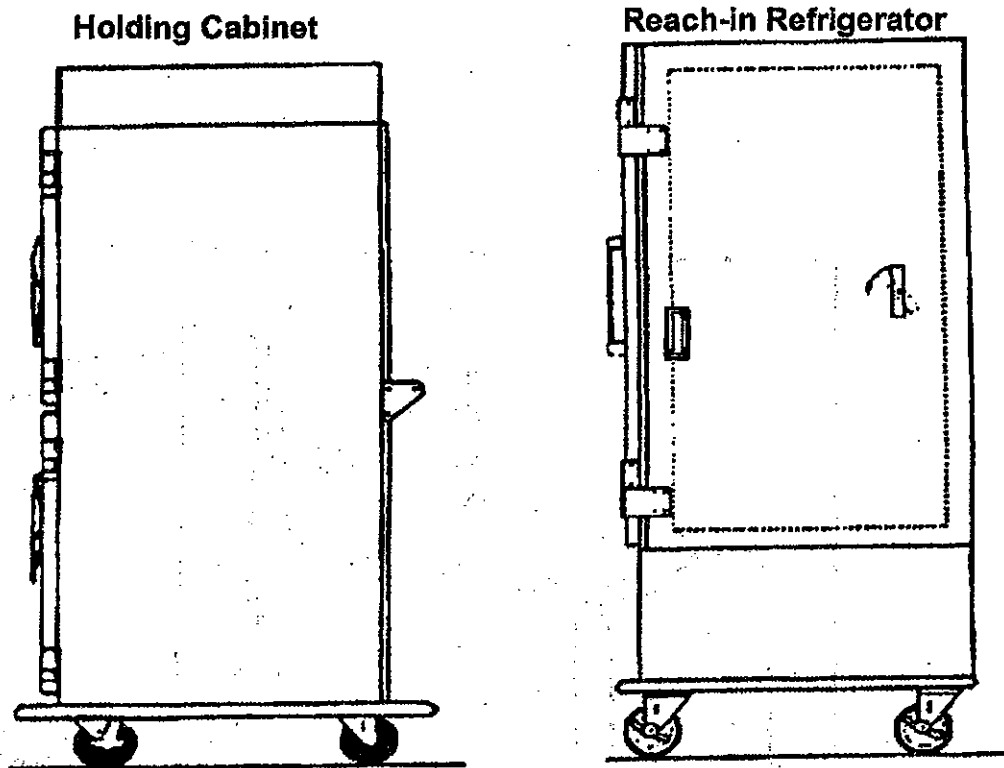


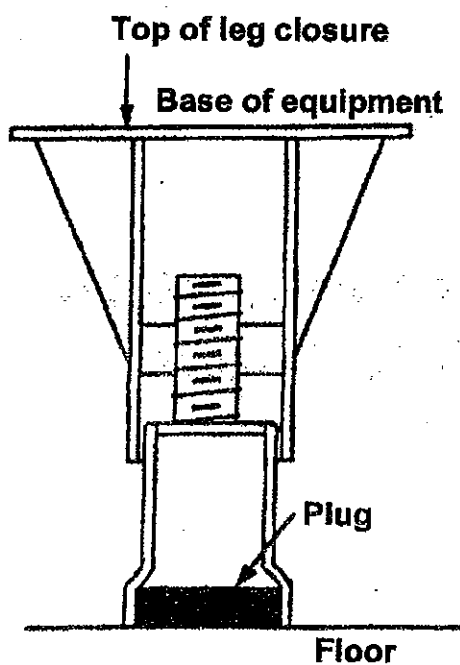
Legs of all equipment should not have hollow, open ends.

If running water dipper wells are installed, methods for filling and draining the units must be identified.



