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USACE / NAVFAC / AFCEA / NASA                      UFGS-11 46 00 (January 2008)  
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Preparing Activity:    USACE                      Superseding  
   UFGS-11 40 00.00 20 (April 2006)  
   UFGS 11 46 01.00 10 (April 2006)

## UNIFIED FACILITIES GUIDE SPECIFICATIONS

References are in agreement with UMRL dated January 2008

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### SECTION 11 46 00

#### FOOD DISPENSING EQUIPMENT 01/08

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NOTE: This guide specification covers the requirements for food dispensing equipment including, but not limited to; bar equipment, coffee urns and warmers, salad bars, desert tables, food warmers, soup kettles, tureens and heat lamps; pre-packaged food dispensers, dish, tableware; ice, ice cream, beverage, juice and water dispensers.

Coordinate this section and use in conjunction with the following sections:

11 05 40 - COMMON WORK RESULTS FOR FOODSERVICE EQUIPMENT  
11 06 40.13 - FOOD SERVICE EQUIPMENT SCHEDULE

Edit this guide specification for project specific requirements by adding, deleting, or revising text. For bracketed items, choose applicable items(s) or insert appropriate information.

Remove information and requirements not required in respective project, whether or not brackets are present.

Comments and suggestions on this guide specification are welcome and should be directed to the technical proponent of the specification. A listing of technical proponents, including their organization designation and telephone number, is on the Internet.

Recommended changes to a UFGS should be submitted as a Criteria Change Request (CCR).

This guide specification includes tailoring options for NAVFAC, and USACE. Selection or deselection of a tailoring option will include or exclude that option in the section, but editing the resulting section to fit the project is still required.

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PART 1 GENERAL

1.1 REFERENCES

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NOTE: This paragraph is used to list the publications cited in the text of the guide specification. The publications are referred to in the text by basic designation only and listed in this paragraph by organization, designation, date, and title.

Use the Reference Wizard's Check Reference feature when you add a RID outside of the Section's Reference Article to automatically place the reference in the Reference Article. Also use the Reference Wizard's Check Reference feature to update the issue dates.

References not used in the text will automatically be deleted from this section of the project specification when you choose to reconcile references in the publish print process.

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The publications listed below form a part of this specification to the extent referenced. The publications are referred to within the text by the basic designation only.

ASME INTERNATIONAL (ASME)

ASME A112.19.3 (2000: R 2004) Stainless Steel Plumbing Fixtures (Designed for Residential Use)

NSF INTERNATIONAL (NSF)

NSF 14 (2007) Plastics Piping System Components and Related Materials

NSF 169 (2007) Standard Specification for Special Purpose Food Equipment and Devices

NSF 18 (2007) Standard for Manual Food and Beverage Dispensing Equipment

NSF 2 (2007) Food Equipment

NSF 20 (2007) Standard for Bulk Milk Dispensing Machines

NSF 25 (2007) Standard for Vending Machines for Food and Beverage

NSF 36 (2007) Standard for Dinnerware

NSF 4 (2007) Standard for Commercial Cooking, Rethermalization and Powered Hot Food Holding and Transport Equipment

NSF 42 (2007) Standard Specification for Water Treatment Units - Aesthetic Effects

NSF 51 (2007) Food Equipment Materials

NSF 53 (2007) Standard Specification for Drinking Water Treatment Units - Health Effects

NSF 6 (2007) Dispensing Freezers

NSF Product Listing (2002) NSF Product Listings of Food Equipment and Related Products, Components, and Materials

U.S. ENVIRONMENTAL PROTECTION AGENCY (EPA)

Energy Star (1992; R 2006) Energy Star Energy Efficiency Labeling System

U.S. NATIONAL ARCHIVES AND RECORDS ADMINISTRATION (NARA)

29 CFR 1910-SUBPART D Walking - Working Surfaces

29 CFR 1910.144 Safety Color Code for Marking Physical Hazards

29 CFR 1910.145 Accident Prevention Signs and Tags

29 CFR 1910.306 Specific Purpose Equipment and Installations

1.2 GENERAL REQUIREMENTS

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NOTE: Indicate the configuration and layout for all food dispensing equipment, with elevations and equipment identified by number. Show "Food Service Equipment Schedule" on the drawings using the same identification numbers[ as indicated on the current US Army Quartermaster Center and School equipment schedule]. Ensure that all Contractor built-to-order items, per Food Service Equipment Schedule", are shown and coordinated with the specifications.

