

Food Contact Surfaces

Should be:

- 1) An approved material
- 2) Smooth
- 3) Free of breaks, open seams, cracks, chips, inclusions, pits, and similar imperfections



Ice Machine Physical Contaminants & Sanitization

➡ Upon inspections, I find numerous things in Ice Machines such as adult beverages, scoops with handles, food items, mold, hair etc...

Recommended Tips:

- Sanitize lid opening and entry point daily
- Provide open ended scoop on exterior of machine
- Remove all ice and sanitize machine and internal parts quarterly – recommended to tag with completion date on machine
- Provide beer refrigerator for cooks 😊



Ice Machine Physical Contaminants & Sanitization cont...



Ice Machine Physical Contaminants & Sanitization cont...



Walk-In Refrigeration Requirements

- Walk-in units must be constructed and installed in accordance with nationally recognized standards and bear the certification mark of an ANSI accredited organization (e.g. NSF, EPH, ETL.)
- Interior finishes of a walk-in unit should be certified/classified for sanitation by an ANSI accredited certification program. Galvanized metal is not allowed because it can rust.
- Refrigerators shall be capable of maintaining appropriate temperatures (below 41°F) and temperature sensing devices must be located in the unit to measure the air temperature in the warmest part of the refrigerator.
- Air circulation within the unit must not be obstructed and should allow for an even and consistent flow of cold air through the unit.
- Walk-ins must be equipped with lighting that provides 10 foot candles of light throughout the unit when it is full of product. Lights must be properly shielded.
- There must be cove base junctures that are compatible with both wall and floor coverings. The coving should provide at least ¼" radius and 4 inches in height. Joint finishes should be compatible with the wall structure and voids must be eliminated at joints. Grouting used on walls and/or floors should be nonabsorbent and impregnated with epoxy, silicone, or equivalent compound.
- Walk-in Refrigerator floors may be made of:
 - Insulated metal flooring provided by the manufacturer of the walk-in, or
 - Quarry tile, or
 - Poured epoxy.
- Walk-in Refrigerator walls may be made of:
 - Insulated wall panels provided by the manufacturer of the walk-in, or
 - Stainless Steel, or
 - Aluminum electroplated galvanized steel, of 22-24 gauge material (0.040 in.) or better, with a stucco-embossed or flat finish, or
 - Fiberglass reinforced Polyester Panels (FRP).



Walk-In Refrigeration Requirements cont...

- Walls are to be vertically seamed between panels, and joined using a like-material concealed fastener such as an internal hem strip, with a gasket at the seam and closed to 1/32inch. Ceiling panels are to be joined in a like manner. Butt-jointed panels are not allowed. Vertical corners must have minimum continuous radii of ¼ inch.
- Fasteners shall not be used to secure wall or ceiling panels. Any fasteners that are used for other purposes must be countersunk and concealed with "cam-lock"-type flat caps.
- Walk-in ceilings may be made of:
 - Insulated ceiling panels provided by the manufacturer of the walk-in, or
 - Stainless Steel, or
 - Aluminum electroplated galvanized steel, of 22-24 gauge material (0.040 in.) or better, with a stucco-embossed or flat finish , or
 - FRP.
- Doors must be third-party sanitation certified component walk-in door. Vertical and ceiling door jams are to be finished as above.
- All drain/condensate/refrigeration lines must not have exposed copper and must be sealed in accordance with NSF standard 2 or painted with epoxy paint and all penetrations for such lines must be sealed properly.
- Refrigeration components must be third-party certified to sanitation standards, and must be drained indirectly to an external floor sink or other approved device (such as an external evaporation pan). The BTU rating for the given ambient temperature must meet or exceed those provided for by the calculations listed in the ASHRAE (American Society of Heating, Refrigerating and Air-Conditioning Engineers) Refrigeration Handbook.

ALL FINISHES MUST BE COMMERCIAL GRADE. SPEC SHEETS ON THE MATERIALS USED TO BUILD THE WALK IN MUST BE PROVIDED. PERTINENT MECHANICAL CODE AND PLUMBING CODE REQUIREMENTS MUST ALSO BE MET.



