1999 Food Code Plan Review References

**Floors, Walls & Ceilings**

**MATERIALS FOR CONSTRUCTION & REPAIR:**

6-101.11 Surface Characteristics. (indoor areas) pg 139
- Materials smooth, durable, easily cleanable and nonabsorbent for areas subject to food operations or moisture.
- Carpet is closely woven and easily cleanable.

**DESIGN, CONSTRUCTION & INSTALLATION:**

6-201.11 Floors, Walls and Ceilings. (cleanability) pg 140
- Designed, constructed and installed to be smooth & easily cleanable. *(Except antislip floor coverings may be used for safety.)*

6-201.12 Floors, Walls and Ceilings, Utility Lines. (cleanability) pg 141
- Utility lines and pipes may not be unnecessarily exposed, and if exposed, they can not obstruct cleaning, and may not be installed horizontally on the floor.

6-201.13 Floor and Wall Junctures, Coved and Enclosed or Sealed. (cleanability) pg 141
- Other than water flushing, coved and closed to 1mm or less, or Water flushing, coved & sealed, floors graded to drain(s).

6-201.14 Floor Carpeting, Restrictions & Installation. (flooring, cleanability) pg 141
- Or similar material may not be installed in food preparation areas, walk-ins, ware washing areas, toilet rooms, refuse storage rooms, or other areas subject to moisture, flushing, or spray cleaning methods. If installed in other areas: securely attached with durable mastic, stretch & tack method or by another method; and tight against the wall under the coving or away from the wall with the edges secured by metal stripping or some other means.

6-201.15 Floor Coverings, Mats and Duckboards. (cleanability) pg 142
- Designed to be removable and easily cleanable.

6-201.16 Wall and Ceiling Coverings and Coatings. (cleanability, “finish schedules”) pg 142
- Easily cleanable and sealed to be smooth and nonabsorbent *(except areas used for only dry storage)*.

6-200.17 Walls and Ceilings, Attachments. (cleanability) pg 142
- Attachments such as light fixtures, ventilation components, fans, decorative items, etc., shall be easily cleanable (except in consumer areas, wall & ceiling surfaces, decorative items and attachments provided for ambiance, if items are kept clean).

6-201.18 Walls and Ceilings, Studs, Joists, and Rafters. (cleanability) pg 142
- These may not be exposed in areas subject to moisture *(except temporary food establishments)*.

**Employee Accommodations**

6-403.11 Designated Areas. (location & placement) pg 149
- Areas designated for employees to eat, drink and use tobacco are located so that FEULSS are protected from contamination. Lockers or other suitable facilities shall be located in a designated room or area where contamination of FEULSS can not occur.
Lighting

DESIGN, CONSTRUCTION & INSTALLATION:

6-202.11 Light Bulbs, Protective Shielding. (functionality) pg 142-143
Shielded, coated or shatter-resistant in areas of exposed foods; clean equipment, utensils, and linens; or unwrapped single service/use articles (FEULSS) (except areas storing food in unopened packages, if the packaging would be unaffected by broken glass and capable of being cleaned of glass). Infrared or headlamps have a shield surrounding & extending beyond the bulb so that only the face of the bulb is exposed.

NUMBERS & CAPACITIES:

6-303.11 Intensity. (lighting) pg 148
10 foot candles measured 30 inches above the floor: walk-ins, dry food storage, and other areas during cleaning (e.g. dining). 20 foot candles measured at the surface for self-service areas such as buffets, salad bars, where fresh produce or packaged foods are offered; and inside equipment such as reach-in or under-counter refrigerators; or measured 30 inches above the floor for areas used for handwashing, warewashing, equipment & utensil storage, and toilet rooms. 50 foot candles measured at the work surfaces when working with food, utensils or equipment where safety is a factor: knives, slicers, grinders, saws, etc.

Ventilation

DESIGN, CONSTRUCTION, AND INSTALLATION:

6-202.12 Heating, Ventilation, Air Conditioning System Vents. (functionality) pg 143
Systems shall be designed & installed so that make-up air intake & exhaust vents do not contaminate food, food-contact surfaces, equipment or utensils.

