WV Retail Food Program
New Sanitarian Training

2013 Food Code
Chapter 4
Food

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Equipment, Utensils, and Linens

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4-1 MATERIALS FOR CONSTRUCTION AND REPAIR

Subparts

4-101 Multiuse
4-102 Single-Service and Single-Use
• **4-101.11** Characteristics of Utensils and Food-Contact Surfaces.
  • May not allow the migration of deleterious substances or impart colors, odors, or tastes to food and shall be:  
    • Safe;  
    • Durable, corrosion-resistant, and nonabsorbent;  
    • Sufficient to withstand repeated warewashing;  
    • Smooth, easily cleanable surface; and  
    • Resistant pitting, chipping, crazing, scratching, scoring, distortion, and decomposition.
4-1 MATERIALS FOR CONSTRUCTION AND REPAIR

- 4-101.12 Cast Iron, Use Limitation.
  - Cast iron may not be used for utensils or food-contact surfaces.
  - Except:
    - As a surface for cooking.
    - Utensils if the utensils are used only as part of an uninterrupted process from cooking through service.

- 4-101.13 Lead, Use Limitation.
  - Lead-free or contain levels of lead not exceeding the limits of the following utensil categories:
  - Pewter alloys may not exceed of 0.05% lead.
  - May not contain solder and flux with lead in excess of 0.2%.
• 4-101.14 Copper, Use Limitation.
  • Copper/brass may not be used for
    • Food with a pH below 6 (vinegar, fruit juice, or wine) \(^\text{P}\)
    • A fitting or tubing installed between a backflow prevention device and a carbonator. \(^\text{P}\)
  • Copper and copper alloys may be used pre fermentation and fermentation steps of a beer brewing.

• 4-101.15 Galvanized Metal, Use Limitation.
  • Galvanized metal may not be used for in contact with acidic food. \(^\text{P}\)

• 4-101.16 Sponges, Use Limitation.
  • Sponges may not be used.
4-1 MATERIALS FOR CONSTRUCTION AND REPAIR

- **4-101.17 Wood, Use Limitation.**
  - Wood and wood wicker may not be used as a food-contact surface.
  - Hard maple or an equivalently hard, close-grained wood may be used for:
    - Cutting boards; cutting blocks; bakers' tables, rolling pins, doughnut dowels, salad bowls, and chopsticks; and
    - Wooden paddles used in confectionery operations at a temperature 230°F or above
  - Whole, uncut, raw fruits and vegetables, and nuts in the shell may be kept in the wood shipping containers in which they were received, until the fruits, vegetables, or nuts are used.
  - If the nature of the food requires removal of rinds, peels, husks, or shells before consumption, the whole, uncut, raw food may be kept in:
    - Untreated wood containers; or
    - Treated wood containers if the containers are treated with a preservative that meets the requirements specified in 21 CFR 178.3800 Preservatives for wood.
• 4-101.18 Nonstick Coatings, Use Limitation.
  • Used with non-scoring or non-scratching utensils and cleaning aids.
• 4-101.19 Nonfood-Contact Surfaces.
  • Non-food-contact constructed of a corrosion-resistant, nonabsorbent, and smooth material.
• 4-102.11 Characteristics.
  • Materials that are used to make single-service and single-use articles may not:
    • Allow the migration of deleterious substances, \(P\) or
    • Impart colors, odors, or tastes to food; and
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4-2 DESIGN AND CONSTRUCTION

• 4-201.11 Equipment and Utensils.
  • Designed and constructed to be durable.

• 4-201.12 Food Temperature Measuring Devices.
  • Food temperature measuring devices may not have sensors or stems constructed of glass,
  • Except shatterproof coating (candy thermometers).
4-2 DESIGN AND CONSTRUCTION

- **4-202.11 Food-Contact Surfaces.**
  - Multiuse food-contact surfaces shall be:
    - Smooth; \(^{Pf}\)
    - Free of breaks, open seams, cracks, chips, inclusions, pits, and similar imperfections; \(^{Pf}\)
    - Free of sharp internal angles, corners, and crevices; \(^{Pf}\)
    - Finished to have smooth welds and joints; \(^{Pf}\) and
    - Accessible for cleaning and inspection by one of the following methods:
      - Without being disassembled, \(^{Pf}\)
      - By disassembling without the use of tools, Pf or
      - By easy disassembling with the use of handheld tools commonly available to maintenance and cleaning personnel such as screwdrivers, pliers, open-end wrenches, and Allen wrenches. \(^{Pf}\)
    - Does not apply to cooking oil storage tanks, distribution lines for cooking oils, or beverage syrup lines or tubes.
EXAMPLES
4-2 DESIGN AND CONSTRUCTION

• 4-202.12 CIP Equipment.
  • Shall meet 4-202.11 and be designed and constructed so that:
    • Cleaning and sanitizing solutions circulate throughout a fixed system and contact all interior food-contact surfaces, and
    • The system is self-draining or capable of being completely drained of cleaning and sanitizing solutions; and
  • CIP equipment that is not designed to be disassembled for cleaning shall be designed with inspection access points to ensure that all interior food-contact surfaces throughout the fixed system are being effectively cleaned.

• 4-202.13 "V" Threads, Use Limitation.
  • Except for hot oil cooking or filtering equipment, "V" type threads may not be used on Food-contact surfaces.
• **4-202.17 Kick Plates, Removable.**
  • Kick plates shall be designed so that the areas behind them are accessible for inspection and cleaning by being:
    • Removable by one of the methods specified under Subparagraph 4-202.11(A)(5) or capable of being rotated open; and
    • Removable or capable of being rotated open without unlocking EQUIPMENT doors.

• **4-202.18 Ventilation Hood Systems, Filters.**
  • Filters or other grease extracting EQUIPMENT shall be designed to be readily removable for cleaning and replacement if not designed to be cleaned in place.
4-2 DESIGN AND CONSTRUCTION

• **4-203.11 Temperature Measuring Devices, Food.**
  • Food temperature measuring devices that are scaled only in Celsius or dually scaled in Celsius and Fahrenheit shall be accurate to ±1°C in the intended range of use and replacement if not designed to be cleaned in place. Pf
  • Food temperature measuring devices that are scaled only in Fahrenheit shall be accurate to ±2°F in the intended range of use. Pf

• **4-203.12 Temperature Measuring Devices, Ambient Air and Water.**
  • Ambient air and water temperature measuring devices that are scaled in Celsius or dually scaled in Celsius and Fahrenheit shall be designed to be easily readable and accurate to ±1.5°C in the intended range of use. Pf
  • Ambient air and water temperature measuring devices that are scaled only in Fahrenheit shall be accurate to ±3°F in the intended range of use. Pf
• **4-203.13 Pressure Measuring Devices, Mechanical Warewashing Equipment.**

  Pressure measuring devices that display the pressures in the water supply line for the fresh hot water sanitizing rinse shall have increments of 7 kilopascals (1 pound per square inch) or smaller and shall be accurate to ±14 kilopascals (±2 pounds per square inch) in the range indicated on the manufacturer’s data plate.

