    d. Hand washing facilities must be provided with hot and cold running water.

    e. All equipment must meet the appropriate standards of NSF International.

    f. Lighting, cleanable surfaces and under bar finishes must comply with food and beverage rules.

    g. All ice bins in outside facilities must be covered and self draining to a sanitary sewer.

    h. All glass storage (single service or multi-use) must be properly protected.

i. There may be no ice cream drinks in outdoor facilities and drinks mixed with a blender may be permitted when approved utensil cleansing facilities are provided.

j. Food preparation must take place inside the licensed food establishment.

k. All beverages and utensils must be stored inside the permanent food establishment at the end of the day.

l. If multiuse utensils are used, warewashing facilities must be provided or all utensils must be cleaned and sanitized inside the permanent food establishment.

m. Provide adequate pest control and garbage removal.

4. The facility must be capable of being fully enclosed on the sides and roof to provide protection during adverse weather. Interior surfaces must be finished with smooth, durable, nonabsorbent, easily cleanable material that resists the wear and abuse to which surfaces are subjects.

5. The floor finish must be constructed of smooth, durable, nonabsorbent, easily cleanable materials that resist the wear and abuse to which they are subjected. Appropriate materials include commercial grade vinyl composition tile, sheet vinyl, ceramic tile, quarry tile, terrazzo, or equivalent, depending on the service levels. The junctures between walls and floors must be coved.

6. Aisle spaces must be at least 36 inches to permit unobstructed work activity. Equipment must be located to permit easy cleaning.

MINNESOTA FOOD EQUIPMENT
VENTILATION GUIDELINES

A special task force of Environmental Health Directors has created the following guideline to provide assistance in the review of food establishment ventilation plans. It is intended to help achieve more uniformity and to provide a logical basis for decision-making regarding the type of hood system that is needed, when applicable, over equipment in food establishments.

GENERAL CRITERIA OR DETERMINING TYPES OF HOOD SYSTEM

Type I Hood System – for any of the following:

1. Appliance is used for initial cooking.
2. Cooking process produces smoke or grease vapors.
3. Cooking process uses oil as the cooking medium.
4. Gas appliances – unless combustion products are ducted separately.
5. Solid fuel appliances (wood, charcoal, mesquite, etc.).

Type II Hood System – for any one of the following, if Type I Hood System is not required:

1. Odor removal.
2. Steam removal.
3. Heat removal only – includes appliances, which are capable of greater than 300 degrees F.

Miscellaneous Guides

1. Decisions on exhaust ventilation and makeup air should be coordinated with other codes, including:
    - Minnesota and Uniform Mechanical Code
    - Minnesota and Uniform Building Code
    - Uniform fire Code and NFPA 96
    - ASHRAE Standards 62-1989

2. Further ventilation resources including construction guides and equipment exempted may be found in the “Description of Ventilation Systems-Food Service Establishments” published by the Michigan Department of Public Health.

3. Hoods must be installed to enable maximum capture and removal of grease, vapors, fumes, smoke, steam, heat, or odors.

    a. The 6-inch overhang on both cooking and dishwasher hoods should be measured to the inside edge of a hood’s gutter, if one exists. Gutters are typically unnecessary except below the filter bank.
    b. The vertical distance from the bottom of a hood to the top of a dishwasher should not exceed 3 feet.

4. Air balance and performance tests should be submitted to all appropriate health and building authorities.

5. If multiple appliances are under one hood, the type of hood cfm exhaust volume, and distance from filters to cooking surface must account for the most hazardous types of appliances present, as specified in UMC 2003 (e, f, g & h).

6. Exposed fire protection piping inside the hoods must be minimized. Any exposed piping must be chrome plated or stainless steel.

7. If filters are installed in a Type II hood to keep ducts clean, it should be documented that appliances needing a Type I hood will not be permitted. (Filters may give a false perception that grease-producing equipment can be installed.)

8. A conditional approval for a specific use or unique situation should be documented in the establishment's file, and the consequences should be clear in case operational factors change or problems develop. Determinations for a conditional approval can be based upon several factors such as menu, volume, frequency, operating temperature, location, type of contaminant and general ventilation within the area involved.

9. Local agencies may be more restrictive than the MN Department of Health. Certain situations may indicate a need for more stringent requirements.

