

ServSafe© Food Safety Manager Exam Study Guide

Chapter 10: Sanitary Facilities & Equipment

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Chapter 10: Sanitary Facilities & Equipment

Facility Design

- A food establishment should be designed so it will help keep food safe and can be cleaned quickly.
- Good workflow. The workflow of the facility should keep food out of the temperature zone as much as possible and minimize the number of times food has to be handled.
- Storage areas should be near receiving areas to minimize delays in storing food.
- Prep tables should be near coolers and freezers for the same reason.
- Reduction of cross contamination. Place equipment to prevent splashing or spillage from piece of equipment to another.
- Accessibility for cleaning. Well planned lay outs that make it easy to clean help maintain food safety.
- Before starting any new construction or renovations, check with your local authority to ensure that the new design meets regulations, and ensures the safe flow of food.

Interior Requirements for a Sanitary Operation

- Floors. Flooring must be smooth, nonabsorbent, easy to clean and durable. Floors should also have curved, sealed edgings called floor coving.
- Walls, ceiling and doors. The materials for your facility's doors, ceilings and doors must be smooth, nonabsorbent, durable and easy to clean. Walls must be able to withstand repeated washings and be of light colors.

Equipment Selection

- Equipment must meet certain criteria that depend on whether or not the equipment's surface comes in direct contact with food.
- Food contact surface equipment:
 - Safe for contact with food.
 - Nonabsorbent, smooth, corrosion resistant
 - Easy to clean and maintain
 - Durable – stands up to heavy and repeated cleaning
 - Resistant to pitting, chipping, scratching, scouring, distortion and decomposition.
- Non food contact surfaces
 - These surfaces may not come in direct contact with food but may be subjected to splashing or spillage – therefore then need to be nonabsorbent, smooth, and corrosion resistant.
 - Easy to clean and maintain
 - Free of unnecessary ledges, projections or crevice.
- Look for NSF®, UL®, or UL EPH® seals of approvals on all equipment. Only use equipment designed for a commercial foodservice operation.

Installing and Maintaining Equipment

- Floor mounted equipment. Put floor mounted equipment at on legs that are at least six (6) inches high.
- Tabletop equipment. Put tabletop equipment on legs at least four (4) inches high.
- Gaps. Seal any gaps between equipment and surrounding countertops and walls.

Dishwashing Machines

- Information about the right dishwasher settings should always be posted on the machine. It should show the right water temperature, conveyer speed, and water pressure.
- Thermometer. The machine's thermometer should be in a place where it is easy to read. It should show the temperature increases in increments no greater than 2°F (1°C).

Handwashing Stations

- Handwashing stations should be put in areas that make it easy for staff to wash their hands.
- Handwashing stations are required in restrooms, areas used to prep foods, service and dishwashing areas.
- Handwashing stations must have the following items:
 - Hot and cold running water. The hot water temperature should reach at least 100°F (38°C).
 - Soap. The soap should preferably be liquid or foam type – bar or powder soap is also acceptable.
 - Hand Dryer. Most local codes require disposable paper towels. A hand dryer may also be used as back up – but beware of the germs it might be spreading. DO NOT use common cloth towels to dry your hands. They transfer dirt and pathogens left on one person's hands to another person.
 - Garbage container.
 - Signage. There must always be a sign telling employees to wash their hands before returning to work.
 - Check your local regulatory requirements for additional information.

Water & Plumbing

- Cross connections. The greatest challenge to food safety that relates to water and plumbing, comes from water cross connections.
- A cross connection is a link between safe water and dirty water, which can come from drains, sewers, or other wastewater sources.
- A cross connection is dangerous because it can let backflow occur. Backflow is the reverse of water contaminants through a cross connection into a potable water supply.

- Backflow can occur when the pressure in a potable water supply drops below the pressure of dirty water. The pressure difference can pull the dirty water into the safe water supply.
- A running faucet below the flood rim of a sink is an example of a cross connection that can lead to backflow. A running hose in a mop bucket is another example.

Backflow Prevention

- The best way to prevent backflow is to avoid creating a cross connection.
- Do not attach a hose to a faucet unless a backflow prevention device is in place. Even if these devices are installed, never create a cross connection.
- The only sure way to prevent a backflow is to create an air gap.
- An air gap is an air space that separates the water supply outlet from a potentially contaminated source.

Grease Condensation

- A buildup of grease in pipes is another common problem in foodservice plumbing systems.
- Grease traps prevent grease buildup from blocking pipes and should be cleaned regularly. If not cleaned often and regularly, dirty water will back up and cause odors and contamination.

Overhead leaks

- Overhead rood leaks, wastewater pipes and sprinkler systems can leak and cause contamination.
- Call for service anytime a ceiling tile becomes stained or a leak is observed.

Sewer

- Sewage and wastewater are contaminated with pathogens and you must prevent them from getting into your food service operation.
- If you have a sewer back up in your operation, immediately close the affected areas. Call for professional assistance.
- Be sure to carefully clean and sanitize any area affected by a sewer back up.

Lighting

The following table shows the lighting requirements for various areas in a food service operation:

| Minimum Lighting Intensity | Area |
|-----------------------------------|--|
| 50 foot candles (540 lux) | Prep areas |
| 20 foot candles (215 lux) | <ul style="list-style-type: none"> • Handwashing or dish wash areas • Buffets and salad bars • Displays for produce or packaged foods • Utensil storage areas • Wait stations |

| | |
|---------------------------|--|
| | <ul style="list-style-type: none"> • Restrooms • Inside some equipment such as reach in coolers |
| 10 foot candles (108 lux) | <ul style="list-style-type: none"> • Inside walk in coolers and freezers • Dry storage areas • Dining rooms (for cleaning purposes) |

- All lights should have shatter resistant light bulbs and light covers.

Ventilation

- Ventilation must be designed so that smoke, grease and condensation do not drip onto foods and equipment.
- Have a professional clean the hoods and ductwork at a regular basis.

Garbage

- Garbage removal. Garbage must be removed from prep areas as quickly as possible.
- Cleaning garbage containers. Keep clean garbage containers. Clean containers away from all food service and storage areas.
- Indoor containers. Must be leak proof, fire resistant certified, water proof and pest proof.
- Liners for containers. Line garbage containers with leak proof and thick garbage can liners.
- Outdoor containers. Keep outdoor container areas clean and covered at all times.

Maintaining the Facility

- Clean the establishment at least on a daily basis
- Make sure the building is sound with no leaks, holes or cracks on the floors, walls and roof.
- Control pests
- Maintain the outside of the building and property including parking lots and sidewalks.