• **4-204.11 Ventilation Hood Systems, Drip Prevention.**

  Exhaust ventilation hood systems in food preparation and warewashing areas including components such as hoods, fans, guards, and ducting shall be designed to prevent grease or condensation from draining or dripping onto food, equipment, utensils, linens, and single-service and single-use articles.
4-204.12 Equipment Openings, Closures and Deflectors.

- A cover or lid for equipment shall overlap the opening and be sloped to drain.
- An opening located within the top of a unit of equipment that is designed for use with a cover or lid shall be flanged upward at least 5 millimeters (two-tenths of an inch).
- Except as specified under ¶ (D) of this section, fixed piping, temperature measuring devices, rotary shafts, and other parts extending into equipment shall be provided with a watertight joint at the point where the item enters the equipment.
- If a watertight joint is not provided:
  - The piping, temperature measuring devices, rotary shafts, and other parts extending through the openings shall be equipped with an apron designed to deflect condensation, drips, and dust from openings into the food; and
  - The opening shall be flanged as specified under ¶ (B) of this section.
4-204.13 Dispensing Equipment, Protection of Equipment and Food.

• In equipment that dispenses or vends liquid food or ice in unpackaged form:
  • The delivery tube, chute, orifice, and splash surfaces directly above the container receiving the food shall be designed in a manner, such as with barriers, baffles, or drip aprons, so that drips from condensation and splash are diverted from the opening of the container receiving the food;
  • The delivery tube, chute, and orifice shall be protected from manual contact such as by being recessed;
  • The delivery tube or chute and orifice of equipment used to vend liquid food or ice in unpackaged form to self-service consumers shall be designed so that the delivery tube or chute and orifice are protected from dust, insects, rodents, and other contamination by a self-closing door if the equipment is:
    • Located in an outside area that does not otherwise afford the protection of an enclosure against the rain,
    • windblown debris, insects, rodents, and other contaminants that are present in the environment, or
    • Available for self-service during hours when it is not under the full-time supervision of a food employee; and
  • The dispensing equipment actuating lever or mechanism and filling device of consumer self-service beverage dispensing equipment shall be designed to prevent contact with the lip-contact surface of glasses or cups that are refilled.
• Dispensing equipment in which time/temperature control for safety food in a homogenous liquid form is maintained outside of the temperature control requirements as specified under § 3-501.16(A) shall:
  • Be specifically designed and equipped to maintain the commercial sterility of aseptically packaged food in a homogenous liquid form for a specified duration from the time of opening the packaging within the equipment; p and
  • Conform to the requirements for this equipment as specified in NSF/ANSI 18-2006-Manual Food and Beverage Dispensing Equipment. p
4-204.14 Vending Machine, Vending Stage Closure.

The dispensing compartment of a vending machine including a machine that is designed to vend prepackaged snack food that is not TCS food such as chips, party mixes, and pretzels shall be equipped with a self-closing door or cover if the machine is:

- Located in an outside area that does not otherwise afford the protection of an enclosure against the rain, windblown debris, insects, rodents, and other contaminants that are present in the environment; or
- Available for self-service during hours when it is not under the full-time supervision of a food employee.
• 4-204.16 Beverage Tubing, Separation.
  • Except for cold plates that are constructed integrally with an ice storage bin, BEVERAGE tubing and cold-plate BEVERAGE cooling devices may not be installed in contact with stored ice.

• 4-204.17 Ice Units, Separation of Drains.
  • Liquid waste drain lines may not pass through an ice machine or ice storage bin.

• 4-204.18 Condenser Unit, Separation.
  • If a condenser unit is an integral component of EQUIPMENT, the condenser unit shall be separated from the FOOD and FOOD storage space by a dustproof barrier.

• 4-204.19 Can Openers on Vending Machines.
  • Cutting or piercing parts of can openers on VENDING MACHINES shall be protected from manual contact, dust, insects, rodents, and other contamination.
4-2 DESIGN AND CONSTRUCTION

• 4-204.110 Molluscan Shellfish Tanks.
  • Except as specified under ¶ (B) of this section, molluscan shellfish life support system display tanks may not be used to store or display shellfish that are offered for human consumption and shall be conspicuously marked so that it is obvious to the consumer that the shellfish are for display only. P
  • Molluscan shellfish life-support system display tanks that are used to store or display shellfish that are offered for human consumption shall be operated and maintained in accordance with a variance granted by the regulatory authority as specified in § 8-103.10 and a HACCP Plan that:
    • Is submitted by the permit holder and approved as specified under § 8-103.11; Pf and
    • Ensures that:
      • Water used with fish other than molluscan shellfish does not flow into the molluscan tank, Pf
      • The safety and quality of the shellfish as they were received are not compromised by the use of the tank, Pf and
      • The identity of the source of the shellstock is retained as specified per § 3-203.12. Pf
        • In a refrigerated vending machine, the ambient air temperature may not exceed 5 °C (41°F) for more than 30 minutes immediately after the machine is filled, serviced, or restocked; P or
        • In a hot holding vending machine, the ambient air temperature may not be less than 57 °C (135 °F) for more than 120 minutes immediately after the machine is filled, serviced, or restocked. P
EXAMPLES
4-2 DESIGN AND CONSTRUCTION

- 4-204.112 Temperature Measuring Devices.
  - In a mechanically refrigerated or hot food storage unit, the sensor of a temperature measuring device shall be located to measure the air temperature or a simulated product temperature in the warmest part of a mechanically refrigerated unit and in the coolest part of a hot food storage unit.
  - Except as specified in ¶ (c) of this section, cold or hot holding equipment used for time/temperature control for safety food shall be designed to include and shall be equipped with at least one integral or permanently affixed temperature measuring device that is located to allow easy viewing of the device's temperature display.
  - Paragraph (B) does not apply to equipment for which the placement of a temperature measuring device is not a practical means for measuring the ambient air surrounding the food because of the design, type, and use of the equipment, such as calrod units, heat lamps, cold plates, bainmaries, steam tables, insulated food transport containers, and salad bars.
  - Temperature measuring devices shall be designed to be easily readable.
  - Food temperature measuring devices and water temperature measuring devices on warewashing machines shall have a numerical scale, printed record, or digital readout in increments no greater than 1° C or 2 ° F in the intended range of use. Pf
- **4-204.113 Warewashing Machine, Data Plate Operating Specifications.**
  - A warewashing machine shall be provided with an easily accessible and readable data plate affixed to the machine by the manufacturer that indicates the machine’s design and operation specifications including the:
    - Temperatures required for washing, rinsing, and sanitizing;
    - Pressure required for the fresh water sanitizing rinse unless the machine is designed to use only a pumped sanitizing rinse; and
    - Conveyor speed for conveyor machines or cycle time for stationary rack machines.
EXAMPLES
• 4-204.114 Warewashing Machines, Internal Baffles.
  • Warewashing machine wash and rinse tanks shall be equipped with baffles, curtains, or other means to minimize internal cross contamination of the solutions in wash and rinse tanks.