Designer must coordinate with other sections for final connection of equipment.

NOTE: Details of particular equipment and installations are provided on Naval Food Service Division drawings. Use these NAVFSD drawings as a basis for the project details. Contact NAVFSD at commercial telephone (717) 790-7580 or DSN 430-7580.

<u>Equipment Item</u>	<u>NAVFSSO Dwg. File</u>
1. Clean Gear Dresser	541
2. Clean Gear Table	553
3. Service Stand	851

#### 4. Steam Kettles and Water Metering 983

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Refer to section 11 05 40 - COMMON WORK RESULTS FOR FOODSERVICE EQUIPMENT for general requirements. Refer to section 11 06 40.13 for FOODSERVICE EQUIPMENT SCHEDULE.

##### 1.3 DESCRIPTION OF WORK

The work includes [furnishing and] [installing] [and modifying existing] food service dispensing equipment and related work. Verify all existing dimensions, contract drawings, product data and all related conditions prior to commencing rough-in work. Include coordination of delivery through existing finished opening and vertical handling limitations within the building. Advise the Contracting Officer of all discrepancies prior to ordering equipment. Submit Contractor's Field Verification Data prior to the preconstruction meeting.

Provide rough-in and connect utilities to equipment in accord with requirements specified in other sections of this specification and in accord with the physical dimensions, capacities, manufacturer's instructions, and other requirements of the equipment furnished.

##### 1.3.1 Design Requirements

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NOTE: On the drawings, show:

1. A 1:50 1/4 inch scale floor plan with layout of all food service equipment and Naval Equipment Symbols.
2. Food Service Equipment Schedule laid out in accord with NAVFSSOcurrent US Army Quartermaster Center and School equipment schedule specified design requirements, including Energy Star qualified model list.
3. Floor, wall, and ceiling penetrations.
4. Raised bases, retainer curbs, or depressions.
5. Recessed, grated floor drains required for equipment.
6. Disconnect switches.
7. Electrical chases and raceways and plumbing chases.
8. Utility connections to building water, sanitary, electrical, and other utility systems. Convenience outlets at point of use for plug-in equipment.
9. All Contractor built-to-order items, per Food Service Equipment Schedule, shown and coordinated with the specifications.

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Submit detail drawings as stated in section 11 05 40 - COMMON WORK RESULTS FOR FOOD SERVICE EQUIPMENT for food dispensing and related food processing equipment. Drawings must be 1:50 1/4 inch scale minimum.

#### 1.4 SUBMITTALS

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NOTE: Review Submittal Description (SD) definitions in Section 01 33 00 SUBMITTAL PROCEDURES and edit the following list to reflect only the submittals required for the project. Submittals should be kept to the minimum required for adequate quality control.

A "G" following a submittal item indicates that the submittal requires Government approval. Some submittals are already marked with a "G". Only delete an existing "G" if the submittal item is not complex and can be reviewed through the Contractor's Quality Control system. Only add a "G" if the submittal is sufficiently important or complex in context of the project.

For submittals requiring Government approval on Army projects, a code of up to three characters within the submittal tags may be used following the "G" designation to indicate the approving authority. Codes for Army projects using the Resident Management System (RMS) are: "AE" for Architect-Engineer; "DO" for District Office (Engineering Division or other organization in the District Office); "AO" for Area Office; "RO" for Resident Office; and "PO" for Project Office. Codes following the "G" typically are not used for Navy, Air Force, and NASA projects.