10. Please refer to the "Minnesota Food Equipment Ventilation Guidelines," Appendix A for examples of food equipment and Appendix B for illustrations of the different types of hood systems.

THE FOLLOWING LISTS CONTAIN EXAMPLES OF FOOD EQUIPMENT THAT REQUIRE HOOD VENTIALTION SYSTEMS ACCORDINGLY, BUT ARE NOT LIMITED TO THE EQUIPMENT NAMED.

Equipment Requiring Type I Hood System Grease filters, welded iron duct and fire protection (numbers in parentheses correspond to numbers on specification sheets.)

Barbecue Machine (1)
Braising Pan (2)
Broiler/Grill (3)
Convection Oven – with meat and other grease producing food (4)
Corn Popper – theater or large oil consuming types (5)
Fryer, deep fat, doughnut (6)
Griddle (8)
Gyros Vertical Broiler (9)
Kettle, electric heated, flat bottom, gas heated, steam jacketed, tilting or trunion (10)
Meat Roaster/Slow Cooker – capable of greater than 300 degrees F (11)
Oven (12)
Peanut Roaster – gas (13)
Pizza Oven – large volume, large conveyor (14)
Pot Stove – high BTU or kw-burner for stock pots (15)
Pressure Fryer/Broaster (16)
Range/Stove (17)
Rice Cooker – gas (18)
Rotisserie (19)
Salamander – including gas cheese melters on full time (20)
Salamander Broiler (21)
Smokehouse, Chinese (22)
Smoker (23)
Solid Fuel Appliance (charcoal, mesquite, wood, etc.) – requires separate Type I Hood System (24)
Wok (Chinese Range) (25)

Equipment Requiring a Type II Hood System – Filters optional; non-welded sheet metal duct
(numbers in parentheses correspond to numbers on specification sheets.)

Bain Marie – large, equivalent to 4+ steam table pans (30)
Confectioner's Stove (31)
Convection Oven/Bake Oven – for bakery products, closed door pizza ovens, and countertop conveyor ovens (32)
Corn Popper – medium usage, or for odor/heat removal in multi-use buildings (33)
Dishwasher – high and low temperature, above counter (34)
Plate Warmer (35)Pot/Pan/Tray Washer (36)
Proof Box – rolling multiple rack (37)
Rethermalization Units/Steam Kettle – soup in bag, pasta (38)
Steam Cookers – vegetables only (39)
Toaster – large conveyor, institutional type (40)

Equipment Not Requiring A Hood System
Installation of multiple units of these types or extreme usage of equipment may require a hood system.
(numbers in parentheses correspond to numbers on specification sheets.)

Cheese Melter – electric, plate activated (45)
Corn Popper – small, occasional use, bars (46)
Cotton Candy Machine (47)
Countertop Infrared Ovens – cookies, pizza (48)
Glass Washer and Under counter Dishwasher (49)
Hot Dog Steamer/Roller Grill (50)
Hot Food Cabinet – holding or display only, max. 300 degrees F (51)
Hot Plate – electric, reheating only, no initial cooking (52)
Microwave Oven (53)
Proof Box – single rack (54)
Rethermalization Units – small, portable (55)
Rice Cooker – electric (56)
Three Compartment Sink (58)
Toaster – small, electric (59)
Waffle Maker (60)

Ventless (Recirculating) Hood Systems (70)
None approved to date as listed grease extractor. Consideration will be given to unique situations based on applications and performances.

BOARD ESTABLISHMENTS 10 AND UNDER

Food Service

Food service establishments serving 10 or fewer people including staff may, when approved by the Regulatory Authority use domestic equipment instead of NSF International equipment as stated in Minnesota Rule 4626.0505 J. All other requirements of the code apply. For newly built establishments the following list of equipment and finishes should be used.