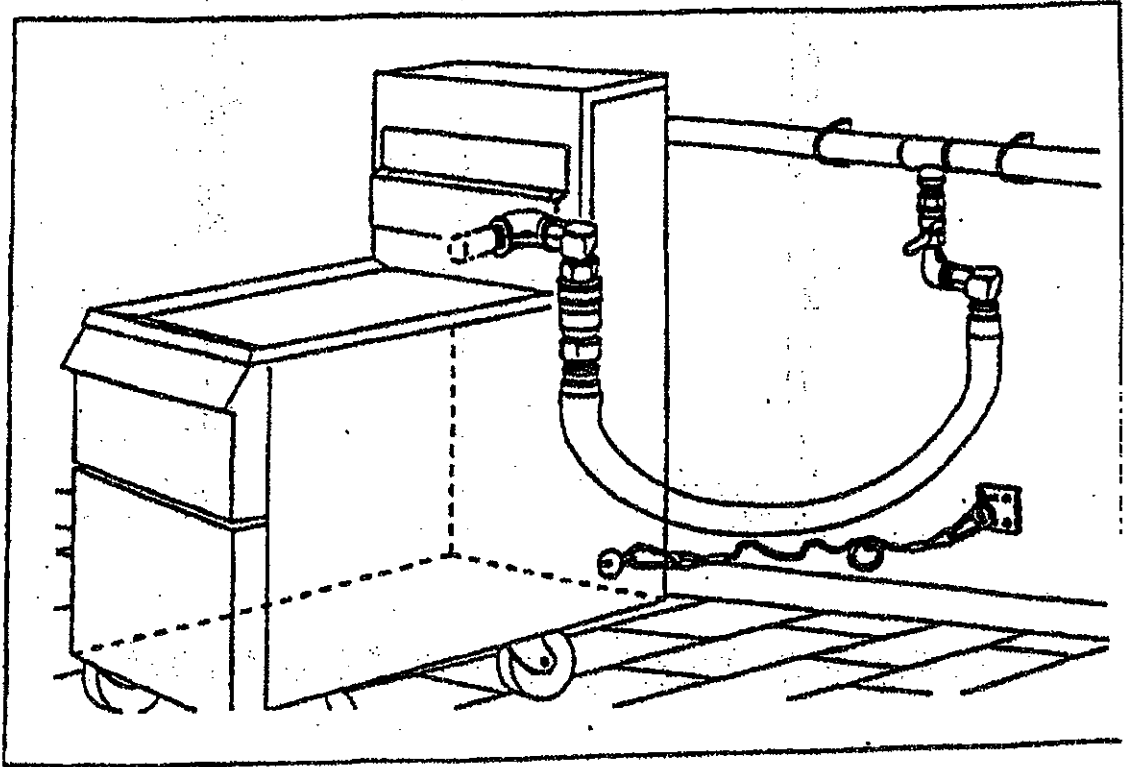
Kitchen Equipment Mounted On Castors

Figure 6-1

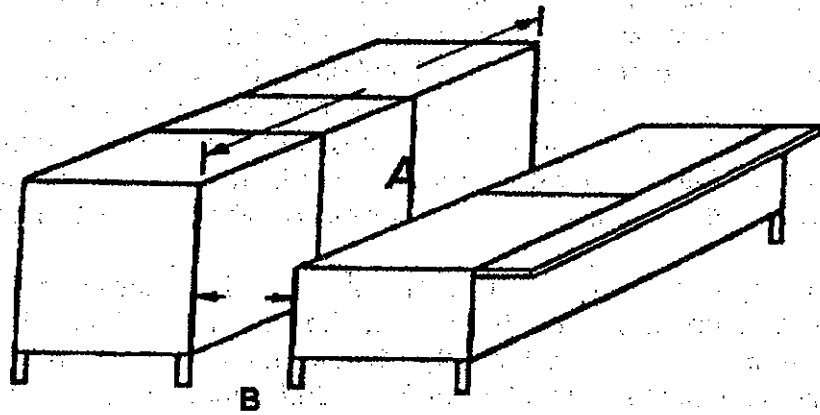


Sanitary Leg

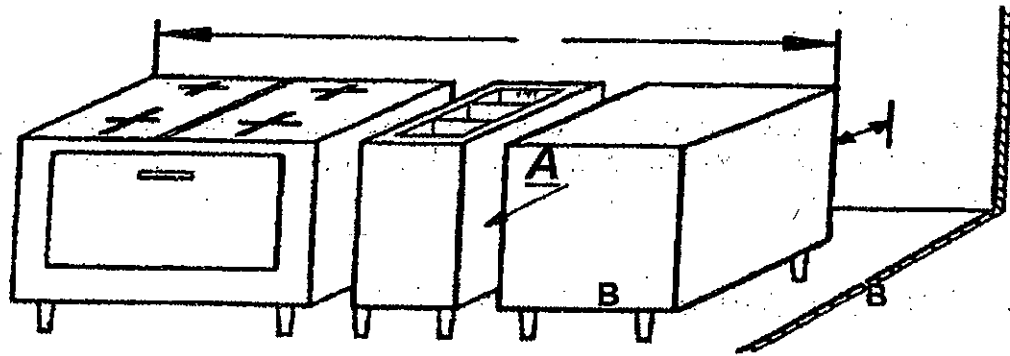
Figure 6-2



Flexible Gas Connection With Safety Chain



Equipment sealed together



Equipment

Recommended Equipment Spacing
Provided Access is Available From Both Ends:

Equipment Length (A)

Space From Walls and Adjacent Equipment (B)

4' or less

6"

4' - 8'

12"

8' or more

18"

Equipment Spacing

PART 7 - DRY STORAGE

The dry storage space needed depends on the menu, number of meals served between deliveries, frequency of deliveries, and the amount and type of single-service items to be stored. The location of dry storage should be adjacent to the food preparation area and convenient to receiving. Adequate ventilation should be provided. Food should not be stored under exposed sewer lines. Similarly, a cabinet that is used for the storage of food, shall not be located under exposed or unprotected sewer lines, open stairwells or other sources of contamination.

Shelving, dollies, racks, pallets and skids shall be corrosion-resistant, non-absorbent and smooth. The highest shelf for practical use should be 7 feet. The lowest one should be at least 6 inches from the floor. Clearance between shelves should be at least 15 inches. Sufficient moveable racks, skids and dollies should be provided to store all bulk containers. Shelving, dollies, racks, pallets and skids should be spaced away from walls to allow for cleaning and pest monitoring/inspection.

Approved food containers with tight-fitting covers and dollies should be used for storing bulk foods such as flour, cornmeal, sugar, dried beans, rice and similar food.

DRY STORAGE CALCULATION EXAMPLES:

These formulas can be used to estimate dry storage space :

Formula # 1 - Linear feet of storage shelving =
$$\frac{\text{Volume per meal} \times \text{number of meals between deliveries}}{D \times H \times C}$$

Volume per meal = 0.1 cubic feet
D = Depth of the shelves in feet
H = Distance between shelves in feet
C = 0.8 or 80% effective capacity of shelf height

For example, assume 400 meals per day and a 10 day storage between deliveries = 4000 meals between deliveries, shelf depth of 18 inches (1.5 ft.), clearance of 18 inches (1.5 ft.) between shelves and 80% effective capacity of shelf height:

Linear feet of storage shelving =
$$\frac{0.1 \text{ cu. ft} \times 4000 \text{ meals}}{1.5 \text{ ft.} \times 1.5 \text{ ft.} \times 0.8} = 222 \text{ Linear feet}$$

Formula # 2 - Square feet of storage area =

ESTIMATED LINEAR FEET OF STORAGE SHELVING NEEDED (Formula #1)		ESTIMATED SQUARE FEET OF STORAGE AREA NEEDED (Formula #2)	
Based on 0.1 cu. ft. per meal		Based on 0.1 cu. ft. per meal	
Meals Served Between Deliveries	1 ft. deep x 1ft. high shelves (D x H = 1)	1.5 ft. deep x 1.5 ft. high shelves (D x H = 2.25)	2 ft. deep x 1.5 ft. high shelves (D x H = 3)
200	25	11	1
300	37.5	17	12.5
400	50	22	17
500	62.5	28	21
600	75	33	25
800	100	44	33
1000	125	55	42
1500	187.5	83	62.5
2000	250	111	83
2500	312.5	139	104
3000	375	167	125
4000	500	222	167
5000	625	278	208
Meals Served Between Deliveries	Height = 5 ft. Floor Area = .5	Height = 6 ft. Floor Area = .5	Height = 6 ft. Floor Area = .6
200	8	7	6
300	12	10	8
400	16	13	11
500	20	17	14
600	24	20	17
800	32	27	22
1000	40	33	28
1500	60	50	42
2000	80	67	56
2500	100	83	69
3000	120	100	83
4000	160	133	111
5000	200	167	139