• 4-204.115 Warewashing Machines, Temperature Measuring Devices.
  • A warewashing machine shall be equipped with a temperature measuring device that indicates the temperature of the water:
    • In each wash and rinse tank; \(^{PF}\) and
    • As the water enters the hot water sanitizing final rinse manifold or in the chemical sanitizing solution tank. \(^{PF}\)

• 4-204.116 Manual Warewashing Equipment, Heaters and Baskets.
  • If hot water is used for sanitization in manual warewashing operations, the sanitizing compartment of the sink shall be:
    • Designed with an integral heating device that is capable of maintaining water at a temperature not less than 77oC (171oF); \(^{PF}\) and
    • Provided with a rack or basket to allow complete immersion of equipment and utensils into the hot water. \(^{PF}\)
EXAMPLES
• **4-204.117 Warewashing Machines, Automatic Dispensing of Detergents and Sanitizers.**

  • A warewashing machine that is installed after adoption of this code by the regulatory authority, shall be equipped to:
    • Automatically dispense detergents and sanitizers; \(^{\text{Pf}}\)
    • Incorporate a visual means to verify that detergents and sanitizers are delivered or a visual or audible alarm to signal if the detergents and sanitizers are not delivered to the respective washing and sanitizing cycles. \(^{\text{Pf}}\)
EXAMPLES
4-204.118 Warewashing Machines, Flow Pressure Device.

Warewashing machines that provide a fresh hot water sanitizing rinse shall be equipped with a pressure gauge or similar device such as a transducer that measures and displays the water pressure in the supply line immediately before entering the warewashing machine; and

If the flow pressure measuring device is upstream of the fresh hot water sanitizing rinse control valve, the device shall be mounted in a 6.4 millimeter or one-fourth inch Iron Pipe Size (IPS) valve.

Paragraphs (A) and (B) of this section do not apply to a machine that uses only a pumped or recirculated sanitizing rinse.
• **4-204.119 Warewashing Sinks and Drainboards, Self-Draining.**
  • Sinks and drainboards of WAREWASHING sinks and machines shall be self-draining.

• **4-204.120 Equipment Compartments, Drainage.**
  • EQUIPMENT compartments that are subject to accumulation of moisture due to conditions such as condensation, FOOD or BEVERAGE drip, or water from melting ice shall be sloped to an outlet that allows complete draining.
4-2 DESIGN AND CONSTRUCTION

• **4-204.121 Vending Machines, Liquid Waste Products.**
  • Vending machines designed to store beverages that are packaged in containers made from paper products shall be equipped with diversion devices and retention pans or drains for container leakage.
  • Vending machines that dispense liquid food in bulk shall be:
    • Provided with an internally mounted waste receptacle for the collection of drip, spillage, overflow, or other internal wastes; and
    • Equipped with an automatic shutoff device that will place the machine out of operation before the waste receptacle overflows.
  • Shutoff devices specified under Subparagraph (B)(2) of this section shall prevent water or liquid food from continuously running if there is a failure of a flow control device in the water or liquid food system or waste accumulation that could lead to overflow of the waste receptacle.

• **4-204.122 Case Lot Handling Apparatuses, Movability.**
  • Apparatuses, such as dollies, pallets, racks, and skids used to store and transport large quantities of packaged foods received from a supplier in a cased or overwrapped lot, shall be designed to be moved by hand or by conveniently available apparatuses such as hand trucks and forklifts.
• **4-204.123** Vending Machine Doors and Openings.

• VENDING MACHINE doors and access opening covers to FOOD and container storage spaces shall be tight-fitting so that the space along the entire interface between the doors or covers and the cabinet of the machine, if the doors or covers are in a closed position, is no greater than 1.5 millimeters or one-sixteenth inch by:
  
  • Being covered with louvers, screens, or materials that provide an equivalent opening of not greater than 1.5 millimeters or one-sixteenth inch. Screening of 12 or more mesh to 2.5 centimeters (12 mesh to 1 inch) meets this requirement;
  
  • Being effectively gasketed;
  
  • Having interface surfaces that are at least 13 millimeters or one-half inch wide; or
  
  • Jambs or surfaces used to form an L-shaped entry path to the interface.

• VENDING MACHINE service connection openings through an exterior wall of a machine shall be closed by sealants, clamps, or grommets so that the openings are no larger than 1.5 millimeters or one-sixteenth inch.
• 4-205.10 Food Equipment, Certification and Classification.
• Food equipment that is certified or classified for sanitation by an American National Standards Institute (ANSI)-accredited certification program is deemed to comply with Parts 4-1 and 4-2 of this chapter.
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4-3 NUMBERS AND CAPACITIES

Subparts

4-301 Equipment
4-302 Utensils, Temperature Measuring Devices, and Testing Devices
4-3 NUMBERS AND CAPACITIES

- **4-301.11 Cooling, Heating, and Holding Capacities.**
  - Equipment for cooling and heating food, and holding cold and hot food, shall be sufficient in number and capacity to provide food temperatures as specified under Chapter 3. \(^{Pf}\)

