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UNIFIED FACILITIES GUIDE SPECIFICATIONS

References are in agreement with UMRL dated July 2023
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SECTION 12 35 39

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08/17, CHG 1: 08/18

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SECTION 12 35 39

COMMERCIAL KITCHEN CASEWORK
08/17, CHG 1: 08/18

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

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).

PART 1 GENERAL

NOTE: 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

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.

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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.

NSF INTERNATIONAL (NSF)

NSF/ANSI 2	(2021) Food Equipment
NSF/ANSI 35	(2020) High Pressure Decorative Laminates for Surfacing Food Service Equipment

U.S. DEPARTMENT OF DEFENSE (DOD)

DOD 4000.25-1-M	(2006) MILSTRIP - Military Standard Requisitioning and Issue Procedures

1.2 DEFINITIONS

Refer to Section 11 06 40.13 FOODSERVICE EQUIPMENT SCHEDULE.

1.3 SUMMARY

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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.

Coordinate with other sections for final connection of equipment.

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 Supported Command to assist with identification of kitchen equipment necessary to meet mission requirements.

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General requirements, including all mechanical, electrical, health and safety, are specified in Section 11 05 40 COMMON WORK RESULTS FOR FOODSERVICE EQUIPMENT. Provide detailed equipment Schedule conforming to DOD 4000.25-1-M.

1.3.1 General Requirements

The work includes [furnishing] [and] [installing] [and modifying existing] [casework] [countertops] [slide rails] [_____] for foodservice 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 Field Verification Data prior to the preconstruction meeting. Provide rough-in and connect utilities to equipment in accordance with requirements specified in Section 11 05 40 COMMON WORK RESULTS FOR FOODSERVICE EQUIPMENT and with the physical dimensions, capacities and other requirements of the equipment furnished. Submit Detail Drawings for foodservice casework, countertops, and rails in the same format as the equipment schedule on the drawings.

1.3.2 Foodservice Configuration

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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 Supported Command to assist with identification of kitchen equipment necessary to meet mission requirements.

Equipment Item	NAVFSSO Dwg. File
Clean Gear Dresser	541
Clean Gear Table	553
Service Stand	851
Counter Front With Tray Slide	857

On the drawings, show:

1. A 1:50 1/4 inch scale floor plan with layout of all foodservice equipment, casework, counters and rails using Naval Equipment Symbols.

2. A food Service Equipment Schedule laid out in accordance with current CNIC's Galleys Department or US Army Quartermaster Center and School equipment

schedules, and specified design requirements.

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.

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Submit coordinated detail drawings for [casework] [countertops] [slide rails] [_____]. 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. Follow all the applicable NSF International standards for equipment. Submit within [60] [_____] days of award of contract. Drawings scale: 1:50 (1/4 inch) 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, 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

Field Verification Data; G[, [_____]]

SD-02 Shop Drawings

Foodservice Configuration; G[, [_____]]

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

SD-03 Product Data

Recycled Content for steel components; S

SD-04 Samples

Closure Panels; G[, [_____]]

1.5 PRE-INSTALLATION MEETINGS

Thirty [_____] days prior to the commencement of work, notify the Contracting Officer that the submittal items listed above are prepared and ready for review.

1.6 DELIVERY, STORAGE AND HANDLING

Submit and comply with manufacturer's instructions for shipping, handling, storage, installation and start-up.

PART 2 PRODUCTS

2.1 STEEL COMPONENTS

Provide Steel Components with a minimum of 60 percent recycled content. Provide data identifying percentage of recycled content for steel components.

2.2 CAFETERIA; BUFFET; HOT AND COLD COUNTERS

2.2.1 Counter Edges and Backsplashes

2.2.1.1 Counter Edges

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

2.2.1.1.1 Turned Down

50 mm 2 inch at 90 degrees with 19 mm 3/4 inch tight hem at bottom. Round free corners with 19 mm 3/4 inch radius.

2.2.1.1.2 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.

2.2.1.1.3 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.

2.2.1.2 Counter Backsplash

Provide counter backsplash of the following types:

2.2.1.2.1 Coved Up

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 stainless steel "zee" clips anchored to wall, 900 mm 36 inches on center.

2.2.1.2.2 Turned Up

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 stainless steel "zee" clips anchored to wall, 900 mm 36 inch on center.

2.2.2 Counter Bases

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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.

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2.2.2.1 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 18 gage thick stainless steel or 1.2 mm 18 gage thick galvanized steel with laminated plastic material in accordance with NSF/ANSI 35. Fabricate joint trim of 50 mm 2 inch wide, 1.8 mm 14 gage thick 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 [_____].]

2.2.2.2 Open Counter Bases

Fabricate and crossbrace with 40 mm 1.625 inch outside diameter, 1.5 mm 16 gage thick 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 [_____].]

2.2.3 Legs

Fabricate of 1.5 mm 16 gage thick, 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.

2.2.4 Pedestal Bases

Fabricate of 2.5 mm 12 gage thick 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.

2.2.5 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.

2.2.6 Casters

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

2.2.7 Open Base Shelves

Fabricate of 1.5 mm 16 gage thick 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.

2.2.8 Closed Base Interior Shelves

Fabricate of 1.5 mm 16 gage thick 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.

2.2.9 Shelf Pan Slides

Provide 1.8 mm 14 gage thick 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.

2.2.10 Drawers

Provide die-stamped 1.2 mm 18 gage thick stainless steel, 500 by 500 by 125 mm 20 by 20 by 5 inch deep. Ensure drawer body can 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 14 gage thick 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 kg 50 pounds when fully extended. Provide stops for each drawer at fully open position. Enclose drawers on open-base tables in 1.2 mm 18 gage thick stainless steel housing.

2.2.11 Doors

Provide stainless steel double-cased doors, 1.2 mm 18 gage thick outer pan with corners welded, ground smooth and polished; 0.9 mm 20 gage thick 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.

2.3 TRAY SLIDE

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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.

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

[2.3.1 Solid Type

Provide solid type constructed with 1.8 mm 14 gage thick stainless steel

with front and back edges rolled 45 mm 1.75 inch at 180 degrees. Ensure top edge of roll is 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.

][2.3.2 Tube Type

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

]2.3.3 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.

2.3.4 Protector Shelf

Install and locate protector shelf as indicated on the drawings. Fabricate top of 1.8 mm 14 gage thick 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.

2.3.5 Shelf Frame

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

2.3.6 Shelf Frame Support

Form front uprights of 30 by 30 mm 1.25 by 1.25 inch, 1.5 mm 16 gage thick stainless steel tubing. Form back uprights of 25 by 25 mm one by one inch, 1.5 mm 16 gage thick 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.

2.4 PROTECTOR GLASS

6 mm0.25 inch thick, transparent [clear tempered plate glass] [heat and mar resistant clear acrylic]. Frame edges with 13 mm 0.5 inch, 0.09 mm 20 gage thick 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 19 mm 3/4 inch radius.

2.5 FOOD SHIELD

Provide self-serve food shield conforming to NSF/ANSI 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 non-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.

2.6 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.

[2.7 COLORS

[Refer to Section 09 06 00 - SCHEDULES FOR FINISHES.][As indicated on drawings.]

]PART 3 EXECUTION

3.1 INSTALLATION,

Install as specified in Section 11 05 40 COMMON WORK RESULTS FOR FOODSERVICE EQUIPMENT.

3.2 MANUFACTURER'S FIELD SERVICES

As specified in Section 11 05 40 COMMON WORK RESULTS FOR FOODSERVICE EQUIPMENT.

-- End of Section --