Volume per meal x number of meals between deliveries
Average height (ft.) x fraction of usable storeroom floor area

Volume per meal = 0.1 cu. ft

Usable storage height = 5 to 7 feet (total height of the ceiling minus the distance of shelving from the floor and ceiling)

Fraction of useable storeroom floor area = .4 to .6 (total floor area minus door openings, aisle space, distance of shelving from walls)

For example, assume 400 meals per day and a 10 day storage between deliveries = 4000 meals between deliveries, 5 feet useful storage height, and .5 of usable floor area.

Storage Area = $\frac{0.1 \text{ cu.ft.} \times 4000 \text{ meals}}{5 \text{ ft.} \times .5} = 160 \text{ square feet}$

SECTION 8 - WAREWASHING FACILITIES

The minimum requirement for warewashing in a food establishment is a 3-compartment sink. A mechanical warewashing machine may be installed in addition to the 3-compartment sink.

MANUAL WAREWASHING

For manual warewashing, a stainless steel sink with no fewer than 3 compartments must be provided. The sink compartments shall be large enough to completely immerse the largest pot, pan or piece of equipment to be used in the establishment that will not be cleaned in place. Each compartment shall be supplied with adequate hot and cold potable running water. The temperature of the wash solution in manual warewashing equipment shall be maintained at not less than 110°F or the temperature specified on the cleaning agent manufacturer's label instructions. Drainboards, utensil racks or tables large enough to accommodate clean and soiled utensils shall be provided. The drainboards shall be self draining. A two-compartment sink may be allowed by the Regulatory Authority under certain conditions.

Adequate facilities for pre-flushing or pre-scrapping equipment and utensils must be provided.

If hot water is used to sanitize equipment and utensils, the means for heating the water to 171°F in the 3rd compartment must be identified. The racks for the immersion of equipment and utensil must be specified.

MECHANICAL WAREWASHING (see Figure #8)

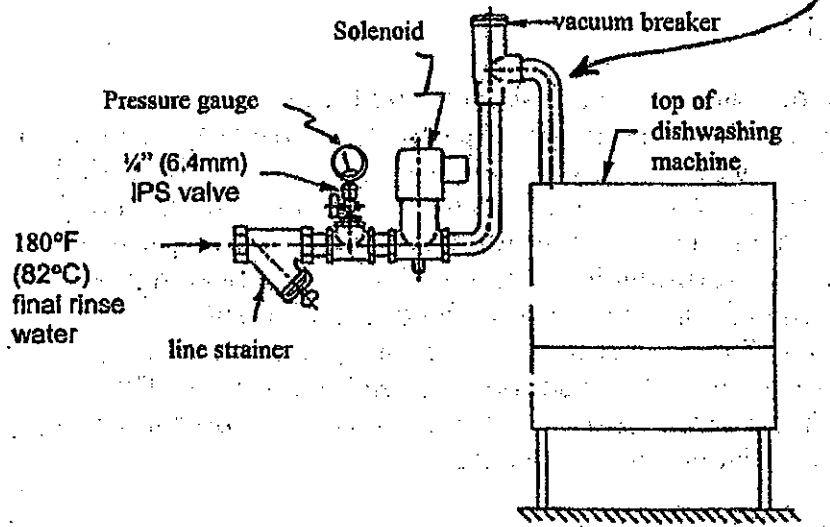
Warewashing machines shall be installed in accordance with the manufacturer's recommendations and applicable code requirements.

Adequate facilities shall be provided to air dry washed equipment and utensils. Drainboards, utensil racks or tables must be large enough to allow proper and sufficient air drying of equipment and utensils. Storage facilities shall be provided to store cleaned and sanitized utensils and equipment at least 6" above the floor; protected from splash, dust, overhead plumbing or other contamination. The plan must specify the location and facilities used for storing all utensils and equipment.

If used, the hot water booster for warewashing machines must be identified during plan review.

If the detergent dispenser or drying agent dispenser is not equipped with an integral backflow prevention device, the injection point of the chemicals shall be below the vacuum breaker on the warewashing machine.

**Point of installation for detergent dispenser and drying agent dispenser
(6" below vacuum breaker)**



Typical Warewashing Machine Water Supply

Figure 8

DETERMINING WAREWASH MACHINE CAPACITY

The capacity of the dishwashing machines should be based on the peak number and type of dishes, utensils, flatware, etc. that must be washed per hour. One way to find the capacity in racks per hour for each make and model of machine is to refer to the manufacturer's specification sheets. To determine the required capacity refer to the following guide:

Each 20" x 20" dishrack will accommodate:

- 16 - 9" dinner plates
- 25 - water glasses
- 16 - coffee cups
- 100 - pieces of flatware

Only 70% of the listed capacity (in racks per hour) should be considered as an average capacity. Consult the manufacturers' specification sheets ("cut sheets") for optimum capacity.

A suggested formula to determine the number of dishracks required per hour for a restaurant serving 200 meals at lunch is as follows:

200 plates	= $\frac{200 \text{ plates}}{16 \text{ plates/rack}} = 13 \text{ racks}$
200 water glasses	= $\frac{200 \text{ glasses}}{25 \text{ glasses/rack}} = 8 \text{ racks}$
200 coffee cups	= $\frac{200 \text{ coffee cups}}{16 \text{ cups/rack}} = 13 \text{ racks}$
200 pieces of flatware	= $\frac{200 \text{ pieces}}{100 \text{ pieces/rack}} = 2 \text{ racks}$

Required total working capacity = 36 racks/hour

Since this figure is 70% of the listed capacity, a mechanical dishwasher with a minimum listed capacity of:

$$\frac{36}{.70 (70\%)} = 51 \text{ racks/hour would be recommended}$$

An adequate facility for preflushing or prescrapping shall be provided on the soiled dish side of the dishwashing machine.

