
USACE / NAVFAC / AFCEA / NASA UFGS-12 35 20 (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 2008

SECTION TABLE OF CONTENTS

DIVISION 12 - FURNISHINGS

SECTION 12 35 20

FOODSERVICE CASEWORK, COUNTERTOPS, AND ACCESSORIES

01/08

PART 1 GENERAL

- 1.1 REFERENCES
- 1.2 DEFINITIONS
- 1.3 GENERAL REQUIREMENTS
- 1.4 DESCRIPTION OF WORK
 - 1.4.1 Design Requirements
- 1.5 SUBMITTALS
- 1.6 Pre-Installation Conference

PART 2 PRODUCTS

- 2.1 CAFETERIA; BUFFET; HOT AND COLD COUNTERS
 - 2.1.1 Counter Edges and Backsplashes
 - 2.1.1.1 Counter Edges
 - 2.1.1.2 Counter Backsplash
 - 2.1.2 Counter Bases
 - 2.1.2.1 Closed Counter Bases
 - 2.1.2.2 Open Counter Bases
 - 2.1.3 Legs
 - 2.1.4 Pedestal Bases
 - 2.1.5 Feet
 - 2.1.6 Casters
 - 2.1.7 Open Base Shelves
 - 2.1.8 Closed Base Interior Shelves
 - 2.1.9 Shelf Pan Slides
 - 2.1.10 Drawers
 - 2.1.11 Doors
- 2.2 TRAY SLIDE
 - 2.2.1 Solid Type
 - 2.2.2 Tube Type
 - 2.2.3 Support Brackets
 - 2.2.4 Protector Shelf
 - 2.2.5 Shelf Frame
 - 2.2.6 Shelf Frame Support

- 2.3 PROTECTOR GLASS
- 2.4 Food Shield
- 2.5 DRIP GUTTER
- 2.6 COLORS

PART 3 EXECUTION

- 3.1 INSTALLATION,
- 3.2 MANUFACTURER'S FIELD SERVICES

-- End of Section Table of Contents --

USACE / NAVFAC / AFCEA / NASA UFGS-12 35 20 (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 2008

SECTION 12 35 20

FOODSERVICE CASEWORK, COUNTERTOPS, AND ACCESSORIES 01/08

NOTE: This guide specification covers the requirements for foodservice casework, countertops, slide rails, food shields, pass through shelves, and other accessories..

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

11 05 40 - COMMON WORK RESULTS FOR FOODSERVICE EQUIPMENT
11 06 40.13 - FOODSERVICE 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.

PART 1 GENERAL

1.1 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.

NSF INTERNATIONAL (NSF)

NSF 2	(2007) Food Equipment
NSF 35	(2007) High Pressure Decorative Laminates for Surfacing Food Service Equipment
NSF Product Listing	(2002) NSF Product Listings of Food Equipment and Related Products, Components, and Materials

U.S. DEPARTMENT OF DEFENSE (DOD)

DOD 4000.25-1-M	(2006; Notice 1) Requisitioning and Issue Procedures
-----------------	--

1.2 DEFINITIONS

Refer to Section 11 06 40.13 - FOODSERVICE EQUIPMENT SCHEDULE.

1.3 GENERAL REQUIREMENTS

NOTE: Indicate the configuration and layout for all casework, countertops, slide rails, sneeze guards, and other accessories, with casework and counter details, and each equipment item identified by number. Show "FoodService Equipment Schedule" on the drawings using the same identification numbers as indicated in Section 11 06 40.13 - FOODSERVICE

EQUIPMENT SCHEDULE[, as indicated on the current US Army Quartermaster Center and School equipment schedule]. Ensure that all Contractor built-to-order items, per 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.

Provide detailed Equipment Schedule conforming to DOD 4000.25-1-M.

General requirements, including all mechanical, electrical, health and safety, must be as specified in Section 11 05 40 - COMMON WORK RESULTS FOR FOODSERVICE EQUIPMENT.

1.4 DESCRIPTION OF WORK

The work includes [furnishing][and][installing] [and modifying existing] [casework][countertops][slide rails][_____] for food service 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 Section 11 05 40 - COMMON WORK RESULTS FOR FOODSERVICE EQUIPMENT and in accord with the physical dimensions, capacities and other requirements of the equipment furnished.

1.4.1 Design Requirements

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. Counter Front With Tray Slide	857

NOTE: On the drawings, show:

1. A 1:50 1/4 inch scale floor plan with layout of

all food service equipment, casework, counters and rails using 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. Wall and ceiling penetrations.