- **4-301.12 Manual Warewashing, Sink Compartment Requirements.**
  - Except as specified in ¶ (C) of This section, a sink with at least 3 compartments shall be provided for manually washing, rinsing, and sanitizing equipment and utensils. \(^{Pf}\)
  - Sink compartments shall be large enough to accommodate immersion of the largest equipment and utensils. If equipment or utensils are too large for the warewashing sink, a warewashing machine or alternative equipment as specified in ¶ (c) of this section shall be used. \(^{Pf}\)
  - Alternative manual warewashing equipment may be used when there are special cleaning needs or constraints, and its use is approved. Alternative manual warewashing equipment may include:
    - High-pressure detergent sprayers;
    - Low-or line-pressure spray detergent foamers;
    - Other task-specific cleaning equipment;
    - Brushes or other implements;
    - 2-compartment sinks as specified under ¶¶ (D) and (E) of this section; or
    - Receptacles that substitute for the compartments of a multicompartiment sink.
  - Before a 2-compartment sink is used:
    - The permit holder shall have its use approved; and
    - The permit holder shall limit the number of kitchenware items cleaned and sanitized in the 2-compartment sink, and shall limit warewashing to batch operations for cleaning kitchenware such as between cutting one type of raw meat and another or cleanup at the end of a shift, and shall:
      - Make up the cleaning and sanitizing solutions immediately before use and drain them immediately after use, and
      - Use a detergent-sanitizer to sanitize and apply the detergent-sanitizer in accordance with the manufacturer’s label instructions and as specified under § 4-501.115, or
      - Use a hot water sanitization immersion step as specified under ¶ 4-603.16(C).
    - A 2-compartment sink may not be used for warewashing operations where cleaning and sanitizing solutions are used for a continuous or intermittent flow of kitchenware or tableware in an ongoing warewashing process.
4-3 NUMBERS AND CAPACITIES

• **4-301.13 Drainboards.**
  • Drainboards, utensil racks, or tables large enough to accommodate all soiled and cleaned items that may accumulate during hours of operation shall be provided for necessary utensil holding before cleaning and after sanitizing.

• **4-301.14 Ventilation Hood Systems, Adequacy.**
  • Ventilation hood systems and devices shall be sufficient in number and capacity to prevent grease or condensation from collecting on walls and ceilings.

• **4-301.15 Clothes Washers and Dryers.**
  • Except as specified in ¶ (B) of this section, if work clothes or linens are laundered on the premises, a mechanical clothes washer and dryer shall be provided and used.
  • If on-premises laundering is limited to wiping cloths intended to be used moist, or wiping cloths are air-dried as specified under § 4-901.12, a mechanical clothes washer and dryer need not be provided.
4-3 NUMBERS AND CAPACITIES

- 4-302.11 Utensils, Consumer Self-Service.
  - A food dispensing utensil shall be available for each container displayed at a consumer self-service unit such as a buffet or salad bar. Pf

- 4-302.12 Food Temperature Measuring Devices.
  - Food temperature measuring devices shall be provided and readily accessible for use in ensuring attainment and maintenance of food temperatures as specified under Chapter 3. Pf
  - A temperature measuring device with a suitable small-diameter probe that is designed to measure the temperature of thin masses shall be provided and readily accessible to accurately measure the temperature in thin foods such as meat patties and fish filets. Pf
• **4-302.13 Temperature Measuring Devices, Manual and Mechanical Warewashing.**
  - In manual warewashing operations, a temperature measuring device shall be provided and readily accessible for frequently measuring the washing and sanitizing temperatures. Pf
  - In hot water mechanical warewashing operations, an irreversible registering temperature indicator shall be provided and readily accessible for measuring the utensil surface temperature. Pf

• **4-302.14 Sanitizing Solutions, Testing Devices.**
  - A test kit or other device that accurately measures the concentration in mg/l of sanitizing solutions shall be provided. Pf
Sanitizer Test Strips

- Color indicator is specific to the batch of test strips
- Expiration dates matter
  - No expiration date means that kit is more than 2 years old
- Exposure to water and air is a problem
- Do not swirl or bounce the strip
Chemical Sanitizer Test Strips Quaternary

- Should be tested between 65°F and 75°F.
- Don’t test bubbles
- 2 Chain quaternary solutions require QT-10 test strips to be accurate
  - Around 200 ppm
- 4 Chain quaternary solutions require QT-40
  - 150-400 ppm
  - EcoLab has a specific strip for a 4 Chain Quaternary Sanitizer of their own called QT-44
- QAC Strips are general, but not the best on accuracy
- Leave in solution for 10 seconds then check
- Ineffective if water hardness exceeds 500 MG/L
- Quat binding with cloth can reduce available quat
- Can be used as a surfactant (detergent)
Chemical Sanitizer Test Strips Chlorine

- Does not do well with bio-mat
- Should be an acid pH
- Dip
- BLOT
- Check

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4-4 LOCATION AND INSTALLATION

Subparts

4-401 Location
4-402 Installation
4-4 LOCATION AND INSTALLATION

- **4-401.11 Equipment, Clothes Washers and Dryers, and Storage Cabinets, Contamination Prevention.**
  - Except as specified in ¶ (B) of this section, equipment, a cabinet used for the storage of food, or a cabinet that is used to store cleaned and sanitized equipment, utensils, laundered linens, and single-service and single-use articles may not be located:
    - In locker rooms;
    - In toilet rooms;
    - In garbage rooms;
    - In mechanical rooms;
    - Under sewer lines that are not shielded to intercept potential drips;
    - Under leaking water lines including leaking automatic fire sprinkler heads or under lines on which water has condensed;
    - Under open stairwells; or
    - Under other sources of contamination.
  - A storage cabinet used for linens or single-service or single-use articles may be stored in a locker room.
  - If a mechanical clothes washer or dryer is provided, it shall be located so that the washer or dryer is protected from contamination and only where there is no exposed food; clean equipment, utensils, and linens; and unwrapped single service and single-use articles.
4-4 LOCATION AND INSTALLATION

• **4-402.11 Fixed Equipment, Spacing or Sealing.**
  • Equipment that is fixed because it is not easily movable shall be installed so that it is:
    • Spaced to allow access for cleaning along the sides, behind, and above the equipment;
    • Spaced from adjoining equipment, walls, and ceilings a distance of not more than 1 millimeter or one thirty-second inch; or
    • Sealed to adjoining equipment or walls, if the equipment is exposed to spillage or seepage.
  • Counter-mounted equipment that is not easily movable shall be installed to allow cleaning of the equipment and areas underneath and around the equipment by being:
    • Sealed; or
    • Elevated on legs as specified under ¶ 4-402.12(D).
4-402.12 Fixed Equipment, Elevation or Sealing.