Drainboards shall be provided, be of adequate size for the proper handling of utensils, and located so as not to interfere with the proper use of the warewashing facilities. Mobile dish tables may be acceptable for use in lieu of drainboards.

CHEMICAL WAREWASHING

Chemical warewashing machines shall meet nationally recognized standards and be certified or classified by an ANSI accredited certification program. The installation must conform to applicable code requirements. Among the specific requirements for the installation of an approved chemical warewashing machine are the following:

1. The chemical sanitizing feeder must meet nationally recognized standards and be certified or classified by an ANSI accredited certification program and be compatible with the specific make and model of machine in question.
2. An approved chemical test kit for determining sanitizer strength shall be available and used.
3. A visual flow indicator must be provided to monitor the operation of the sanitizing agent feeder. Other indication devices such as audible alarms may also be used. The flow indication devices must be installed so as to be conspicuous to the operator.

Adequate facilities shall be provided to air dry washed utensils and equipment. Storage facilities shall be provided to store cleaned and sanitized utensils and equipment at least 12" above the floor, protected from splash, dust, overhead plumbing or other contamination; on fixed shelves; or in enclosed cabinets. The plan must specify location and facilities used for storing all utensils and equipment.

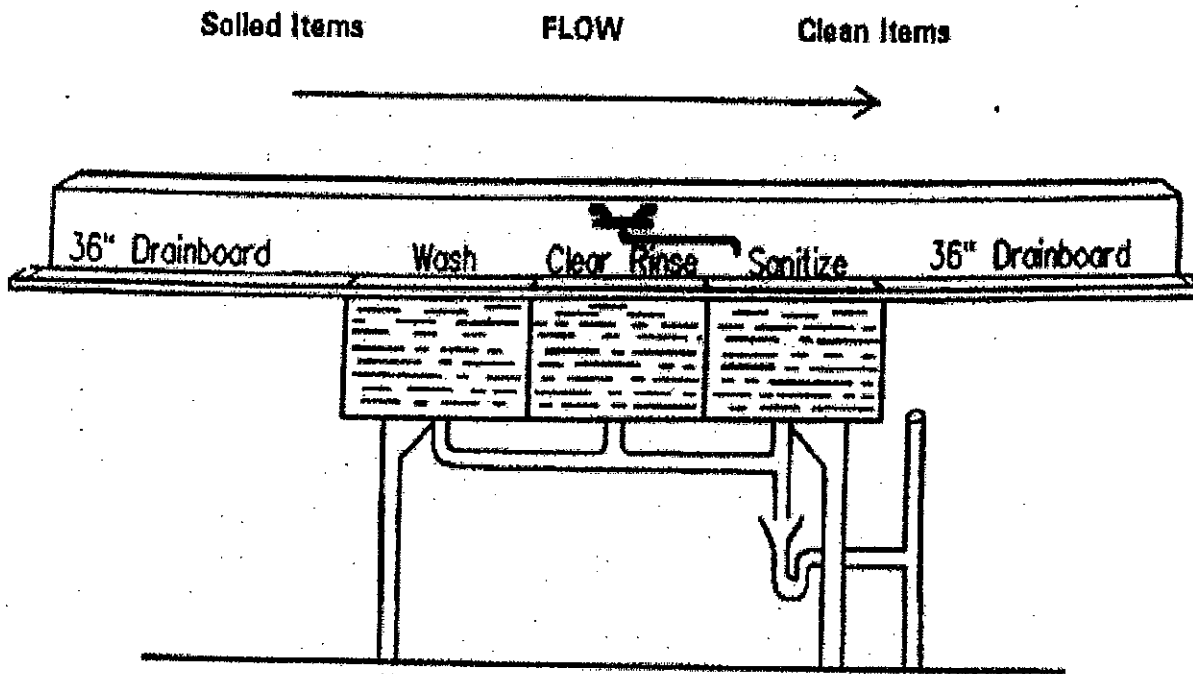
WAREWASHING UTILIZING HOT WATER SANITIZATION

A commercial warewashing machine for mechanical warewashing utilizing hot water for sanitization shall be provided that is in compliance with the standards of an ANSI accredited certification program. The installation and required accessories shall be in conformance with local applicable plumbing codes.

An approved maximum registering thermometer or high temperature test papers shall be available and used.

If the detergent dispenser or drying agent dispenser is not equipped with an integral backflow prevention device, the installation point of the dispenser shall be below the vacuum breaker on the warewashing machine. See figure #8-3.