NUMBERS & CAPACITIES:

6-304.11 Mechanical. (ventilation, "rooms or areas") pg 148
If necessary, mechanical ventilation of sufficient capacity to remove excessive heat, steam, condensation, vapors, obnoxious odors, smoke & fumes.

DESIGN AND, CONSTRUCTION:

4-204.11 Ventilation Hood Systems, Drip Prevention. (functionality) pg 84
Exhaust hood systems in food preparation & warewashing areas and their components shall be designed to prevent grease or condensation from draining or dripping onto food equipment, utensils, linens, and single service/use articles (FEULSS).

NUMBERS & CAPACITIES:

4-202.18 Ventilation Hood Systems, Filters. (cleanability) pg 83
Filters or other grease extracting equipment shall be designed to be readily removable for cleaning & replacement if not designed to be cleaned in place.

4-301.14 Ventilation Hood Systems, Adequacy. (equipment) pg 94
Hood systems & devices shall be sufficient in number & capacity to prevent grease or condensation from collecting on walls & ceilings.
Pest Management

DESIGN, CONSTRUCTION, AND INSTALLATION:

6-202.13 Insect Control Devices, Design and Installation. (functionality) pg 143
Devices that electrocute or stun flying insects shall be designed to retain the insect within the device and are not located over food preparation areas. Dead insects or insect fragments are prevented from being impelled or falling on exposed or clean FEULSS.

6-202.15 Outer Openings, Protected. (functionality) pg 144-145
Outer openings shall be protected against the entry of vermin by: filling or closing holes & gaps along floors, walls, ceilings; tight-fitting windows; and solid, self-closing, tight-fitting doors, (except emergency exit doors need not be self-closing, if designated by the fire protection authority and only used for emergency).

Or window & door openings are protected with 16 mesh screens, air curtain or other effective means. (Except openings into a mall, airport, office building or porch as long as these larger structures are protected against vermin, OR flying insects or pests are absent per location, weather, etc.)

6-202.16 Exterior Walls and Roofs, Protective Barrier (functionality) pg 145
Shall effectively protect the establishment from weather, vermin or other animals.

Water & Plumbing

WATER:

Subpart 5-1 pg 119
Approved source*, meeting quality Standards*, Sampling, sufficient Capacity*, Pressure, Hot Water*, and approved System ("primary").

PLUMBING SYSTEM:

5-201.11 Approved.* (materials) pg 122
System and hoses shall be constructed & repaired with approved materials. Water filter shall be made of safe materials.

5-202.11 Approved System & Cleanable Fixtures.* (design, construction & installation) pg 123
Plumbing system ("secondary") shall be designed, constructed and installed according to law. Fixtures shall be easily cleanable.

5-202.15 Conditioning Device, Design. (design, construction & installation) pg 124
Filter, screen or other water conditioning device shall be designed to facilitate disassembly for servicing & cleaning. Water filter elements shall be a replaceable type.

5-204.13 Conditioning Device, Location. (location & placement) pg 125
Shall be located to facilitate disassembly for servicing & cleaning.

5-203.13 Service Sink. (numbers & capacities) pg 124
At least one service sink or curbed unit with a floor drain shall be provided & conveniently located for mops, wet floor cleaning tools, and disposal of mop water and similar liquid waste.

6-301.13 Handwashing Aids & Devices, Use Restrictions. (handwashing facilities) pg 147
Food preparation, utensil washing, service/mop or curbed sinks may not be provided with handwashing aids & devices, as specified under 6-301.11&12 and 5-501.16(C).
Backflow Prevention & Cross Connections

PLUMBING SYSTEM:

5-202.13 Backflow Prevention, Air Gap.* (design, construction & installation) pg 123
An air gap between the supply inlet & the flood level rim of the plumbing fixture or food/nonfood equipment shall be at least twice the diameter of the supply inlet and may not be less than one inch.