4. Raised bases, retainer curbs, or depressions.

5. Recessed, grated floor drains required for equipment.

6. Utility connections to building water, sanitary, electrical, and other utility systems coordinated with all casework. Convenience outlets at point of use for plug-in equipment.

7. All Contractor built-to-order items, per equipment schedule, shown and coordinated with the specifications.

8. Electrical chases and raceways and plumbing chases.

Submit , within [60][_____] days of award of contract, coordinated detail drawings for [casework][countertops][slide rails][_____]. Drawings must be 1:50 1/4 inch scale minimum. On layout drawing, use Naval Equipment Symbols designated herein.

Refer to Section 11 05 40 - COMMON WORK RESULTS FOR FOODSERVICE EQUIPMENT for complete detail drawing requirements. Equipment must conform to NSF Product Listing standards.

1.5 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.] [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 for food service casework, countertops, and rails[; G][; G, [____]]

Food Service Equipment Schedule[; G][; G, [____]]

Submit in the same format as the equipment schedule on the drawings.

Casework coordinated food service equipment utilities[; G][; G, [____]]

Casework coordination with custom fabricated equipment[; G][; G, [____]]

Installation Instructions and Diagrams[; G][; G, [____]]

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

SD-04 Samples

Exterior panel finish material[; G][; G, [____]]

Interior panel finish material[; G][; G, [____]]

Sample Warranty[; G][; G, [____]]

SD-08 Manufacturer's Instructions

Manufacturer's Instructions[; G][; G, [____]] for shipping, handling, storage, installation.

1.6 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. Preconstruction Submittals:
 - 1. Contractor's Field Verification Data
- b. Shop Drawings, product data and installation instructions
 - 1. Detail Drawings
 - 2. FoodService Equipment Schedule
 - 3. Foodservice equipment utilities
 - 4. Custom fabricated equipment
 - 5. Installation Instructions and Diagrams
- c. Samples
 - 1. Exterior panel finish material
 - 2. Interior panel finish material
 - 3. Sample Warranty
- d. Manufacturer's Instructions
 - 1. Manufacturer's Instructions for shipping, handling, storage, installation, and start-up.

PART 2 PRODUCTS

2.1 CAFETERIA; BUFFET; HOT AND COLD COUNTERS

2.1.1 Counter Edges and Backsplashes

2.1.1.1 Counter Edges

Provide counter edges , as required by design, of the following types:

- a. Turned Down: Fifty mmTwo inch at 90 degrees with 19 mm 3/4 inch tight hem at bottom. Round free corners with 19 mm 3/4 inch radius.
- b. Marine Edge: Turned up [13 mm 1/2 inch] [and] [38 mm 1-1/2 inch] at 45-degree angle and turned down 50 mm 2 inch at 135 degree angle with 19 mm 3/4 inch tight hem at bottom.
- c. Rolled Rim: Coved up 75 mm 3 inch with 38 mm 1-1/2 inch wide rim rolled 180 degrees and turned down to table top; hem edges, and bullnose corners.

2.1.1.2 Counter Backsplash

Provide counter backsplash of the following types:

- a. Coved up [250] [_____] mm [10] [_____] inch and sloped back 38 mm 1-1/2 inch at the top on a 45-degree angle; 63 mm 2-1/2 inch slope where piping occurs. Turned down 25 mm 1 inch at 135 degrees at the rear of the splash with the ends closed to the bottom of the top turn down. Secure splash turn down to wall with 100 mm 4 inch long, 1.9 mm (14 gauge) 14 gauge stainless steel "zee" clips anchored to wall, 900 mm 36 inches on center.
- b. Turned up [150] [_____] mm [6] [_____] inch at 90 degrees on a 16 mm 5/8 inch radius with edge turned back[25 mm 1 inch][50 mm 2

inch] at 90-degree angle with 25 mm 1 inch turn down at 90 degrees at rear of splash with the ends closed to the bottom of the top turn down. Secure splash turn down to wall with 100 mm 4 inch long, 1.9 mm (14 gauge) 14 gauge stainless steel "zee" clips anchored to wall, 900 mm 36 inch on center.

2.1.1.2 Counter Bases

NOTE: Indicate the type desired for the individual pieces of equipment or specify which is to be used. Alternatively, both types may be specified as a Contractor's option.

2.1.1.2.1 Closed Counter Bases

Fabricate with 38 by 38 by 3 mm 1.5 by 1.5 by 0.125 inch galvanized steel angles with all corners mitered, welded and ground smooth. Provide horizontal and vertical angles at 600 mm 2 feet on-center. Fabricate closure panels of 1.2 mm thick 18 gage stainless steel or 1.2 m thick 18 gage galvanized steel with laminated plastic material in accord with NSF 35. Fabricate joint trim of 50 mm 2 inch wide, 1.8 mm thick 14 gage stainless steel; attach with concealed bolts or screws. For enclosed bases provide double-wall at ends and partitions. Weld support legs to body support angles. [Use closed-type bases on [____].]