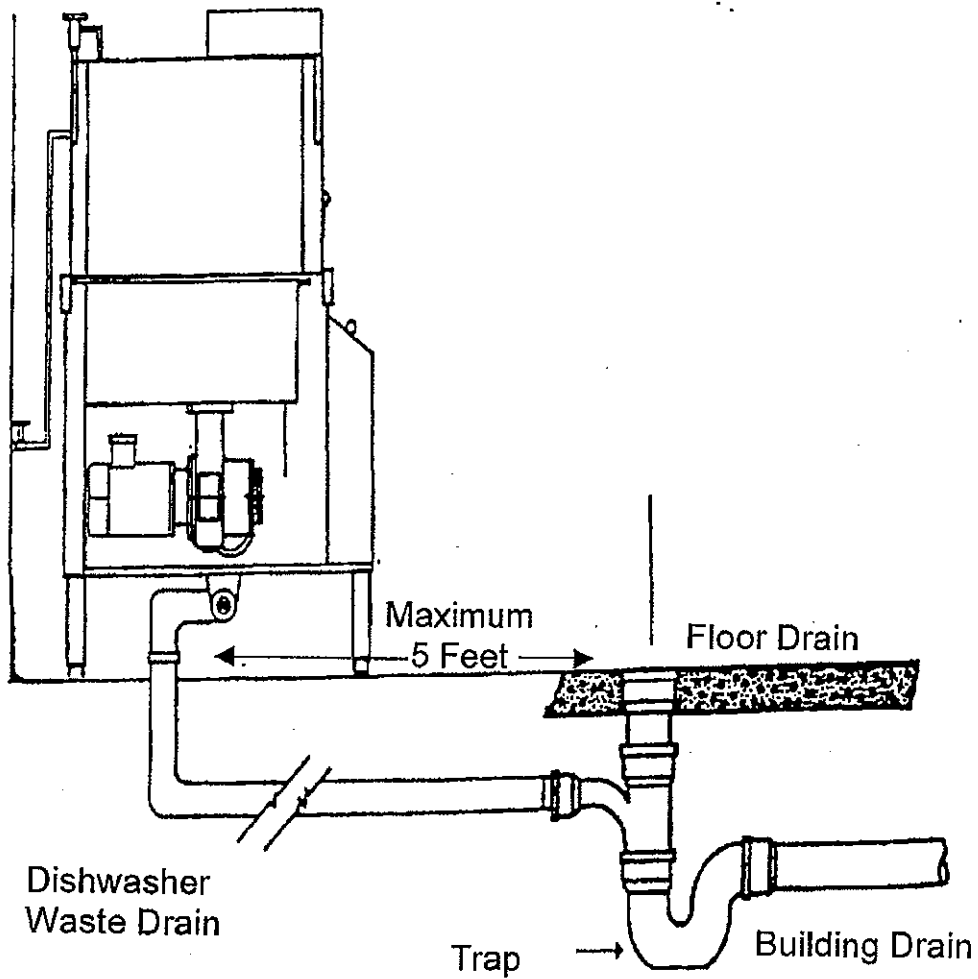
Other references are available for additional formulas and information. One such reference includes: Salvato Textbook. Environmental Engineering & Sanitation 4th Edition. Copyright John Wiley & Sons, Inc. United States. 1992.



Recommended warewashing arrangement using three-compartment sink. Drainboards for soiled dishes and for cleaned utensils must be adequate. A 36" drainboard should have a pitch of $\frac{1}{8}$ " to $\frac{3}{8}$ " per foot toward the sink.

Three Compartment Sink With Indirect Waste

Figure 8-1



Warewashing Machine With a Direct Waste Connection

Figure 8-2

SECTION 9 - FINISHES

The finishes of the floors, walls, and ceilings in food establishments shall be smooth, durable, easily cleanable and be non-absorbent in areas exposed to moisture. Floor wall junctures shall be covered.

The chart below lists the types of floor, wall, and ceiling finishes that are acceptable in food establishments in the areas listed.

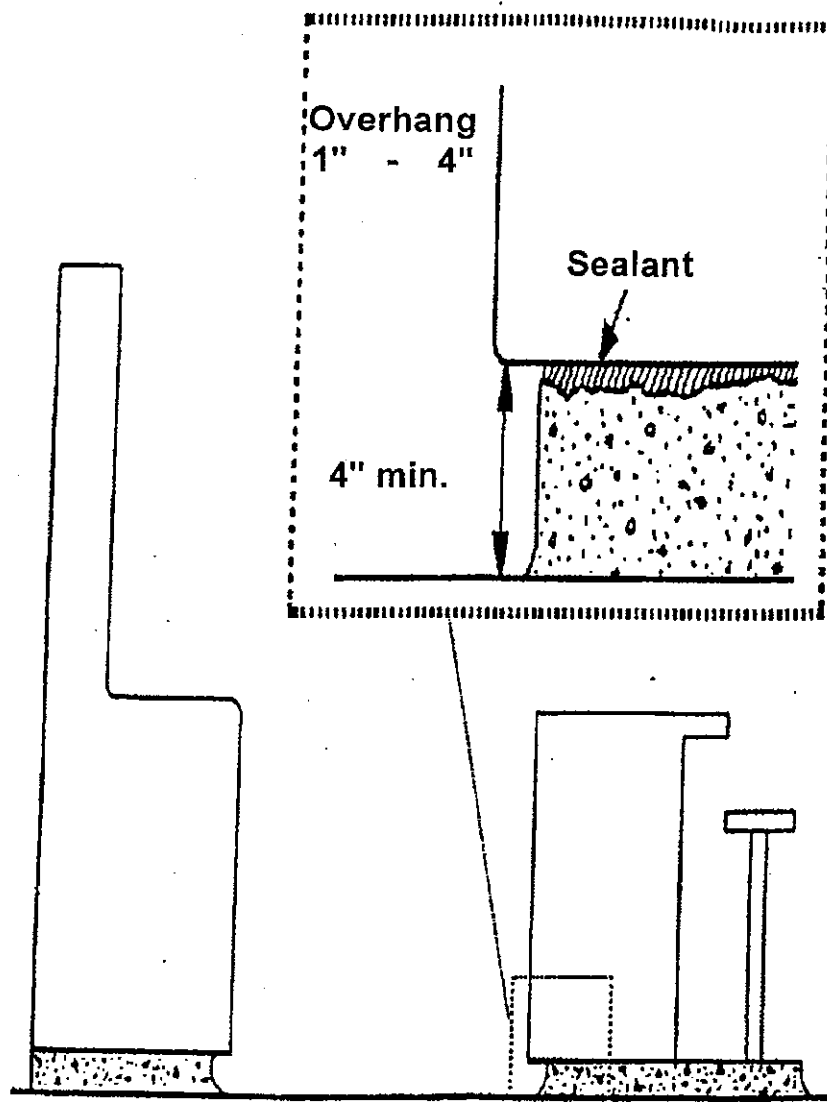
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Room/Area	Floors	Walls	Ceilings
Cooking Areas (Areas exposed to high heat)	Quarry tile Poured Epoxy Commercial Grade Vinyl Composition Tile (VCT) Commercial Grade Sheet Linoleum with Chemically Welded Seams	Stainless Steel Ceramic Tile Aluminum	Stainless Steel Smooth, Non-Acoustical Plastic Coated or Metal-Clad Fiberboard Dry-wall sealed with an Epoxy Finish Plastic Laminate Glazed Surfaces
Food Preparation (No or low heat exposure)	Quarry tile Poured Epoxy Commercial Grade Vinyl Composition Tile (VCT) Commercial Grade Sheet Linoleum with Chemically Welded Seams	Stainless Steel Ceramic Tile Fiberglass Reinforced Polyester Panels (FRP) Concrete Block Filled with Epoxy Paint or Glaze	Smooth, Plastic Coated or Metal-Clad Fiberboard Dry-wall sealed with an Epoxy Finish Plastic Laminate Glazed Surfaces
Walk-in Refrigerators and Freezers	Insulated Metal Flooring Provided by the Manufacturer of the Walk-in Quarry tile Poured Epoxy	Insulated Wall Panels Provided by the Manufacturer of the Walk-in Stainless Steel Aluminum Fiberglass Reinforced Polyester Panels (FRP)	Insulated Ceiling Panels Provided by the Manufacturer of the Walk-in Stainless Steel Aluminum Fiberglass Reinforced Polyester Panels (FRP)
Warewashing Areas	Quarry tile Poured Epoxy Commercial Grade Vinyl Composition Tile (VCT) Commercial Grade Sheet Linoleum with Chemically Welded Seams	Stainless Steel Ceramic Tile Fiberglass Reinforced Polyester Panels (FRP) Concrete Block Filled with Epoxy Paint or a Glazed	Smooth, Non-Acoustical Plastic Coated or Metal-Clad Fiberboard Dry-wall sealed with an Epoxy Finish Plastic Laminate