- Floor-mounted equipment that is not easily movable shall be sealed to the floor or elevated at least a 6 inch clearance between the floor.
- If the floor is not 6 inches from the point of cleaning access, the clearance by be 4 inches.
- Does not apply to display shelving units, display refrigeration units, and display freezer units located in the consumer shopping areas of a retail food store, if the floor under the units is maintained clean.
- Counter-mounted equipment shall be elevated on legs that provide at least 4 inches tall.
- The clearance space between the table and counter-mounted equipment may be:
  - 3 inches if 20 inches from the point of access for cleaning; or
  - 2 inches if the 3 inches from the point of access for cleaning
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• **4-501.11 Good Repair and Proper Adjustment.**
  • Equipment shall be maintained in a state of repair and condition that meets the requirements specified under Parts 4-1 and 4-2.
  • Equipment components such as doors, seals, hinges, fasteners, and kick plates shall be kept intact, tight, and adjusted in accordance with manufacturer's specifications.
  • Cutting or piercing parts of can openers shall be kept sharp to minimize the creation of metal fragments that can contaminate food when the container is opened.
• **4-501.12 Cutting Surfaces.**
  • Surfaces such as cutting blocks and boards that are subject to scratching and scoring shall be resurfaced if they can no longer be effectively cleaned and sanitized or discarded if they are not capable of being resurfaced.

• **4-501.13 Microwave Ovens.**
  • Microwave ovens shall meet the safety standards specified in 21 CFR 1030.10 Microwave ovens.

• **4-501.14 Warewashing Equipment, Cleaning Frequency.**
  • A warewashing machine; the compartments of sinks, basins, or other receptacles used for washing and rinsing equipment, utensils, or raw foods, or laundering wiping cloths; and drainboards or other equipment used to substitute for drainboards as specified under § 4-301.13 shall be cleaned:
    • Before use;
    • Throughout the day at a frequency necessary to prevent recontamination of equipment and utensils and to ensure that the equipment performs its intended function; and
    • If used, at least every 24 hours.
EXAMPLES
• **4-501.15 Warewashing Machines, Manufacturers' Operating Instructions.**
  • A warewashing machine and its auxiliary components shall be operated in accordance with the machine's data plate and other manufacturer's instructions.
  • A warewashing machine's conveyor speed or automatic cycle times shall be maintained accurately timed in accordance with manufacturer's specifications.

• **4-501.16 Warewashing Sinks, Use Limitation.**
  • A warewashing sink may not be used for handwashing as specified under § 2-301.15.
  • if a warewashing sink is used to wash wiping cloths, wash produce, or thaw food, the sink shall be cleaned as specified under § 4-501.14 before and after each time it is used to wash wiping cloths or wash produce or thaw food. Sinks used to wash or thaw food shall be sanitized as specified under part 4-7 before and after using the sink to wash produce or thaw food.
• 4-501.17 Warewashing Equipment, Cleaning Agents.
  • When used for warewashing, the wash compartment of a sink, mechanical warewasher, or wash receptacle of alternative manual warewashing equipment as specified in ¶ 4-301.12(c), shall contain a wash solution of soap, detergent, acid cleaner, alkaline cleaner, degreaser, abrasive cleaner, or other cleaning agent according to the cleaning agent manufacturer's label instructions.

• 4-501.18 Warewashing Equipment, Clean Solutions.
  • The wash, rinse, and sanitize solutions shall be maintained clean.
• **4-501.19 Manual Warewashing Equipment, Wash Solution Temperature.**
  • The temperature of the wash solution in manual warewashing equipment shall be maintained at not less than 43°C (110°F) or the temperature specified on the cleaning agent manufacturer's label instructions. Pf

• **4-501.110 Mechanical Warewashing Equipment, Wash Solution Temperature.**
  • The temperature of the wash solution in spray type warewashers that use hot water to sanitize may not be less than:
    • Stationary rack, single temperature machine, 74°C (165°F); Pf
    • Stationary rack, dual temperature machine, 66°C (150°F); Pf
    • Single tank, conveyor, dual temperature machine, 71°C (160°F); Pf
    • Multitank, conveyor, multitemperature machine, 66°C (150°F). Pf
  • The temperature of the wash solution in spray-type warewashers that use chemicals to sanitize may not be less than 49°C (120°F). Pf
4-5 MAINTENANCE AND OPERATION

- **4-501.111 Manual Warewashing Equipment, Hot Water Sanitization Temperatures.**
  - If immersion in hot water is used for sanitizing in a manual operation, the temperature of the water shall be maintained at $171^\circ\text{F}$ or above. \(p\)

- **4-501.112 Mechanical Warewashing Equipment, Hot Water Sanitization Temperatures.**
  - In a mechanical operation, the temperature of the fresh hot water sanitizing rinse as it enters the manifold may not be more than $194^\circ\text{F}$, or less than:
    - For a stationary rack, single temperature machine, $165^\circ\text{F}$; \(p_f\)
    - or
    - For all other machines, $180^\circ\text{F}$. \(p_f\)
  - The maximum temperature specified under ¶ (A) of this section, does not apply to the high pressure and temperature systems with wand-type, hand-held, spraying devices used for the in-place cleaning and sanitizing of equipment such as meat saws.
• 4-501.113 Mechanical Warewashing Equipment, Sanitization Pressure.
• The flow pressure of the fresh hot water sanitizing rinse in a warewashing machine, as measured in the water line immediately downstream or upstream from the fresh hot water sanitizing rinse control value, shall be within the range specified on the machine manufacturer’s data plate and may not be less than 5 pounds per square inch or more than 30 pounds per square inch.

- A chemical sanitizer used in a sanitizing solution for a manual or mechanical operation at contact times specified under ¶4-703.11(C) shall meet the criteria specified under § 7-204.11 Sanitizers, Criteria, shall be used in accordance with the EPA-registered label use instructions, \(^\text{p}\) and shall be used as follows:
  - A chlorine solution shall have a minimum temperature based on the concentration and PH of the solution as listed in the following chart; \(^\text{p}\)
  - An iodine solution shall have a:
    - Minimum temperature of 20° C (68° F), \(^\text{p}\)
    - PH of 5.0 or less or a PH no higher than the level for which the manufacturer specifies the solution is effective, \(^\text{p}\)
    - Concentration between 12.5 MG/L and 25 MG/L; \(^\text{p}\)
  - A quaternary ammonium compound solution shall:
    - Have a minimum temperature of 24° C (75° F), \(^\text{p}\)
    - Have a concentration as specified under § 7-204.11 and as indicated by the manufacturer's use directions included in the labeling, \(^\text{p}\) and
    - Be used only in water with 500 MG/L hardness or less or in water having a hardness no greater than specified by the EPA-registered label use instructions; \(^\text{p}\)
  - If another solution of a chemical specified under ¶¶ (A) (C) of this section is used, the permit holder shall demonstrate to the regulatory authority that the solution achieves sanitization and the use of the solution shall be approved; \(^\text{p}\)
  - If a chemical sanitizer other than chlorine, iodine, or a quaternary ammonium compound is used, it shall be applied in accordance with the EPA-registered label use instructions; \(^\text{p}\) and
  - If a chemical sanitizer is generated by a device located on-site at the food establishment it shall be used as specified in ¶¶(A)-(D) of this section and shall be produced by a device that:
    - Complies with §§ 2(q)(1) and 12 of the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), \(^\text{p}\)
    - Complies with 40 CFR 152.500 Requirement for Devices and 40 CFR 156.10 Labeling Requirements, \(^\text{p}\)
    - Displays the EPA device manufacturing facility registration number on the device, \(^\text{pf}\)
    - Is operated and maintained in accordance with manufacturer’s instructions \(^\text{pf}\).
<table>
<thead>
<tr>
<th>Concentration Range (MG/L)</th>
<th>Minimum Temperature pH 10 or less °C (°F)</th>
<th>Minimum Temperature pH 8 or less °C (°F)</th>
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<tr>
<td>25 – 49</td>
<td>49 (120)</td>
<td>49 (120)</td>
</tr>
<tr>
<td>50 – 99</td>
<td>38 (100)</td>
<td>24 (75)</td>
</tr>
<tr>
<td>100</td>
<td>13 (55)</td>
<td>13 (55)</td>
</tr>
</tbody>
</table>
  • If a detergent-sanitizer is used to sanitize in a cleaning and sanitizing procedure where there is no distinct water rinse between the washing and sanitizing steps, the agent applied in the sanitizing step shall be the same detergent-sanitizer that is used in the washing step.