5-202.14 Backflow Prevention Device, Design Standard. (design, construction & installation) pg 123
Shall meet American Society of Sanitary Engineering (ASSE) standards for construction, installation, maintenance, inspection and testing for that specific application & device.

5-203.14 Backflow Prevention Device, When Required.* (numbers & capacities) pg 125
Plumbing system shall be installed to preclude backflow (solid, liquid or gas) into the water supply at each point of use, including on a hose bibb with or without an attached hose and is required by law by providing an air gap (under 5-202.13) or installing an approved backflow device (under 5-202.14).

5-203.15 Backflow Prevention Device, Carbonator.* (numbers & capacities) pg 125
RESERVED (“ASSE now has Standard #1022 for this application, a dual check valve with an intermediate atmospheric vent.”)

5-204.12 Backflow Prevention Device, Location (location & placement) pg 125
Shall be located so that it may be serviced & maintained.

5-205.12 Prohibiting a Cross Connection.* (operation & maintenance) pg 126
A person may not create a cross connection via a pipe or conduit between the drinking water and nondrinking water system or other unknown system (Except for firefighting, as specified in 9 CFR 308.3(d)). The piping of a nondrinking water system shall be durably identified so that it is readily distinguishable from the drinking water system.

SEWAGE, OTHER LIQUID WASTE, AND RAINWATER:

5-402.11 Backflow Prevention.* (design, construction & installation) pg 131
A direct connection may not exist between the sewage system and a drain line from equipment in which food, equipment, or utensils (FEU) are placed. (Except if allowed by law, a warewashing machine may have a direct connection provided the drain line is connected to the inlet side of a properly vented floor drain trap located within 5 feet of the unit. Or, if allowed by law, a warewashing or culinary sink may have a direct connection.)

Plumbing Waste

SEWAGE, OTHER LIQUID WASTE, AND RAINWATER:

5-402.10 Establishment Drainage System. (retention, drainage & delivery) pg 131
The drainage system & grease traps shall be designed & installed as specified under 5-202.11(A) Approved System and Cleanable Fixtures.* (installed according to law) pg 123.

5-402.11 Backflow Prevention.* (design, construction & installation) pg 131
A direct connection may not exist between the sewage system and a drain line from equipment in which food, equipment, or utensils (FEU) are placed. (Except if allowed by law, a warewashing machine may have a direct connection provided the drain line is connected to the inlet side of a properly vented floor drain trap located within 5 feet of the unit. Or if allowed by law, a warewashing or culinary sink may have a direct connection.)

5-402.12 Grease Trap. (location & placement) pg 132
If used, shall be located to be easily accessible for cleaning.

5-402.13 Conveying Sewage.* (operation & maintenance) pg 132
Shall be conveyed to the point of disposal through an approved sanitary sewage system or other system that is constructed, maintained, and operated according to law (trucks, holding tanks, pumps, pipes, hoses).
5-403.11 Approved Sewage Disposal System.* (disposal facility, design & construction) pg 132
Disposed through an approved public sewage treatment plant, or an individual sewage disposal system that is sized, constructed, maintained & operated according to law.

5-403.12 Other Liquid Wastes & Rainwater. (design & construction) pg 132
Condensate & other nonsewage liquids & rainwater shall be drained from point of discharge to disposal according to law.

**Handsinks**

**PLUMBING SYSTEM:**

5-202.12 Handwashing Facility, Installation. (water temperature & flow) (design, construction & installation) pg 123
Shall be equipped to provide at least 110°F water through a mixing valve or combination faucet. Self-closing, slow-closing or metering faucet shall provide water for at least 15 seconds before having to be reactivated. A steam mixing valve may not be used at a handsink. Automatic handwashing facilities shall be installed per manufacturer’s instructions.

5-203.11 Handwashing Facilities.* (numbers & capacities) pg 124
At least one lavatory but an adequate number for their convenient use by employees in areas specified under 5-204.11 and not fewer than specified by law. (If approved and capable of removing types of soils encountered in food operations, automatic handwashing facilities may be substituted for handwashing lavatories.) (If approved, when food exposure is limited, chemically treated towelettes in lieu of not conveniently available handwashing lavatory.)