		Surface	Glazed Surfaces
Food Storage	Quarry tile Poured Epoxy Commercial Grade Vinyl Composition Tile (VCT) Commercial Grade Sheet Linoleum with Chemically Welded Seams Smooth, Sealed Concrete	Stainless Steel Ceramic Tile Fiberglass Reinforced Polyester Panels (FRP) Concrete Block Filled with Epoxy Paint or a Glazed Surface Epoxy Sealed Dry-Wall	Plastic Coated or Metal- Clad Fiberboard Dry-wall sealed with an Epoxy Finish Plastic Laminate Glazed Surfaces
Other Storage	Quarry tile Poured Epoxy Commercial Grade Vinyl Composition Tile (VCT) Commercial Grade Sheet Linoleum with Chemically Welded Seams Smooth, Sealed Concrete	Stainless Steel Ceramic Tile Fiberglass Reinforced Polyester Panels (FRP) Concrete Block Filled with Epoxy Paint or a Glazed Surface Dry-wall sealed with an Epoxy Finish	Plastic Coated or Metal- Clad Fiberboard Dry-wall sealed with an Epoxy Finish Plastic Laminate Glazed Surfaces
Bar (Food Worker Side of Bar)	Quarry tile Poured Epoxy Commercial Grade Vinyl Composition Tile (VCT) Commercial Grade Sheet Linoleum with Chemically Welded Seams	Stainless Steel Ceramic Tile Fiberglass Reinforced Polyester Panels (FRP) Plastic Laminate Concrete Block Filled with Epoxy Paint or a Glazed Surface	Plastic Coated or Metal- Clad Fiberboard Dry-wall sealed with an Epoxy Finish Plastic Laminate Glazed Surfaces
Toilet Rooms	Quarry tile Poured Epoxy Commercial Grade Vinyl Composition Tile (VCT)	Stainless Steel Ceramic Tile Fiberglass Reinforced Polyester Panels (FRP)	Plastic Coated or Metal- Clad Fiberboard Dry-wall sealed with an Epoxy Finish

	Commercial Grade Sheet Linoleum with Chemically Welded Seams	Concrete Block Filled with Epoxy Paint or a Glazed Surface	Plastic Laminate Glazed Surfaces
Dressing Rooms	Quarry tile Poured Epoxy Commercial Grade Vinyl Composition Tile (VCT) Commercial Grade Sheet Linoleum with Chemically Welded Seams Smooth, Sealed Concrete	Stainless Steel Ceramic Tile Fiberglass Reinforced Polyester Panels (FRP) Concrete Block Filled with Epoxy Paint or a Glazed Surface Epoxy Sealed Dry-Wall	Plastic Coated or Metal-Clad Fiberboard Dry-wall sealed with an Epoxy Finish Plastic Laminate Glazed Surfaces
Garbage and Refuse (Interior Locations)	Quarry tile Poured Epoxy Commercial Grade Vinyl Composition Tile (VCT) Commercial Grade Sheet Linoleum with Chemically Welded Seams Commercially Manufactured Insulated Floor Panels	Stainless Steel Ceramic Tile Fiberglass Reinforced Polyester Panels (FRP) Concrete Block Filled with Epoxy Paint or a Glazed Surface Commercially Manufactured Insulated Wall Panels	Stainless Steel Plastic Coated or Metal-Clad Fiberboard Dry-wall sealed with an Epoxy Finish Plastic Laminate Glazed Surfaces Commercially Manufactured Insulated Ceiling Panels
Mop Service Areas	Quarry tile Poured Epoxy Commercial Grade Vinyl Composition Tile (VCT) Commercial Grade Sheet Linoleum with Chemically Welded Seams	Stainless Steel Ceramic Tile Fiberglass Reinforced Polyester Panels (FRP) Concrete Block Filled with Epoxy Paint or a Glazed Surface	Plastic Coated or Metal-Clad Fiberboard Dry-wall sealed with an Epoxy Finish Plastic Laminate Glazed Surfaces

Additional Notes: Finishes must be installed in accordance with the manufacturer's recommendations. If a new finish or texture is proposed, a sample of the material may be requested by the Regulatory Authority prior to installation.



Coving At Base Junctures

Figure 10-1

SECTION 10 – PEST CONTROL

Preventive measures during design and construction of a food establishment are essential to eliminating and controlling pest problems.

Food establishments should be designed and constructed to restrict the entrance of pests.