• 4-501.116 Warewashing Equipment, Determining Chemical Sanitizer Concentration.
  • Concentration of the sanitizing solution shall be accurately determined by using a test kit or other device. Pf
EXAMPLES
• **4-502.11 Good Repair and Calibration.**
  • Utensils shall be maintained in a state of repair or condition that complies with the requirements specified under Parts 4-1 and 4-2 or shall be discarded.
  • Food temperature measuring devices shall be calibrated in accordance with manufacturer's specifications as necessary to ensure their accuracy. Pf
  • Ambient air temperature, water pressure, and water temperature measuring devices shall be maintained in good repair and be accurate within the intended range of use.

• **4-502.12 Single-Service and Single-Use Articles, Required Use.**
  • A food establishment without facilities specified under parts 4-6 and 4-7 for cleaning and sanitizing kitchenware and tableware shall provide only single-use kitchenware, single-service articles, and single-use articles for use by food employees and single-service articles for use by consumers. P
EXAMPLES
• 4-502.13 Single-Service and Single-Use Articles, Use Limitation.
  • Single-service and single-use articles may not be reused.
  • The bulk milk container dispensing tube shall be cut on the diagonal leaving no more than one inch protruding from the chilled dispensing head.

• 4-502.14 Shells, Use Limitation.
  • Mollusk and crustacea shells may not be used more than once as serving containers.
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4-6 CLEANING OF EQUIPMENT AND UTENSILS

Subparts

4-601 Objective
4-602 Frequency
4-603 Methods
4-6 CLEANING OF EQUIPMENT AND UTENSILS

• 4-601.11 Equipment, Food-Contact Surfaces, Nonfood-Contact Surfaces, and Utensils.
  • Equipment food-contact surfaces and utensils shall be clean to sight and touch. Pf
  • The food-contact surfaces of cooking equipment and pans shall be kept free of encrusted grease deposits and other soil accumulations.
  • Nonfood-contact surfaces of equipment shall be kept free of an accumulation of dust, dirt, food residue, and other debris.
4-6 CLEANING OF EQUIPMENT AND UTENSILS

• 4-602.11 Equipment Food-Contact Surfaces and Utensils.
  • Equipment food-contact surfaces and utensils shall be cleaned:
    • Before each use with a different type of raw animal food such as beef, fish, lamb, pork, or poultry; \(^\text{P}\)
    • Each time there is a change from working with raw foods to working with ready-to-eat foods; \(^\text{P}\)
    • Between uses with raw fruits and vegetables and with time/temperature control for safety food; \(^\text{P}\)
    • Before using or storing a food temperature measuring device; \(^\text{P}\)
    • At any time during the operation when contamination may have occurred. \(^\text{P}\)
4-602.11 Equipment Food-Contact Surfaces and Utensils.

- Does not apply if the food-contact surface or utensil is in contact with a succession of different types of raw meat and poultry each requiring a higher cooking temperature as specified under § 3-401.11 than the previous type.
- If used with TCS, equipment food contact surfaces and utensils shall be cleaned throughout the day at least every 4 hours.
- Surfaces of utensils and equipment contacting TCS food may be cleaned less frequently than every 4 hours if:
  - In storage, containers TCS food and their contents are maintained at temperatures specified under Chapter 3 and the containers are cleaned when they are empty.
4-6 CLEANING OF EQUIPMENT AND UTENSILS

• 4-602.11 Equipment Food-Contact Surfaces and Utensils.
  • Surfaces of utensils and equipment contacting TCS food may be cleaned less frequently than every 4 hours if:
    • Refrigerated room or area that is maintained at one of the temperatures in the following chart and:
      • The utensils and equipment are cleaned at the frequency in the following chart that corresponds to the temperature; and
    • The cleaning frequency is documented

<table>
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<tr>
<th>Temperature</th>
<th>Cleaning Frequency</th>
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<tr>
<td>5.0°C (41°F) or less</td>
<td>24 hours</td>
</tr>
<tr>
<td>&gt;5.0°C - 7.2°C (&gt;41°F - 45°F)</td>
<td>20 hours</td>
</tr>
<tr>
<td>&gt;7.2°C - 10.0°C (&gt;45°F - 50°F)</td>
<td>16 hours</td>
</tr>
<tr>
<td>&gt;10.0°C - 12.8°C (&gt;50°F - 55°F)</td>
<td>10 hours</td>
</tr>
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</table>
4-602.11 Equipment Food-Contact Surfaces and Utensils.