5-204.11 Handwashing Facilities.* (location & placement) pg 125
Shall be located to allow convenient use by employees in food preparation, food dispensing, and warewashing areas; and in or immediately adjacent to toilet rooms.

5-205.11 Using a Handwashing Facility. (operation & maintenance) pg 125
Shall be maintained so that it is accessible at all times for employee use and may not be used for purposes other than handwashing. An automatic handwashing facility shall be used in accordance with manufacturer’s instructions.

**NUMBERS & CAPACITIES:**

5-501.16 Storage Areas, Rooms, and Receptacles, Capacity & Availability. pg 134
Shall be of sufficient capacity to hold RR&R that accumulate. If disposable towels are used at handsinks, a waste receptacle shall be located at each handsink or group of adjacent handsinks.

6-301.11 Handwashing Cleanser, Availability. (handwashing facilities) pg 146
Each handsink or two adjacent handsinks shall be provided a supply of hand cleaning liquid, powder or bar soap.

6-301.12 Hand Drying Provision. (handwashing facilities) pg 147
Each handsink or adjacent group shall be provided with individual disposable towels, a continuous towel system that supplies the user with a clean towel, or a heated-air hand drying device.

6-301.13 Handwashing Aids & Devices, Use Restrictions. (handwashing facilities) pg 147
Food preparation, utensil washing, service/mop or curbed sinks may not be provided with handwashing aids & devices, as specified under 6-301.11&12 and 5-501.16(C).
**Toilets & Urinals**

**PLUMBING SYSTEM:**

5-203.12 Toilets and Urinals.* (numbers & capacities) pg 124
At least one toilet, or as required by law. As authorized and specified by law, urinals may be substituted for toilets.

**REFUSE, RECYCLABLES & RETURNABLES:**

5-501.17 Toilet Room Receptacle, Covered. (numbers & capacities) pg 134
Female restrooms shall be provided with a covered receptacle for sanitary napkins.

**DESIGN, CONSTRUCTION & INSTALLATION:**

6-202.14 Toilet Rooms, Enclosed. (functionality) pg 143
Located on the premises shall be completely enclosed and provided with a tight-fitting, self-closing door (except toilet rooms located outside the food establishment and do not open directly into the facility, i.e. a shopping mall).

**NUMBERS & CAPACITIES**

6-302.10 Minimum Number. (toilets & urinals) pg 147
Shall be provided as specified under 5-203.12 Toilets and Urinals.* (numbers & capacities) pg 124

6-302.11 Toilet Tissue, Availability. (toilets & urinals) pg 147
A supply of toilet tissue shall be available at each toilet.

**LOCATION & PLACEMENT:**

6-402.11 Convenience and Accessibility. (toilet rooms) pg 149
Toilet rooms shall be conveniently located & accessible to employees during all hours of operation.

**Equipment**

**DESIGN & CONSTRUCTION:**

3-204.10 Food Equipment, Certification & Classification. (acceptability) pg 92
(American National Standards Institute) Food equipment that is certified or classified for sanitation by an ANSI-accredited certification program will be deemed to comply with Parts 4-1 & 4-2 of the Code.

**MATERIALS FOR CONSTRUCTION & REPAIR:**

4-101.11 Characteristics.* (multiuse) pg 77
Materials used in utensils and equipment, food-contact surfaces may not allow the migration of deleterious substances or impart colors, odors, or tastes to food and under normal use shall be: safe*; (durable, corrosion-resistant & nonabsorbent);* sufficient in weight & thickness to withstand repeated warewashing;* smooth, easily cleanable surface;* and resistant to pitting, chipping, crazing, scratching, scoring, distortion & decomposition.