Choose the first bracketed item for Navy, Air Force and NASA projects, or choose the second bracketed item for Army projects.

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Government approval is required for submittals with a "G" designation; submittals not having a "G" designation are [for Contractor Quality Control approval.] [for information only. When used, a designation following the "G" designation identifies the office that will review the submittal for the Government.] Submit the following in accordance with Section 01 33 00 SUBMITTAL PROCEDURES:

##### SD-01 Preconstruction Submittals

Contractor's Field Verification Data[; G][; G, [\_\_\_\_]]

##### SD-02 Shop Drawings

Detail Drawings[; G][; G, [\_\_\_\_]]

Custom fabricated equipment[; G][; G, [\_\_\_\_]]

Installation Instructions and Diagrams[; G][; G, [\_\_\_\_]]

Detail drawings, as specified, including insulation and utility requirements.

#### SD-03 Product Data

food dispensing equipment

#### SD-05 Design Data

Manufacturer's descriptive and technical literature[; G][; G,  
[\_\_\_\_\_]]

#### SD-06 Test Reports

Manufacturer's Test Data[; G][; G, [\_\_\_\_\_]]  
Field Test Reports[; G][; G, [\_\_\_\_\_]]

#### SD-07 Certificates

NSF Certification[; G][; G, [\_\_\_\_\_]]  
UL Certification[; G][; G, [\_\_\_\_\_]]  
Energy Star Qualified

#### SD-08 Manufacturer's Instructions

Manufacturer's Instructions[; G][; G, [\_\_\_\_\_]] for shipping,  
handling, storage, installation, and start-up.

### 1.5 QUALITY ASSURANCE

Refer to section 11 05 40 - COMMON WORK RESULTS FOR FOOD SERVICE EQUIPMENT.

Equipment specified within this section must also conform to the applicable requirements of the following reference standards: NSF 14, NSF 169, NSF 18, NSF 2, NSF 20, NSF 25, NSF 36, NSF 4, NSF 42, NSF 51, NSF 53, NSF 6, NSF Product Listing, and Energy Star for powered equipment.

#### 1.5.1 Pre-Installation Conference

Thirty [\_\_\_\_\_] days prior to the commencement of work, notify the Contracting Officer that the following items are prepared and ready for review:

a. Shop Drawings, product data and installation instructions

- [
1. Detail Drawings
  2. Custom fabricated equipment  
Submit custom fabricated equipment drawings after approval of food service equipment drawings.]
  3. Installation Instructions and Diagrams

b. Product Data:

food dispensing equipment

c. Design Data

1. Manufacturer's descriptive and technical literature
2. Manufacturer's Test Data
3. Energy Star Qualified

d. Manufacturer's Instructions

1. [Manufacturer's Instructions](#) for shipping, handling, storage, installation, and start-up.

## PART 2 PRODUCTS

### 2.1 MATERIALS

Food dispensing equipment must conform to OSHA standards [29 CFR 1910.144](#), [29 CFR 1910.145](#), [29 CFR 1910.306](#), and related NSF and UL standards as specified herein and in section 11 05 40 - COMMON WORK RESULTS FOR FOOD SERVICE EQUIPMENT.

Floor areas adjacent to food dispensing equipment point of operation, and working surfaces must conform to [29 CFR 1910-SUBPART D](#)

Food dispensing equipment materials must conform to the requirements as stated in section [11 05 40](#) - COMMON WORK RESULTS FOR FOOD SERVICE EQUIPMENT.

### 2.2 LIST OF EQUIPMENT

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NOTE: Edit the master "Food Service Equipment Schedule" in section [11 06 40.13](#) carefully; retain items of equipment used for the project. The Equipment List is intended to be edited and included in the project Specification. List the information contained on the Equipment List on the Contract Drawings.  
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Submit detailed Food Service Equipment List as specified in section [11 06 40.13](#) - FOOD SERVICE EQUIPMENT SCHEDULE. Include submittal of [NSF Certification](#) and [UL Certification](#) for individual food dispensing components.