Surfaces of utensils and equipment contacting TCS food may be cleaned less frequently than every 4 hours if:

- Containers in buffet style lines hold RTE TCS food at correct temperatures intermittently combined with additional supplies of the same food that is at the required temperature, cleaned at least every 24 hours;
- Temperature measuring devices are maintained in contact with food, such as when left in a container of deli food or in a roast, held at temperatures specified under Chapter 3;
- Equipment is used for storage of packaged or unpackaged food such as a reach-in refrigerator and the equipment is cleaned at a frequency necessary to preclude accumulation of soil residues;
- The cleaning schedule is approved based on consideration of:
  - Characteristics of the equipment and its use,
  - The type of food involved,
  - The amount of food residue accumulation, and
  - The temperature at which the food is maintained during the operation and the potential for the rapid and progressive multiplication of pathogenic or toxigenic microorganisms that are capable of causing foodborne disease; or
- In-use utensils are intermittently stored in a container of water in which the water is maintained at 135 °F or more and the utensils and container are cleaned at least every 24 hours or at a frequency necessary to preclude accumulation of soil residues.
4-6 CLEANING OF EQUIPMENT AND UTENSILS

- 4-602.11 Equipment Food-Contact Surfaces and Utensils.
  - Except when dry cleaning methods are used as specified under § 4-603.11, surfaces of utensils and equipment contacting food that is not TCS food shall be cleaned:
    - At any time when contamination may have occurred;
    - At least every 24 hours for iced tea dispensers and consumer self-service utensils such as tongs, scoops, or ladles;
    - Before restocking consumer self-service equipment and utensils such as condiment dispensers and display containers; and
    - In equipment such as ice bins and beverage dispensing nozzles and enclosed components of equipment such as ice makers, cooking oil storage tanks and distribution lines, beverage and syrup dispensing lines or tubes, coffee bean grinders, and water vending equipment:
      - At a frequency specified by the manufacturer, or
      - Absent manufacturer specifications, at a frequency necessary to preclude accumulation of soil or mold.
4-602.12 Cooking and Baking Equipment.
• The food-contact surfaces of cooking and baking equipment shall be cleaned at least every 24 hours. This section does not apply to hot oil cooking and filtering equipment if it is cleaned as specified in Subparagraph 4-602.11(D)(6).
• The cavities and door seals of microwave ovens shall be cleaned at least every 24 hours by using the manufacturer's recommended cleaning procedure.

4-602.13 Nonfood-Contact Surfaces.
• Nonfood-contact surfaces of equipment shall be cleaned at a frequency necessary to preclude accumulation of soil residues.

4-603.11 Dry Cleaning.
• If used, dry cleaning methods such as brushing, scraping, and vacuuming shall contact only surfaces that are soiled with dry food residues that are not TCS food.
• Cleaning equipment used in dry cleaning food-contact surfaces may not be used for any other purpose.
4-6 CLEANING OF EQUIPMENT AND UTENSILS

• **4-603.12 Precleaning.**
  • Food debris on equipment and utensils shall be scraped over a waste disposal unit or garbage receptacle or shall be removed in a warewashing machine with a prewash cycle.
  • If necessary for effective cleaning, utensils and equipment shall be pre-flushed, presoaked, or scrubbed with abrasives.

• **4-603.13 Loading of Soiled Items, Warewashing Machines.**
  • Soiled items to be cleaned in a warewashing machine shall be loaded into racks, trays, or baskets or onto conveyors in a position that:
    • Exposes the items to the unobstructed spray from all cycles; and
    • Allows the items to drain.

• **4-603.14 Wet Cleaning.**
  • Equipment food-contact surfaces and utensils shall be effectively washed to remove or completely loosen soils by using the manual or mechanical means necessary such as the application of detergents containing wetting agents and emulsifiers; acid, alkaline, or abrasive cleaners; hot water; brushes; scouring pads; high-pressure sprays; or ultrasonic devices.
  • The washing procedures selected shall be based on the type and purpose of the equipment or utensil, and on the type of soil to be removed.
• 4-603.15 Washing, Procedures for Alternative Manual Warewashing Equipment.
  • If washing in sink compartments or a warewashing machine is impractical such as when the equipment is fixed or the utensils are too large, washing shall be done by using alternative manual warewashing equipment as specified in ¶ 4-301.12(C) in accordance with the following procedures:
  • Equipment shall be disassembled as necessary to allow access of the detergent solution to all parts;
  • Equipment components and utensils shall be scrapped or rough cleaned to remove food particle accumulation; and
  • Equipment and utensils shall be washed as specified under ¶ 4-603.14(A).
4-603.16  Rinsing Procedures.

Washed utensils and equipment shall be rinsed so that abrasives are removed and cleaning chemicals are removed or diluted through the use of water or a detergent-sanitizer solution by using one of the following procedures:

- Use of a distinct, separate water rinse after washing and before sanitizing if using:
  - A 3-compartment sink,
  - Alternative manual warewashing equipment equivalent to a 3-compartment sink as specified in ¶ 4-301.12(C), or
  - A 3-step washing, rinsing, and sanitizing procedure in a warewashing system for CIP equipment;
- Use of a detergent-sanitizer as specified under § 4-501.115 if using:
  - Alternative warewashing equipment as specified in ¶ 4-301.12(C) that is approved for use with a detergent sanitizer, or
  - A warewashing system for CIP equipment;
- Use of a non-distinct water rinse that is integrated in the hot water sanitization immersion step of a 2-compartment sink operation;
4-6 CLEANING OF EQUIPMENT AND UTENSILS

• 4-603.16 Rinsing Procedures.
  • Washed utensils and equipment shall be rinsed so that abrasives are removed and cleaning chemicals are removed or diluted through the use of water or a detergent-sanitizer solution by using one of the following procedures:
    • If using a warewashing machine that does not recycle the sanitizing solution as specified under ¶ (e) of this section, or alternative manual warewashing equipment such as sprayers, use of a non-distinct water rinse that is:
      • Integrated in the application of the sanitizing solution
      • Wasted immediately after each application; or
    • If using a warewashing machine that recycles the sanitizing solution for use in the next wash cycle, use of a nondistinct water rinse that is integrated in the application of the sanitizing solution.
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<td>Methods</td>
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SANITIZATION OF EQUIPMENT AND UTENSILS
• **4-701.10 Objective Food-Contact Surfaces and Utensils.**
  • Equipment food-contact surfaces and utensils shall be sanitized.

• **4-702.11 Frequency Before Use After Cleaning.**
  • Utensils and food-contact surfaces of equipment shall be sanitized before use after cleaning.
4-7 SANITIZATION OF EQUIPMENT AND UTENSILS

- **4-703.11 Methods Hot Water and Chemical.**
  - After being cleaned, equipment food-contact surfaces and utensils shall be sanitized in:
    - Hot water manual operations by immersion for at least 30 seconds and as specified under § 4-501.111; p
    - Hot water mechanical operations set up as specified under 4-501.15, 4-501.112, and 4-501.113 and achieving a utensil surface temperature 160°F as measured by an irreversible registering temperature indicator; p or
    - Chemical manual or mechanical operations, using a solution as specified under § 4-501.114. Contact times shall be consistent with those on EPA-registered label use instructions by providing:
      - Contact time of at least 10 seconds for a chlorine solution specified under
      - A contact time of at least 7 seconds for a chlorine solution of 50 MG/L that has a pH of 10 or less and a temperature of at least 38°C (100°F) or a PH of 8 or less and a temperature of at least 75°F, p
      - A contact time of at least 30 seconds for other chemical sanitizing solutions, p or
      - A contact time used in relationship with a combination of temperature, concentration, and pH that, when evaluated for efficacy, yields sanitization as defined in ¶ 1-201.10(B). p
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4-8 LAUNDERING

• **4-801.11 Clean Linens.**
• Clean linens shall be free from food residues and other soiling matter.