4-101.12 Cast Iron, Use Limitation (multiuse) pg 78
May be used as a cooking surface or serving utensils only as part of an uninterrupted process from cooking through service.
LEAD LIMITATIONS: Ceramic, China & Crystal

<table>
<thead>
<tr>
<th>Hot Beverage or Coffee Mugs</th>
<th>Maximum Lead: 0.5 ppm or mg/L</th>
</tr>
</thead>
<tbody>
<tr>
<td>Large Hollowware, bowls 1.16 qts or 1.1 L</td>
<td>1.0 ppm or mg/L</td>
</tr>
<tr>
<td>Small Hollowware, bowls &lt; 1.16 qts or 1.1 L</td>
<td>2.0 ppm or mg/L</td>
</tr>
<tr>
<td>Flat Utensils, plates &amp; saucers etc.</td>
<td>3.0 ppm or mg/L</td>
</tr>
<tr>
<td>Pewter Alloys used as a food contact surface</td>
<td>.05%</td>
</tr>
<tr>
<td>Solder &amp; Flux used as a food contact surface</td>
<td>.2%</td>
</tr>
</tbody>
</table>

4-101.14 Copper, Use Limitation.* (multiuse) (includes brass) pg 79
May not be used for foods with a pH < 6.0 such as vinegar, fruit juice, wine, etc., except for the prefermentation & fermentation steps of a beer brewing operation or for a water supply line between a carbonator & backflow preventer.

4-101.15 Galvanized Metal, Use Limitations.* (multiuse) pg 79
May not be used in contact with acidic food.

4-101.16 Sponges, Use Limitation. (multiuse) pg 79
May not be used in contact with cleaned & sanitized or in-use food contact surfaces.

4-101.19 Wood, Use Limitations. (multiuse) pg 79
Wood & wood wicker may not be used as a food contact surface.

Except:
1. Hard maple or equivalently hard, close-grained wood may be used for cutting boards & blocks, bakers’ tables, and utensils such as rolling pins, doughnut dowels, salad bowls & chopsticks;
2. Wooden paddles for pressure scraping kettles in confectionery operations with products reaching at least 230°F (110°C).
3. Whole uncut raw fruit & vegetables, and unshelled nuts may be kept in the original wooden shipping container.
4. Whole, uncut, raw foods requiring the removal of rinds, peels, husks, or shells may be kept in untreated wood containers or treated wood as specified in 21 CFR 178.3800 Preservatives for Wood.

4-101.110 Nonstick Coatings, Use Limitation. (multiuse) pg 80
Cooking surfaces that have a perfluorocarbon resin coating shall be used with nonscoring or nonscratching cleaning aids.

4-101.111 Nonfood-Contact Surfaces. (multiuse) pg 80
Equipment surfaces exposed to splash, spillage, or other food soiling or require frequent cleaning shall be constructed of a corrosion-resistant, nonabsorbent, smooth material.
DESIGN & CONSTRUCTION:

4-202.16 Nonfood Contact Surfaces. (cleanability) pg 83
Free of unnecessary ledges, projections, and crevices and designed & constructed for ease of cleaning and facilitate maintenance.

4-201.11 Equipment and Utensils. (durability & strength) pg 81
Durable & retain their characteristic qualities under normal use.

4-202.11 Food-Contact Surfaces.* (cleanability) pg 80
Multiuse food-contact surfaces shall be smooth; free of breaks, open seams, cracks, chips, pits, and similar imperfections; free from sharp internal angles, corners, and crevices; finished to have smooth welds & joints; and accessible for cleaning & inspection without being disassembled, disassembled without tools or easy disassembly with the use of handheld tools commonly available such as screwdrivers, pliers, open-end wrenches, and Allen wrenches. (Except cooking oil storage tanks, cooking oil distribution lines, or beverage syrup lines or tubes.)

3-201.12 CIP Equipment (cleanability) pg 82
Meet the characteristics as specified under 4-202.11 and designed & constructed so that cleaning & sanitizing solutions circulate throughout a fixed system and contact all interior food contact surfaces. The system is self-draining or capable of being completely drained of cleaning & sanitizing solutions. CIP equipment not designed to be disassembled for cleaning shall be designed with inspection access points to ensure that all interior food-contact surfaces are being effectively cleaned.