Openings to the outside shall be effectively protected against the entrance of pests. Openings to the outside shall be protected by the installation of tight fitting, self-closing doors; closed windows; self-closing windows at drive-throughs; screening; controlled air currents; vestibules; or other means approved by the Regulatory Authority. Screen doors shall be self-closing and screens for windows, doors, skylights, transoms, intake air ducts, exhaust vents and other openings to the outside shall be tight fitting and free of breaks. Screening material shall not be less than sixteen mesh to the inch. Openings around pipes, conduit or wiring must be sealed.

Loading docks and delivery doors must be provided with effective air curtains or vestibules with self-closing doors to preclude the entrance of insects.

Insect control devices are effective tools in controlling flying insects that have entered a food establishment. Electrocuting units shall be designed to retain the insect within the device. Insect control devices may not be located over a food preparation area and should be installed in accordance with the manufacturer's recommendations.

The presence of pests shall be controlled throughout the premises. Openings between the floor and bottom of the doors to the outside shall be adequately flashed with rodent proof material/weather stripping to eliminate any opening.

SECTION 11 – LIGHTING

The light intensity shall be at least 108 lux (10 foot candles) at a distance of 75 cm (30 inches) above the floor, in walk-in refrigeration units and dry food storage areas and rooms during periods of cleaning.

The light intensity shall be at least 215 lux (20 foot candles) at a surface where food is provided for consumer self-service such as buffets and salad bars or where fresh product or packaged foods are sold or offered for consumption; inside equipment such as reach-in and under-counter refrigerators; at a distance of 75 cm (30 inches) above the floor in areas used for handwashing, warewashing, and utensil storage, and in toilet rooms.

The light intensity shall be at least 540 lux (50 foot candles) at a surface where a food employee is working with food or working with utensils or equipment such as knives, slicers, grinders, or saws where employees safety is a factor.

Shielding such as plastic shields, plastic sleeves with end caps, shatterproof bulbs and/or other approved devices shall be provided for all artificial lighting fixtures located in areas where there is exposed food; clean equipment, utensils, and linens; or unwrapped single-service and single-use articles.

Heat lamps shall be protected against breakage by a shield surrounding and extending beyond the bulb, leaving only the face of the bulb exposed.

SECTION 12 – VENTILATION

All rooms shall have sufficient ventilation to keep them free of excessive heat, steam, vapors, obnoxious odors, smoke and fumes. Ventilation systems shall be designed and installed according to law.

GENERAL PRINCIPLES OF EXHAUST

The purpose of an exhaust hood is to provide a method of collecting, as nearly as possible, all of the grease produced from the cooking process while furnishing a means of removing heat, smoke and odors from the cooking area. A sufficient volume of air movement (capture velocity) must be provided to effectively draw grease particles and cooking vapors directly from the cooking surface to the grease extractors. This air flow removes cooking odors and keeps grease particles from settling onto nearby surfaces.

An effective capture velocity shall be sufficient to overcome opposing air currents, capture the grease and cooking vapors, and transport them to the grease extractors. When grease vapors cool and condense, an extractor removes grease particles by directed air flow, contraction, and expansion (drop out).

For heat and steam producing equipment, the hood or ventilation system controls humidity, heat and unwanted condensation.

COOKING EQUIPMENT

Cooking ventilation hoods and devices shall be designed and installed to prevent grease or condensation from collecting on walls, ceilings, and fire suppression supply piping and from dripping into food or onto food contact surfaces.

Make up air intakes must be screened and filtered to prevent the entrance of dust, dirt, insects and other contaminating material. Where the introduction of makeup air will cause condensation, drafting or interfere with the exhaust or vapor capture efficiency of the hood, the makeup air must be tempered. Tempering of makeup air may be necessary in certain climates.

Exposed piping must be cleanable.

HOT WATER SANITIZING WAREWASHING MACHINES

Exhaust ventilation may be necessary over hot water sanitizing warewashing machines to minimize moisture and steam.

FIRE PROTECTION

Fire protection for equipment that produces grease-laden vapors is regulated by National Fire Protection Association Bulletin #96.

Other references are available for additional formulas and information. Such references include:

North American Association of Food Equipment Manufactures. An Introduction to the Food Service Industry. First Edition 1995.

National Environmental Health Association. Manual of Recommended Practice for Ventilation in Food Service Establishments, by James D. Barnes. 1984.

SECTION 13 – OTHER

Service Sink

At least one service sink or one curbed cleaning facility equipped with a floor drain shall be provided and conveniently located for the cleaning of mops or similar wet floor cleaning tools and for the disposal of mop water and similar liquid waste.

There shall be a place to store mops and similar cleaning items where they can be air dried after use.

Poisonous or Toxic Materials

Poisonous or toxic materials shall be stored so they cannot contaminate food, equipment, utensils, linens, and single-service and single-use articles.

These items can be separated by using spacing or partitioning. Poisonous or toxic materials cannot be located above food, equipment, utensils, linens, or single-service and single-use articles.

Clothes Washers and Dryers

If a mechanical clothes washer and dryer are proposed, they must be located away from exposed food, clean equipment, utensils, and linens; and unwrapped single-service and single-use articles.

Dressing Rooms and Lockers

Lockers must be provided to store employees' belongings and clothing. If lockers are not used, another type of area can be designated and identified on the plan for the storage of employees' belongings.

If employees will be changing their clothes or putting on uniforms in the establishment, a dressing room must be designated on the plans.

Storage and Disposal Facilities for Grease Waste, Refuse, Recyclables, and Returnables

Indoor Storage

If grease waste, refuse, recyclables, and returnables are stored inside the establishment, the floors, walls, and ceilings of the storage area must be smooth, durable, easily cleanable, and nonabsorbent. The area must be rodent-proof and insect-proof and must have sufficient capacity to hold the items being stored before removal. If the food establishment is located in a warm weather climate, air conditioned or refrigerated storage rooms should be considered as a method that can be used to minimize odors and decomposition of the waste materials.

Storage rooms must be separated from food, equipment, utensils, linens, and single-

service and single-use articles.

