
USACE / NAVFAC / AFCEA / 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 July 2009

SECTION TABLE OF CONTENTS

DIVISION 11 - EQUIPMENT

SECTION 11 46 00

FOOD DISPENSING EQUIPMENT

01/08

PART 1 GENERAL

- 1.1 GENERAL RELATED SECTIONS AND STANDARDS
- 1.2 REFERENCES
- 1.3 SYSTEM DESCRIPTION
- 1.4 SUBMITTALS
- 1.5 QUALITY ASSURANCE

PART 2 PRODUCTS

- 2.1 WATER FILTER
 - 2.1.1 Cartridge Filter
 - 2.1.2 Working Pressure and Flow Rate
- 2.2 HAND SINKS
 - 2.2.1 Sink Body
 - 2.2.2 Mounting
 - 2.2.2.1 Leg Mounting
 - 2.2.2.2 Wall Mounting
 - 2.2.2.3 Counter Mounting
 - 2.2.3 Faucets and Drain

PART 3 EXECUTION

- 3.1 INSTALLATION

-- End of Section Table of Contents --

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SECTION 11 46 00

FOOD DISPENSING EQUIPMENT 01/08

NOTE: This guide specification covers the requirements for food dispensing equipment.

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.

PART 1 GENERAL

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.

1.1 GENERAL RELATED SECTIONS AND STANDARDS

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.

- a. Refer to section 11 05 40 COMMON WORK RESULTS FOR FOODSERVICE EQUIPMENT for general requirements. Provide detailed Food Service Equipment Schedule as specified in Section 11 06 40.13 FOOD SERVICE EQUIPMENT SCHEDULE.
- b. Food dispensing equipment shall conform to OSHA standards 29 CFR 1910.144, 29 CFR 1910.145, 29 CFR 1910.306, and related NSF and UL standards.
- c. Floor areas adjacent to food dispensing equipment point of operation, and working surfaces shall conform to 29 CFR 1910-SUBPART D
- d. Submit detailed Food Service Equipment List. Include submittal of NSF Certification and UL Certification for individual food dispensing components.

e. Construction and finish of fabricated equipment shall conform to the specifications as stated in section 11 05 40.

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 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.

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 (2008) Stainless Steel Plumbing Fixtures
(Designed for Residential Use)

NSF INTERNATIONAL (NSF)

NSF 14 (2008) 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 (2008) 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 (2007a; Addendum 2008) Standard Specification for Water Treatment Units - Aesthetic Effects
- NSF 51 (2009) Food Equipment Materials
- NSF 53 (2007a; Addenda 2008) Standard Specification for Drinking Water Treatment Units - Health Effects
- NSF 6 (2009) Dispensing Freezers

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

1.3 SYSTEM DESCRIPTION

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

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.

- a. 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.
- b. Submit detail drawings for food dispensing and related food processing equipment. Provide Drawings at 1:50 1/4 inch scale minimum.

1.4 SUBMITTALS

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.

Government approval is required for submittals with a "G" designation; submittals not having a "G" designation are for [Contractor Quality Control approval.] [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 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, [_____]]

Manufacturer' instructions for shipping, handling, storage, installation, and start-up.

1.5 QUALITY ASSURANCE

Provide equipment conforming 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, and Energy Star for powered equipment.

a. [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.

b. Detail Drawings, 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

- c. Submit Design Data consisting of [Manufacturer's literature](#), [Manufacturer's Test Data](#), and [Energy Star Qualified](#)
- d. Submit [Manufacturer's Instructions](#) for shipping, handling, storage, installation, and start-up.
- e. 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.

PART 2 PRODUCTS

[2.1 WATER FILTER

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.

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

2.1.1 Cartridge Filter

The filter, conforming to [NSF 42](#), [NSF 51](#), and [NSF 53](#), 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.

2.1.2 Working Pressure and Flow Rate

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

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.

]2.2 HAND SINKS

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.

2.2.1 Sink Body

Provide sizes and mountings as indicated; provide in accordance with requirements of NSF 2. Provide in accordance 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.

2.2.2 Mounting

2.2.2.1 Leg Mounting

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

2.2.2.2 Wall Mounting

Provide stainless steel mounting brackets.

2.2.2.3 Counter Mounting

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

2.2.3 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 --