4-202.13 "V" Threads, Use Limitation. (cleanability) pg 82
May not be used. (Except hot oil cooking or filtering equipment.)

4-202.14 Hot Oil Filtering Equipment. (cleanability) pg 83
Meet the characteristics as specified under 4-202.11 & .12 and shall be readily accessible for filter replacement and cleaning of the filter.

4-202.15 Can Openers. (cleanability) pg 83
Cutting or piercing parts shall be readily removable for cleaning & replacement.

4-202.17 Kick Plates, Removable. (cleanability) pg 83
Shall be designed so that areas behind them are accessible for inspection & cleaning by: being removable without disassembly, disassembled w/o tools or w/ commonly available tools as specified under 4-202.11(A)(5), OR capable of being rotated or removed without unlocking equipment doors.

4-204.12 Equipment Openings, Closures and Deflectors. (functionality) pg 84
Equipment cover or lid shall overlap the opening and slope to drain. Within the top of the unit: opening shall be flanged upward at least 5mm. Piping, shafts or other parts extending into equipment shall be provided with a water tight joint at the point of entry into the equipment or the openings shall be flanged and equipped with an apron designed to deflect condensation, drips & dust from the food.

4-204.13 Dispensing Equipment, Protection of Equipment and Food. (functionality) pg 85
Dispenses or vends liquid food or unpackaged ice: for self-service, the actuating lever shall be designed to prevent contact with the lip-contact surface of a container being refilled. The delivery tube, chute or orifice shall be designed so that drips from condensation & splash are diverted from the opening of the receiving container; protected from manual contact such as being recessed; designed to prevent contact with the lip-contact surface of a container being refilled; and protected from dust, vermin, and other contamination by a self-closing door if: located outside and does not otherwise afford protection against the environment, OR not always under the full-time supervision of a food employee.

3-203.15 Bearings and Gear Boxes, Leakproof. (functionality) pg 86
Equipment requiring lubricants shall be designed & constructed so that lubricant can not leak, drip, or be forced into or onto food-contact surfaces.

4-204.16 Beverage Tubing, Separation. (functionality) pg 86
Beverage tubing & cold-plates may not be stored in contact with stored ice. (Except ice bins with integral cold-plates.)
4-204.17 Ice Units, Separation of Drains. (functionality) pg 86
Waste lines may not pass through an ice machine or ice bin.

3-203.18 Condenser Unit Separation. (functionality) pg 86
If a condenser is an integral component of equipment, the condenser unit shall be separated from food & food storage space by a dust proof barrier.

4-204.110 Molluscan Shellfish Tanks. (functionality) pg 87
Conspicuously marked for display only. (Except if a variance is granted with a HACCP plan that: retains source identity of shellstock; does not compromise the safety & quality of the shellfish, and the water is not circulated through other fish tanks.)

4-204.120 Equipment Compartments, Drainage. (functionality) pg 91
Equipment compartments subject to accumulation of moisture (condensation, food or beverage drip, melting ice) shall be sloped to an outlet that allows complete draining.

4-204.112 Temperature Measuring Devices. (functionality) pg 88
Air temperature measuring device sensors for mechanically refrigerated or hot food storage units shall be located in the warmest part for refrigeration and the coldest part for hot food storage. Equipment for PHFs shall be equipped with at least one easily readable, and viewable, integral or permanently affixed TMD (Except where not practical, such as calrod units, heat lamps, cold plates, bainmaries, steam tables, salad bars, and insulated transport containers). Food TMDs & Water TMDs on warewashing machines shall have a numerical scale, printed record, or digital readout in increments no greater than 1°C or 2°F.

NUMBERS & CAPACITIES:
3-300.11 Cooling, Heating, and Holding Capacities. (equipment) pg 93
("capacity to maintain or achieve temperature") Equipment shall be sufficient in number & capacity to provide food temperatures as specified under chapter 3.