2.1.1.2.2 Open Counter Bases

Fabricate and crossbrace with 40 mm 1.625 inch outside diameter, 1.5 mm thick 16 gage stainless steel tubing. Weld crossbraces to legs to reinforce each leg. Weld legs to gussets. Make gussets of stainless steel, fully enclosed, a minimum of 75 mm 3 inches in diameter at top, reinforced with bushing, and continuously welded to support channels located under the counter top. [Use open-type bases on [____].]

2.1.1.3 Legs

Fabricate of 1.5 mm thick 16 gage, 40 mm 1.625 inch outside diameter stainless steel tubing. Continuously weld to angles on closed bases and gussets on open bases. Finish bottom of legs smoothly. Overlap stem of feet to provide a sanitary fitting.

2.1.1.4 Pedestal Bases

Fabricate of 2.5 mm thick 12 gage stainless steel for serving line counters. Make pedestal 200 mm high, 250 mm wide, and 600 mm long 8 inches high, 10 inches wide, and 24 inches long with top and bottom edges flanged 38 mm 1.5 inch to the inside at 90 degrees. Provide holes in both flanges for 13 mm 0.5 inch lag screws. Locate utility stub-ups inside pedestal and run to designated equipment.

2.1.1.5 Feet

Die-stamped stainless steel, bullet shaped, fully enclosed, with slightly rounded bottom. Fit top of feet with male threaded stem to mate with end of legs and provide for a 25 mm 1 inch adjustment without threads being exposed.

2.1.1.6 Casters

Provide heavy-duty, ball bearing disc wheel, with replaceable grease-proof rubber or neoprene tires and brakes. Tires must be minimum 125 mm 5 inch diameter and minimum 25 mm one inch width of tread 90 kilograms 200 pounds capacity per caster. Provide pressure-type grease fittings, threaded guards, and plated finish.

2.1.1.7 Open Base Shelves

Fabricate of 1.5 mm thick 16 gage stainless steel with all edges turned down 50 mm 2 inches at 90 degrees on a 6 mm 0.25 inch radius with bottom edges turned back 13 mm 0.5 inch at 45 degrees. Notch corners 90 degrees, and intersections 180 degrees. Weld to legs at corners and intersections. Locate legs maximum 1200 mm 48 inches apart. Shelving to be removable without use of tools.

2.1.1.8 Closed Base Interior Shelves

Fabricate of 1.5 mm thick 16 gage stainless steel. Turn back and side edges up 50 mm 2 inches at 90 degrees on a 6 mm 0.25 inch radius. Turn front edge down 50 mm 2 inches at 90 degrees on a 6 mm 0.25 inch radius and back 6 mm 0.25 inch at 45 degrees. Reinforce shelves longer than 750 mm 30 inches with 38 by 38 by 3 mm 1.5 by 1.5 by 0.125 inch galvanized steel angles under front edge and horizontal center of the shelf. Shelving to be removable without use of tools.

2.1.1.9 Shelf Pan Slides

Provide 1.8 mm thick 14 gage stainless steel, 38 by 38 by 3 mm 1.5 by 1.5 by 0.125 inch angles, with front and back corners rounded and finished smooth. Set angles at 50 mm 2 inches on-center for 450 by 660 mm 18 by 26 inch bun pans and 300 by 500 mm 12 by 20 inch serving pans.

2.1.1.10 Drawers

Provide die-stamped 1.2 mm thick 18 gage stainless steel, 500 by 500 by 125 mm 20 by 20 by 5 inch deep. Drawer body must be easily removed for cleaning with top edges flanged out 13 mm 0.5 inch. Round interior horizontal corners on a 25 mm one inch radius and interior vertical corners on a 50 mm 2 inch radius. Fabricate supporting frame of 1.8 mm thick 14 gage stainless steel channel. Weld drawer face to frame. Die-stamp drawer face with raised border for rigidity. Die-form an integral open sanitary handle into face. Mount drawer slides with ball bearing nylon or stainless steel rollers on channel frame. Provide with slides and frame which allow for full opening of drawer, and are reinforced to support a weight of 22.5 kilograms 50 pounds when fully extended. Provide stops for each drawer at fully open position. Enclose drawers on open-base tables in 1.2 mm thick 18 gage stainless steel housing.