• **4-802.11 Specifications.**
• Linens that do not come in direct contact with food shall be laundered between operations if they become wet, sticky, or visibly soiled.
• Cloth gloves used as specified in ¶ 3-304.15(D) shall be laundered before being used with a different type of raw animal food such as beef, fish, lamb, pork or poultry.
• Linens that are used as specified under § 3-304.13 and cloth napkins shall be laundered between each use.
• Wet wiping cloths shall be laundered daily.
• Dry wiping cloths shall be laundered as necessary to prevent contamination of food and clean serving utensils.
4-8 LAUNDERING

• **4-803.11 Storage of Soiled Linens.**
  • Soiled linens shall be kept in clean, nonabsorbent receptacles or clean, washable laundry bags and stored and transported to prevent contamination of food, clean equipment, clean utensils, and single-service and single-use articles.

• **4-803.12 Mechanical Washing.**
  • Except as specified in ¶ (B) of this section, linens shall be mechanically washed.
  • In food establishments in which only wiping cloths are laundered as specified in ¶ 4-301.15(b), the wiping cloths may be laundered in a mechanical washer, sink designated only for laundering wiping cloths, or a warewashing or food preparation sink that is cleaned as specified under § 4-501.14.
4-8 LAUNDERING

• 4-803.13 Use of Laundry Facilities.
  • Laundry facilities on the premises of a food establishment shall be used only for the washing and drying of items used in the operation of the establishment.
  • Separate laundry facilities located on the premises for the purpose of general laundering such as for institutions providing boarding and lodging may also be used for laundering food establishment items.
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### 4-9 PROTECTION OF CLEAN ITEMS

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4-9 PROTECTION OF CLEAN ITEMS

• 4-901.11 Equipment and Utensils, Air-Drying Required.
  • After cleaning and sanitizing, equipment and utensils:
    • Shall be air-dried or used after adequate draining as specified in the first paragraph of 40 cfr 180.940 tolerance exemptions for active and inert ingredients for use in antimicrobial formulations (food-contact surface sanitizing solutions), before contact with food; and
    • May not be cloth dried except that utensils that have been air-dried may be polished with cloths that are maintained clean and dry.

• 4-901.12 Wiping Cloths, Air-Drying Locations.
  • Wiping cloths laundered in a food establishment that does not have a mechanical clothes dryer as specified in ¶ 4-301.15(B) shall be air-dried in a location and in a manner that prevents contamination of food, equipment, utensils, linens, and single-service and single-use articles and the wiping cloths. This section does not apply if wiping cloths are stored after laundering in a sanitizing solution as specified under § 4-501.114.
- **4-902.11 Food-Contact Surfaces.**
  - Lubricants as specified under § 7-205.11 shall be applied to food-contact surfaces that require lubrication in a manner that does not contaminate food-contact surfaces.

- **4-902.12 Equipment.**
  - Equipment shall be reassembled so that food-contact surfaces are not contaminated.

Except as specified in ¶ (d) of this section, cleaned equipment and utensils, laundered linens, and single-service and single-use articles shall be stored:

- In a clean, dry location;
- Where they are not exposed to splash, dust, or other contamination; and
- At least 15 cm (6 inches) above the floor.

Clean equipment and utensils shall be stored as specified under ¶ (A) of this section and shall be stored:

- In a self-draining position that allows air drying; and
- Covered or inverted.

Single-service and single-use articles shall be stored as specified under ¶ (a) of this section and shall be kept in the original protective package or stored by using other means that afford protection from contamination until used.

Items that are kept in closed packages may be stored less than 6 inches above the floor on dollies, pallets, racks, and skids that are designed as specified under § 4-204.122.
4-9 PROTECTION OF CLEAN ITEMS

- **4-903.12 Prohibitions.**
  - Except as specified in ¶ (B) of this section, cleaned and sanitized equipment, utensils, laundered linens, and single-service and single-use articles may not be stored:
    - In locker rooms;
    - In toilet rooms;
    - In garbage rooms;
    - In mechanical rooms;
    - Under sewer lines that are not shielded to intercept potential drips;
    - Under leaking water lines including leaking automatic fire sprinkler heads or under lines on which water has condensed;
    - Under open stairwells; or
    - Under other sources of contamination.
  - Laundered linens and single-service and single-use articles that are packaged or in a facility such as a cabinet may be stored in a locker room.
4-9 PROTECTION OF CLEAN ITEMS

• **4-904.11 Kitchenware and Tableware.**
  • Single-service and single-use articles and cleaned and sanitized utensils shall be handled, displayed, and dispensed so that contamination of food-and lip-contact surfaces is prevented.
  • Knives, forks, and spoons that are not prewrapped shall be presented so that only the handles are touched by employees and by consumers if consumer self-service is provided.
  • Except as specified under ¶ (B) of this section, single-service articles that are intended for food-or lip-contact shall be furnished for consumer self-service with the original individual wrapper intact or from an approved dispenser.
4-9 PROTECTION OF CLEAN ITEMS

• **4-904.12 Soiled and Clean Tableware.**
  • Soiled tableware shall be removed from consumer eating and drinking areas and handled so that clean tableware is not contaminated.

• **4-904.13 Preset Tableware.**
  • Except as specified in ¶ (B) of this section, tableware that is preset shall be protected from contamination by being wrapped, covered, or inverted.
  • Preset tableware may be exposed if:
    • Unused settings are removed when a consumer is seated; or
    • Settings not removed when a consumer is seated are cleaned and sanitized before further use.
4-9 PROTECTION OF CLEAN ITEMS

• 4-904.14 Rinsing Equipment and Utensils after Cleaning and Sanitizing.

  • After being cleaned and sanitized, equipment and utensils shall not be rinsed before air drying or use unless:

    • The rinse is applied directly from a potable water supply by a warewashing machine that is maintained and operated as specified under Subparts 4-204 and 4-501; and

    • The rinse is applied only after the equipment and utensils have been sanitized by the application of hot water or by the application of a chemical sanitizer solution whose EPA-registered label use instructions call for rinsing off the sanitizer after it is applied in a commercial warewashing machine.
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