Commercial Kitchen Plumbing Requirements

****Reference 2009 International Plumbing Code**

 
Waste and receptors.pdf



Hot Water Tank Recommendations

A. Hot Water System

➔ **Minimum Size:** A minimum 30-gallon capacity water heater, with a 100% recovery rate, is required. If mechanical dishwashing is utilized a minimum 75 gallon capacity water heater with at least 100% recovery rate is required and must meet the hot water demands of all the facilities' fixtures. Hot water must be provided to all sink compartments. Tempered water (95°F-105°F) shall be provided at hand washing sinks. Larger water heaters shall have at least 75% recovery. Tank less water heater units approved by this Department are acceptable. **Note: Small tank less water heaters are not approved for use with mechanical dishwashers.**

Recovery rate of the hot water unit is more important than actual capacity. In the absence of specific hot water usage figures for equipment, the following table may be used to provide an approximation. Hot water should be provided within 45 seconds to all sinks plumbed for hot water. **See Table 1.**

Table 1: Approximate Fixture Hot Water Usage

<u>Equipment Type</u>	<u>Gallons Per Hour</u>	
	<u>High*</u>	<u>Low*</u>
Vegetable Prep Sink	15	15
Three Compartment Sink	60	45
Pre-Rinse Spray Hose Sink	30	30
Commercial Dish wash Machine	Varies with Unit	
Bar Three Compartment Sink	20	
Chemical Sanitizing Glass Washer	60	
Hand Sink – Kitchen & Restroom	5	5
Bain Marie	10	10
Mop Sink	10	10
Garbage Can Wash Station	30	30
Clothes Washer	45	45
Employee Shower	20	20

*High – to be used when multi-use eating utensils are used.

*Low – to be used when single service eating utensils are used.

Warewashing & Sanitizer Requirements

➔ Warewashing Machine, Data Plate Operating Specifications 4-204.113

- Warewashing machine shall be provided with easily accessible and readable data plate that indicates temperature required for wash, rinse and sanitize:
 - Pressure Required on the Data Plate
 - Conveyor Speed and Cycle Time
- A working thermometer for mechanical and manual warewashing readily available

Sanitizing Solution Testing Devices (Test Strips) 4-302.14

- Manual Warewashing a 3 compartment sink large enough to accommodate the immersion of the largest equipment and utensils.

Drainboards 4-301.13

- Drainboards shall be large enough to accommodate all soiled and cleaned items that may accumulate during hours of operation.

Warewashing & Sanitizer Requirements cont...

Mechanical Warewashing Equipment, Hot Water Sanitization Temperatures 4-501.112

- 1) For a stationary rack, single temperature machine, 74 degrees C (165 degrees F); or
- 2) For all other machines, 82 degrees C (180 degrees F).

Manual and Mechanical Warewashing Equipment, Chemical Sanitization – Temperature, pH, Concentration and Hardness 4-501.114

- 1) A quaternary ammonia compound solution shall have a minimum temperature of 200ppm
- 2) A chlorine solution shall have a minimum temperature based on the concentration and pH of the solution as listed in the following chart:

Concentration Range	Minimum Temperature	
	pH 10 or less °C (°F)	pH 8 or less °C (°F)
mg/L		
25 - 49	49 (120)	49 (120)
50-99	38 (100)	24 (75)
100	13 (55)	13 (55)

****Rochester's PH is generally 5.5-6.5**

****Chlorine Bleach Sanitizer Recipe**



ChlorineBleachRecipe.pdf



Little Things That Add Up To Big Things

- **NSF Thermometers everywhere** – cold holding, hot holding, food temperatures
- **Proper Lighting** – Light intensity shall be:
 - at least 10 foot candles - in a walk-in refrigerator and food storage areas
 - 20 foot candles – where food is sold for consumption such as salad bars, inside reach in refrigerators, handwashing and warewashing rooms
 - 50 foot candles – where employees are working with food or using slicers and grinders
- **Proper Delivery Days & Times** – The timing of deliveries is very important if you can't put the product away when it gets there it becomes dangerous before you even think of using it.
- **Ventilation Hood Systems** - shall be sufficient in number and capacity
- **Mechanical** – Necessary to keep rooms free of excessive heat, steam, condensation, vapors, obnoxious odors, smoke, and fumes, mechanical ventilation of sufficient capacity shall be provided.
 - If you can't properly vent out hot air, it causes cold holding problems which is a priority violation.