LOCATION & INSTALLATION:
4-401.11 Equipment, Clothes Washers & Dryers, and Storage Cabinets, Contamination Prevention. (location) pg 96
Equipment or a cabinet for the storage of FEULSS may not be located in: locker rooms; toilet rooms; garbage rooms; mechanical rooms; under unshielded sewer lines; under any leaking or condensate dripping water lines; under open stairwells; or under other sources of contamination. (Except a storage cabinet used for LSS may be stored in a locker room.) A clothes washer or dryer, if provided, shall be located to protect washer & dryer from contamination and to protect FEULSS from contamination.

4-402.11 Fixed Equipment, Spacing or Sealing. (installation) pg 97
Equipment not easily movable (defined as: not mounted on casters, gliders, rollers, or a mechanical means to safely tilt for cleaning, and a nonflexible utility connection line) shall be: spaced to facilitate cleaning along the sides, behind and above; or not spaced more than 1mm from adjoining surfaces (equipment, walls, ceilings); or sealed to adjoining equipment or walls if the equipment is exposed to spillage or seepage. Table-mounted equipment: shall be installed to facilitate cleaning of the unit and areas under and around it by being sealed to the table or elevated on legs as specified under 4-402.12(D).

4-402.12 Fixed Equipment, Elevation or Sealing. (installation) pg 97
Floor equipment not easily movable shall be sealed to the floor or on legs providing at least a 6 inch clearance above the floor. (Except the clearance may be only 4 inches, if no part under the unit is no further than 6 inches from cleaning access points.) (This section does not apply to consumer areas with display shelving, refrigeration units, or freezers, IF the floor underneath is maintained clean.)

Table-mounted equipment not easily movable shall be on legs providing at least a 4 inch clearance above the table (except the clearance may be only 3 inches, if no part of under the unit is no further than 20 inches from cleaning access points OR a 2 inch clearance for up to a 3 inch reach for cleaning).
Warewashing

NUMBERS & CAPACITIES:

4-301.12 Manual Warewashing, Sink Compartment Requirements. (equipment) pg 93
At least 3 compartments for manual washing, rinsing, and sanitizing that are large enough to accommodate immersion of the largest equipment and utensils. Equipment that is too large, a warewashing machine shall be used or … (alternative manual warewashing may be used if approved for special cleaning needs or constraints that 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) & (E) of this section; or receptacles that substitute for the compartments of a multicompartment sink.)

3-300.12 Drainboards. (equipment) pg 94
Drainboards, utensil racks, or tables shall be large enough to accommodate all soiled items before cleaning & cleaned items after sanitizing as they accumulate during hours of operation.

DESIGN & CONSTRUCTION:

4-204.119 Warewashing Sinks & Drainboards, Self Draining. (functionality) pg 90
Sinks & drainboards of warewashing sinks and machines shall be self draining.

4-204.115 Warewashing Machines, Temperature Measuring Devices. (functionality) pg 89
Shall be equipped with a TMD that indicates the temperature of the water in each wash and rinse tank; and as the water enters the hot water sanitizing final rinse manifold or in the chemical sanitizing solution tank.

4-204.117 Warewashing Machines, Sanitizer Level Indicator. (functionality) pg 90
Chemical sanitization units installed after the adoption of this code shall be equipped with an audible or visual "low level" sanitizer indicator as to when to add more sanitizer.

4-204.118 Warewashing Machines, Flow Pressure Device. (functionality) pg 90
A fresh hot water sanitizing rinse shall be equipped with a pressure gauge or similar device that measures & displays water pressure in the supply line immediately before entering the warewashing machine and if the device is upstream of the fresh hot water sanitizing rinse control valve, the device shall be mounted in a one-fourth inch Iron Pipe Size valve.

Refuse, Recyclables, and Returnables (Indoor)

REFUSE, RECYCLABLES & RETURNABLES:

5-501.13 Receptacles. (facilities on the premises, materials, design & installation) pg 133
Receptacles & waste handling units for refuse, recyclables and returnables (RR&R) containing food residue shall be durable, cleanable, vermin resistant, leakproof & nonabsorbent. (Except plastic or wet strength paper bags may be used to line receptacles indoors or outdoors in closed receptacles.)

