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USACE / NAVFAC / AFCEC / NASA	**UFGS-11 46 00 (January 2008)**

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 2021

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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.

Adhere to UFC 1-300-02 Unified Facilities Guide Specifications (UFGS) Format Standard when editing this guide specification or preparing new project specification sections. Edit this guide specification for project specific requirements by adding, deleting, or revising text. For bracketed items, choose applicable item(s) or insert appropriate information.

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

Comments, suggestions and recommended changes for this guide specification are welcome and should be submitted as a Criteria Change Request (CCR).

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PART 1 GENERAL

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NOTE: This guide specification includes, but is 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.

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 accordance 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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1.1 GENERAL RELATED SECTIONS AND STANDARDS

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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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Refer to section 11 05 40 COMMON WORK RESULTS FOR FOODSERVICE EQUIPMENT for general requirements, and Section 11 06 40.13 FOOD SERVICE EQUIPMENT SCHEDULE when preparing the Food Service Equipment List.

Floor areas adjacent to food dispensing equipment point of operation, and working surfaces shall conform to 29 CFR 1910-SUBPART D

1.2 REFERENCES

****

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 Reference Identifier (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.

AMERICAN SOCIETY OF MECHANICAL ENGINEERS (ASME)

ASME A112.19.3/CSA B45.4	(2017; Errata 2017) Stainless Steel Plumbing Fixtures

NSF INTERNATIONAL (NSF)

NSF 53A	(2012) Drinking Water Treatment Units - Health Effects
NSF/ANSI 2	(2019) Food Equipment
NSF/ANSI 4	(2019) Commercial Cooking, Rethermalization and Powered Hot Food Holding and Transportation Equipment
NSF/ANSI 6	(2018) Dispensing Freezers
NSF/ANSI 14	(2019) Plastics Piping System Components and Related Materials
NSF/ANSI 18	(2016) Manual Food and Beverage Dispensing Equipment
NSF/ANSI 20	(2020) Commercial Bulk Milk Dispensing Equipment
NSF/ANSI 25	(2017) Vending Machines for Food and Beverages
NSF/ANSI 36	(2012) Dinnerware
NSF/ANSI 42	(2019) Drinking Water Treatment Units - Aesthetic Effects
NSF/ANSI 51	(2012) Food Equipment Materials
NSF/ANSI 169	(2012)Special Purpose Food Equipment and Devices

U.S. DEPARTMENT OF ENERGY (DOE)

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

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	Specifications for Accident Prevention Signs and Tags
29 CFR 1910.306	Specific Purpose Equipment and Installations

1.3 SUMMARY

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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.

Equipment Item	NAVFSSO Dwg. File
Clean Gear Dresser	541
Clean Gear Table	553
Service Stand	851
Steam Kettles and Water Metering	983

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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 accordance with

requirements specified in other sections of this specification and in accordance with the physical dimensions, capacities, manufacturer's instructions, and other requirements of the equipment furnished.

1.4 PREINSTALLATION MEETING

[Thirty] [_____] days prior to the commencement of work, notify the Contracting Officer that the following items are prepared and ready for review at the Pre-Installation Meetings listed here as shown in the Submittals paragraph.

1.4.1 Detail Drawings

Submit Detail Drawings for food dispensing and related food processing equipment, as specified, including insulation and utility requirements, product data and installation instructions. Submit Custom fabricated equipment drawings after approval of food service equipment drawings. Submit Installation Instructions and Diagrams and food dispensing equipment. Provide Drawings at 1:50 1/4 inch scale minimum.

1.4.2 Design Data

Submit detailed Food Service Equipment List reflecting requirements in Section 11 06 40.13 FOOD SERVICE EQUIPMENT SCHEDULE. Submit Design Data consisting of Manufacturer's literature, Manufacturer's Test Data, and Energy Star Qualified for individual food dispensing components

1.4.3 Manufacturer's Instructions

Submit Manufacturer's Instructions for shipping, handling, storage, installation, and start-up

1.4.4 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.

1.5 SUBMITTALS

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NOTE: Review Submittal Description (SD) definitions in Section 01 33 00 SUBMITTAL PROCEDURES and edit the following list, and corresponding submittal items in the text, to reflect only the submittals required for the project. The Guide Specification technical editors have classified those items that require Government approval, due to their complexity or criticality, with a "G." Generally, other submittal items can be reviewed by the Contractor's Quality Control System. Only add a “G” to an item, if the submittal is sufficiently important or complex in context of the project.

For Army projects, fill in the empty brackets following the "G" classification, with a code of up to three characters 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.

The "S" classification indicates submittals required as proof of compliance for sustainability Guiding Principles Validation or Third Party Certification and as described in Section 01 33 00 SUBMITTAL PROCEDURES.

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" or "S" classification. Submittals not having a "G" or "S" classification are [for Contractor Quality Control approval.][for information only. When used, a code following the "G" classification 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[, [_____]]

SD-02 Shop Drawings

Detail Drawings; G[, [_____]]
Custom Fabricated Equipment; G[, [_____]]
Installation Instructions and Diagrams; G[, [_____]]

SD-03 Product Data

Food Service Equipment List
Food Dispensing Equipment

SD-05 Design Data

Manufacturer's Literature; G[, [_____]]

SD-06 Test Reports

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

SD-07 Certificates

NSF Certification; G[, [_____]]
UL Certification; G[, [_____]]
Energy Star Qualified

SD-08 Manufacturer's Instructions

Manufacturer's Instructions; G[, [_____]]

PART 2 PRODUCTS

2.1 EQUIPMENT

Provide equipment conforming to the applicable requirements of the following reference standards: NSF/ANSI 14, NSF/ANSI 169, NSF/ANSI 18, NSF/ANSI 2, NSF/ANSI 20, NSF/ANSI 25, NSF/ANSI 36, NSF/ANSI 4, NSF/ANSI 42, NSF/ANSI 51, NSF 53A, NSF/ANSI 6, and Energy Star for powered equipment. Food dispensing equipment shall also conform to OSHA standards 29 CFR 1910.144, 29 CFR 1910.145, 29 CFR 1910.306, and related NSF and UL standards.

[2.2 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.

2.2.1 Cartridge Filter

The filter, conforming to NSF/ANSI 42, NSF/ANSI 51, and NSF 53A, shall 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 shall 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.

2.2.2 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. Provide filter suitable for 860 kPa 125 psig maximum working pressure at 38 degrees C 100 degrees F water inlet temperature. Each filter shall 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.

]2.3 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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2.3.1 Sink Body

Provide sizes and mountings as indicated; provide in accordance with requirements of NSF/ANSI 2. Provide in accordance with ASME A112.19.3/CSA B45.4. 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.

2.3.2 Mounting

2.3.2.1 Leg Mounting

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

2.3.2.2 Wall Mounting

Provide stainless steel mounting brackets.

2.3.2.3 Counter Mounting

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

2.3.3 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 in the Field Test Reports.

-- End of Section --