2.1.1.11 Doors

Provide stainless steel double-cased doors, 1.2 mm thick 18 gage outer pan with corners welded, ground smooth and polished. 0.9 mm thick 20 gage inner pan fitted tightly into outer pan with core of sound deadening material. Tack-weld outer and inner pans together with solder-filled seam. Provide doors approximately 20 mm 0.75 inch thick and fitted with flush-recessed, stainless steel door pulls. Mount doors on stainless steel piano or concealed hinges.

2.2 TRAY SLIDE

NOTE: Install tray slides for Enlisted General
Messes as an integral fabrication of serving line
counterfront; NAVFSSO drawing 11103-857 and as
specified in the applicable Standard for other
equipment.

[Solid] [Tube] type, 300 mm 12 inch wide; mounted 865 mm 34 inches above floor. Extend to full length of supporting counter.

[2.2.1 Solid Type

Provide solid type constructed with 1.8 mm thick 14 gage stainless steel with front and back edges rolled 45 mm 1.75 inch at 180 degrees. Top edge of roll must be 10 mm 0.375 inch above flat surface of slide. Provide three inverted "V" forms, approximately 10 mm 0.375 inch high, in flat surface of slide as running surface for trays. Close ends of slide.

] 2.2.2 Tube Type

Provide four 25 mm one inch diameter 1.5 mm thick 16 gage stainless steel tubes with supporting hardware. Close both ends of each tube.

] 2.2.3 Support Brackets

Stainless steel or chromium plated. Secure to counter with stainless steel bolts. Space 1200 mm 4 feet on-center. Provide [stationary] [fold-down] type extending under full width of tray slide.

2.2.4 Protector Shelf

Install and locate protector shelf as indicated on the drawings. Fabricate top of 1.8 mm thick 14 gage stainless steel with all edges rolled down 180 degrees for 38 mm 1.5 inches with bullnosed corners. Shelf to be minimum 250 mm 10 inches wide.

2.2.5 Shelf Frame

Provide 25 by 25 mm one by one inch, 1.5 mm thick 16 gage stainless steel square tubing under all edges of shelf at 750 mm 30 inches on center.

2.2.6 Shelf Frame Support

Form front uprights of 30 by 30 mm 1.25 by 1.25 inch, 1.5 mm thick 16 gage stainless steel tubing. Form back uprights of 25 by 25 mm one by one inch, 1.5 mm thick 16 gage stainless steel square tubing. Provide a horizontal brace, 25 mm one inch above bottom of front uprights. Space front uprights 750 mm 30 inches apart or less, fit with die-formed flanges to be attached to counter top from underside with bolts, and slope 10 degrees to rear.

2.3 PROTECTOR GLASS

6 mm 0.25 inch thick, transparent [clear tempered plate glass] [heat and mar resistant clear acrylic]. Frame edges with 13 mm 0.5 inch, 0.09 mm thick 20 gage stainless steel channel. [Glass] [Acrylic] to be easily replaced in

the event of [breakage][damage]. Provide matching [glass][acrylic] end panels. Round all free corner on 19mm 3/4 inch radius.

2.4 Food Shield

Provide self-serve food shield conforming to NSF 2 constructed of 1.6 mm (16 gauge) 16 gauge stainless steel, with a minimum width of at least 300 mm 12 inch with a full 25 mm 1 inch skirt with 19 mm 3/4 inch tight hem on all sides. Support on stainless steel uprights[at front][as indicated on drawings]. Round all free corners with 19 mm 3/4 inch radius.

- a. Provide adjustable louver brackets below the top fitted with 6 mm 1/4 inch polished, [tempered plate glass][heat and mar-resistant clear acrylic] framed in an all welded stainless steel channel and installed with a 175 mm 7 inch clearance above counter top.
- b. Install fluorescent light fixtures the full length of the none heated undershelf displays, with translucent protection guard. Conceal display light wiring in a corner post. Prewire fixtures to a single recess-mounted master switch per serving shelf.

2.5 DRIP GUTTER

Provide drip gutter as integral part of counter tops, where indicated. Provide a 25 mm one inch brass drain tube centered in bottom of gutter with bottom pitched to drain. Make drip gutter 100 mm wide, 25 mm deep 4 inches wide, one inch deep, and length indicated. Provide removable, stainless steel, die-stamped, anti-splash strainer with finger hole.

[2.6 COLORS

Refer to Section 09 06 90 - COLOR SCHEDULE.

]PART 3 EXECUTION

3.1 INSTALLATION,

Install as specified in Section 11 05 40 - COMMON WORK RESULTS FOR FOOD SERVICE EQUIPMENT.

3.2 MANUFACTURER'S FIELD SERVICES

As specified in Section 11 05 40 - COMMON WORK RESULTS FOR FOOD SERVICE EQUIPMENT.

-- End of Section --