### 2.3 CONSTRUCTION OF FABRICATED EQUIPMENT

Construction and finish of fabricated equipment must conform to the specifications as stated in section [11 05 40](#) - COMMON WORK RESULTS FOR FOOD SERVICE EQUIPMENT.

### 2.4 FACTORY TESTS AND CERTIFICATIONS

Submit [\_\_\_\_\_] copies of all [Manufacturer's Test Data](#) and certifications, including [NSF Certification](#); [UL Certification](#), and Energy Star Qualified data to the Contracting Officer prior to the commencement of any installation work.

### [2.5 WATER FILTER

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NOTE: Water filters will be used only where water taste and quality are poor. Delete if adequate water treatment is provided for the entire facility.  
  
Designer will indicate the location of the water filters on the drawings. Water filters will be located in an accessible location. Water filters



may be piped in parallel to obtain greater capacity.

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Provide a cartridge-type water filter on water supply lines to equipment as shown.

#### 2.5.1 Cartridge Filter

The filter, conforming to NSF 42, NSF 51, and NSF 53, must remove dirt and off-taste items, such as chlorine and other medicinal items, and also reduce lime-scale problems when required by water conditions. Provide filter consisting of a stainless steel pressure vessel, which includes shell top, bracket check valve, fittings and accessories, and plastic disposable cartridge. Provide precoat filtration type cartridge in which a coating of particles is applied on a suitable fabric support. The filter must contain not less than 90 percent activated carbon and 10 percent inert binders, and remove particles 2 microns and larger. Install the filter with [an inlet valve] [a three-position valve header], activation faucet, and by-pass valve which will be normally closed. In addition, provide an indication gauge which indicates when cartridge requires replacement.

#### 2.5.2 Working Pressure and Flow Rate

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NOTE: Designer will select filter size with flow rate to accommodate equipment being filtered.

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Install the filter as recommended by the manufacturer. Filter must be suitable for 860 kPa 125 psig maximum working pressure at 38 degrees C 100 degrees F water inlet temperature. Each filter must have a nominal flow rate of [11.34] [5.67] [3.78] L/minute [180] [90] [60] gph. Provide [1] [2] [\_\_\_\_\_] additional replacement cartridge[s] for each filter.

### ] 2.6 HAND SINKS

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NOTE: Handwashing sinks must be provided behind each serving line. Each handwashing sink must be provided with soap dispensers and either towel dispensers or electric hand dryers specified in Section 10 28 13, TOILET ACCESSORIES.

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#### 2.6.1 Sink Body

Provide sizes and mountings as indicated; provide in accord with requirements of NSF 2. Provide in accord with ASME A112.19.3. Fabricate of 1.8 mm thick 14 gage stainless steel. Round vertical and horizontal corners with a radius of not less than 19 mm 0.75 inch.

#### 2.6.2 Mounting

##### 2.6.2.1 Leg Mounting

Sink legs to be as specified for counters, except weld closed gussets to support channels.

#### 2.6.2.2 Wall Mounting

Provide stainless steel mounting brackets.

#### 2.6.2.3 Counter Mounting

Provide sink body [set in counter] [integral with counter].

#### 2.6.3 Faucets and Drain

Provide [splashback] [counter top] [and] [ledge] mounted [as indicated].  
Provide gooseneck faucet spout , aerator, with two valves. Provide nozzle with anti-splash device without hose thread. Provide cleanout at location indicated on drawings.

### PART 3 EXECUTION

#### 3.1 INSTALLATION

Refer to section 11 05 40 - COMMON WORK RESULTS FOR FOOD SERVICE EQUIPMENT for detailed installation procedures, operation and maintenance manual requirements, training and project closeout procedures. Include all food service dispensing equipment [Field Test Reports](#).

-- End of Section --