1. **Refrigerators/Freezer:** The Food and Drug Administration states that residential refrigerators have questionable air flow and cooling ability. Unless commercial equipment is supplied, the menu needs to be restricted to same day food service. This means potentially hazardous foods are prepared and served the same day and no leftovers are kept for more than 4 hours after the meal service.
2. **Stoves/Ovens:** Must be exhausted to the outside of the building and meet building code requirements.
3. **Microwave:** Unless commercial equipment is supplied. Microwaves may not be used to cook potentially hazardous foods.
4. **Handsink(s):** A separate handsink must be supplied in the food preparation area and may not be used for purposes other than handwashing. MN Rule 4626.1110 B.
5. **Food Preparation Sink:** A two basin sink may be used. If the sink is used for rinsing dishes one compartment needs to be dedicated for food preparation only. Rinsing dishes and utensils may not take place in the dedicated compartment of the sink or at the same time as food preparation.
6. **Dishwashing Machine:** The dishwashing machine must provide a sanitizing rinse as the final step and the rinse cycle must meet the requirements of the Minnesota Food Code. Most residential dishwashers cannot meet the requirement of the code and are not durable. A commercial dishmachine is recommended.
7. **Food Prep Counters:** Food prep counters must be made of material approved for food contact, such as solid surface, stainless steel, ceramic tile. Plastic laminate is not an approved food contact surface.
8. **Nonfood Contact Counters:** Must be corrosion resistant, nonabsorbent and made of a smooth material.
9. **Cabinets:** Wood cabinates may be used if they are sealed with 3 coats of polyurethane, thermofoil or similar material. Wood msut be sealed inside cabinets also.
10. **Wood:** Wood is not suitable anywhere in a food preparation area, including around window and door frames or as a base cove material.
11. **Floors:** Commerical vinyl, ceramic tile, quarry tile or certain types of poured floors are acceptable.
12. **Walls:** Sheetrock with washable paint in nonsplash areas. Areas behind sinks need to be tile or some other nonabsorbent material.
13. **Ceilings:** Must be made of smooth and cleanable material. Popcorn ceilings are not allowed.
14. **Mop Sinks:** A mop sink must be provided unless alternative methods of cleaning floors are used. Mop water may not be disposed of in the 2 compartment sink or the handwashing sink.

Catering

1. Food must be prepared, stored and delivered from a licensed commercial kitchen. Food, equipment or single use items are not allowed to be prepared or stored at a private residence (home).
2. Food must be maintained at safe temperatures during transport and must be transported in a sanitary manner in food grade containers.
3. All food and beverages must be prepared in a permanent licensed food establishment. The food establishment must have at least a medium food establishment license.
4. Must be licensed as a medium or large establishment.
5. Portable handwashing may be required.

Recirculating Hoods

1. The Building official must be contacted regarding the installation of this hood system.
2. The operations and maintenance manual for the recirculating hood must be located on site.
3. The recirculating hood system must be installed and maintained in accordance to the instructions in the manufacturers' manual.
4. The instructions listed in the manufacturer's manual must be followed if it requires more frequent cleaning and inspection outlined in NFPA 96, Chapter 13.
5. The following is a partial list of minimum required maintenance criteria, as outline in National Fire Protection Association (NFPA) 96, Chapter 13 for recirculating systems.
   a. Inspection of the UL 300 listed fire suppression system by qualified service personnel every six months in accordance with the Minnesota Fire Code.
   b. Filters shall be cleaned or replaced in accordance with the manufacturer's instructions.

Tankless Water Heaters

Prior to installation, submit proposal to use tankless water heaters to the Regulatory Authority for review.

1. Contact the manufacturer to determine adequate sizing and proper number of units. Numerous units may need to be installed, per manufacturer's recommendations.
2. The unit's audible/visual alarm must be checked frequently to determine when descaling and maintenance is needed.
3. The unit must be properly descaled when the alarm indicates. Descaling must be done according to manufacturer's recommendations.
4. A water softener is recommended when the water hardness is over 9 grains. Recommended minimum water quality hardness is between 4 grains to 9 grains.
5. A maintenance schedule must be kept and be available for review.
6. All other local permits and codes (i.e. plumbing permit) must be met prior to installation.
7. The manufacturer recommends the use of a tankless valve kit when connecting the water lines to the water heater. This kit will assist in flushing the heat exchanger in areas where water quality issues exist.
8. Follow manufacturer's use and maintenance instructions must be stored at the facility.
9. All utility connections must be enclosed in a wall if installed in a foodservice area. No exposed piping.
10. When used with a warewashing machine a booster heater is recommended.
11. Water heaters location will be evaluated by the regulatory authority.