Outdoor Storage

The outdoor storage surface for the storage of grease waste, refuse, recyclables, and returnables shall be constructed of concrete, asphalt, or other nonabsorbent material. The surface shall be smooth and durable and sloped to drain. If an enclosure is used around the storage area, it must be constructed of durable and cleanable materials. The area must have sufficient capacity to hold the items being stored before removal.

Numbers and Capacities

- 6-301 Handwashing Facilities.
- 6-302 Toilets and Urinals.
- 6-303 Lighting.
- 6-304 Ventilation.
- 6-305 Dressing Areas and Lockers.
- 6-306 Service Sinks.

Location and Placement

- 6-401 Handwashing Facilities.
- 6-402 Toilet Rooms.
- 6-403 Employee Accommodations.
- 6-404 Distressed Merchandise.
- 6-405 Refuse, Recyclables, and Returnables.

C. WATER, PLUMBING, AND WASTE

Water

- 5-101 Source.
- 5-102 Quality.
- 5-103 Quantity and Availability.
- 5-104 Distribution, Delivery, and Retention.

Plumbing System

- 5-201 Materials.
- 5-202 Design, Construction, and Installation.
- 5-203 Numbers and Capacities.
- 5-204 Location and Placement.
- 5-205 Operation and Maintenance.

Mobile Water Tank and Mobile Food Establishment Water Tank

- 5-301 Materials.
- 5-302 Design and Construction.
- 5-303 Numbers and Capacities.
- 5-304 Operation and Maintenance.

Sewage, Other Liquid Waste, and Rainwater

- 5-401 Mobile Holding Tank.
- 5-402 Retention, Drainage, and Delivery.
- 5-403 Disposal Facility.

Refuse, Recyclables, and Returnables

- 5-501 Facilities on the Premises.
- 5-502 Removal.
- 5-503 Facilities for Disposal and Recycling.

FOOD CODE REFERENCE SHEET

A. ADMINISTRATIVE CONSIDERATIONS

Plan Submission and Approval

- 8-201.11 When Plans Are Required.
- 8-201.12 Contents of the Plans and Specifications.
- 8-201.13 When a HACCP Plan is Required.
- 8-201.14 Contents of a HACCP Plan.
- 8-203 Construction Inspection and Approval

B. PHYSICAL FACILITIES

Materials for Construction and Repair

- 6-101.11 Surface Characteristics. (Indoor Areas)
- 6-102.11 Surface Characteristics. (Outdoor Areas)

Design, Construction, and Installation (Cleanability)

- 6-201.11 Floors, Walls, and Ceilings.
- 6-201.12 Floors, Walls, and Ceilings, Utility Lines.
- 6-201.13 Floor and Wall Junctures, Coved, and Enclosed or Sealed.
- 6-201.14 Floor Carpeting, Restrictions and Installation.
- 6-201.15 Floor Covering, Mats and Duckboards.
- 6-201.16 Wall and Ceiling Coverings and Coatings.
- 6-201.17 Walls and Ceilings, Attachments.
- 6-201.18 Walls and Ceilings, Studs, Joists and Rafters.

Design, Construction, and Installation (Functionality)

- 6-202.11 Light Bulbs, Protective Shielding.
- 6-202.12 Heating, Ventilating, Air Conditioning System Vents.
- 6-202.13 Insect Control Devices, Design and Installation.
- 6-202.14 Toilet Rooms, Enclosed.
- 6-202.15 Outer Openings, Protected.
- 6-202.16 Exterior Walls and Roofs, Protective Barrier.
- 6-202.17 Outdoor Food Vending Areas, Overhead Protection.
- 6-202.18 Outdoor Servicing Areas, Overhead Protection.
- 6-202.19 Outdoor Walking and Driving Surfaces, Graded to Drain.
- 6-202.110 Outdoor Refuse Areas, Curbed and Graded to Drain.
- 6-202.111 Private Homes and Living or Sleeping Quarters, Use Prohibition.
- 6-202.112 Living or Sleeping Quarters, Separation.

D. EQUIPMENT, UTENSILS, AND LINENS

Applicable Parts of Food Code Chapter 4

- 4-1** **Materials for Construction and Repair.**
- 4-2** **Design and Construction.**
- 4-3** **Numbers and Capacities.**
- 4-4** **Location and Installation.**
- 4-5** **Maintenance and Operation**
- 4-6** **Cleaning of Equipment and Utensils**
- 4-7** **Sanitization of Equipment and Utensils**
- 4-8** **Laundering**
- 4-9** **Protection of Clean Items**

OTHER REFERENCES

The following is a list of reference materials and resources that can be used when planning a food establishment or reviewing plans for a food establishment. These resources include additional formulas and explanations for the materials presented above.

- Baraban, Regina S. and Joseph F. Durocher, Successful Restaurant Design, New York, NY: Van Nostrand Reinhold.
- Barnes, James D., Manual of Recommended Practice for Ventilation in Food Service Establishments, National Environmental Health Association.
- Birchfield, John C., Design and Layout of Foodservice Facilities, New York, NY: Van Nostrand Reinhold, 1984.
- Food and Drug Administration, 2005 Food Code, National Technical Information Service, Springfield, VA.
- Kazarian, Edward A., Foodservice Facilities Planning, Third Edition, Copyright Van Nostrand-Reinhold, New York, 1989.
- NAFEM, National Association of Food Equipment Manufactures, Introduction to the Food Service Industry (Kitchen Design).
- North American Association of Food Equipment Manufactures, An Introduction to the Foodservice Industry, First Edition, 1996.
- Salvato, J. A., Environmental Engineering & Sanitation, Fourth Edition, Copyright John Wiley & Sons, Inc., United States and Canada, 1992.
- Scribeven, Carl and James Stevens, Food Equipment Facts, Troy, NY: Conceptual Design, 1980 or latest printing (or equal publication).
- Stipanuk, David M. and Roffman, Harold Hospitality Facilities Management and Design, American Hotel & Motel Association, Educational Institute, 1992.