5-501.16 Storage Areas, Rooms, and Receptacles, Capacity & Availability. (numbers & capacities) pg 134
Shall be of sufficient capacity to hold RR&R that accumulate and a receptacle shall be provided in each area where refuse is generated or commonly discarded, or recyclables or returnables are placed. If disposable towels are used at handwashing lavatories, a waste receptacle shall be located at each lavatory or group of adjacent lavatories.

5-501.17 Toilet Room Receptacle, Covered. (numbers & capacities) pg 134
Female restrooms shall be provided a covered receptacle for sanitary napkins.

5-501.18 Cleaning Implements and Supplies. (numbers & capacities) pg 135
Suitable cleaning implements & supplies shall be provided as necessary for effective cleaning of receptacles & waste handling units for RR&R. (Except if approved, off premise cleaning services may be used.)
5-501.19 Storage Areas, Redeeming Machines, Receptacles & Waste Handling Units, Location. (location & placement) pg 135
Areas designated for RR&R and redeeming machines shall be separate from food, equipment, utensils, linens, and single service/use articles (FEULSS) and may not create a public health hazard or nuisance or interfere with cleaning of adjacent space. (Except a redeeming machine may be located in the packaged food area or consumer area if FEULSS are not subject to contamination and a public health hazard or nuisance is not created.)

5-501.110 Storing Refuse, Recyclables, and Returnables. (operation & maintenance) pg 135
Shall be stored in receptacles or waste handling units that are inaccessible to vermin.

5-501.113 Covering Receptacles. (operation & maintenance) pg 136
Receptacles & waste handling units for RR&R shall be kept covered: Inside: if they contain food residue and are not in continuous use, and Outside: with tight fitting lids or doors.

**Outdoor Areas**

**MATERIALS FOR CONSTRUCTION & REPAIR:**

6-102.11 Surface Characteristics. pg 140
Walking & driving areas shall be surfaced to minimize dust, facilitate maintenance and prevent muddy conditions. Exterior surfaces of buildings shall be weather resistant and comply with law.

**DESIGN, CONSTRUCTION & INSTALLATION:**

6-202.19 Outdoor Walking and Driving Surfaces, Graded to Drain. (functionality) pg145
Exterior walking & driving surfaces shall be graded to drain.

6-202.110 Outdoor Refuse Areas, Curbed & Graded to Drain (functionality) pg145
Constructed in accordance with law. Curbed and graded to drain to collect and dispose of liquid refuse waste and from cleaning the area and waste receptacles.

**REFUSE, RECYCLABLES & RETURNABLES:**

5-501.11 Outdoor Storage Surface. (materials, design, construction & installation) pg 133
 Constructed of nonabsorbent material such as concrete or asphalt and shall be smooth, durable & sloped to drain.

5-501.12 Outdoor Enclosure. (materials, design, construction & installation) pg 133
If used, shall be constructed of durable & cleanable material.

5-501.13 Receptacles. (materials, design, construction & installation) pg 133
Waste handling units shall be durable, cleanable, vermin (insect & rodent) resistant, leakproof and nonabsorbent. (Except plastic or wet strength paper bags may be used to line receptacles inside or outside closed receptacles.)

5-501.15 Outside Receptacles. (materials, design, construction & installation) pg 134
Containing food residue and used outside shall be designed & constructed to have tight fitting lids, doors or covers. Compactors shall be installed so that the accumulation of debris and vermin attraction & harborage are minimized. Effective cleaning is facilitated around the unit, and under the unit, if not installed flush with the base pad.

5-501.112 Outside Storage Prohibitions. (operation & maintenance) pg 136
Receptacles that are not rodent-resistant or baled units that contain materials with food residue may not be stored outside. (Except cardboard or other packaging material not containing food residue may be stored outside for regular pick up or disposal in an uncovered receptacle provided it does not create a rodent harborage problem.)