

**SECTION 11 40 11  
CUSTOM FABRICATED FOODSERVICE EQUIPMENT**

SPEC WRITER NOTES:

1. Delete between // // if not applicable to project.
2. Delete other items or paragraphs in the section that are not applicable and renumber the paragraphs.
3. Select custom-fabricated equipment according to usage requirements and local health codes.

**PART 1 - GENERAL**

**1.1 DESCRIPTION**

A. This section specifies custom-fabricated food service equipment as follows:

1. // Tables.//
2. // Prep and scullery sinks. //
3. // Pot washer, prep, and scullery sinks. //
4. // Hoods, condensate, ware washing.//
5. // Urn stands.//

**1.2 RELATED WORK**

SPEC WRITER NOTE: Show metal supports for cooking equipment on drawings and specify requirements for supports in Section 05 50 00, METAL FABRICATIONS.

- A. Section 05 50 00, METAL FABRICATIONS: Metal Supports.
- B. Section 11 40 21, FOOD SERVICE EQUIPMENT-UTILITY DISTRIBUTION SYSTEM: Conveyors.
- C. Section 11 48 00, CLEANING AND DISPOSAL EQUIPMENT: Ware washing Equipment.
- D. Section 13 05 41, SEISMIC RESTRAINT REQUIREMENTS FOR NON-STRUCTURAL COMPONENTS: Seismic Restraint of Equipment.
- E. Section 22 05 19, METERS AND GAGES FOR PLUMBING PIPING: Plumbing Connections.
- F. Section 22 05 23, GENERAL-DUTY VALVES FOR PLUMBING PIPING: Plumbing Connections.
- G. Section 22 05 33, HEAT TRACING FOR PLUMBING PIPING: Plumbing Connections.
- H. Section 22 11 00, FACILITY WATER DISTRIBUTION: Plumbing Connections.
- I. Section 23 11 23, FACILITY NATURAL-GAS PIPING: Plumbing Connections.

- J. Section 22 13 00, FACILITY SANITARY SEWERAGE: Plumbing Connections.
- K. Section 22 13 23, SANITARY WASTE INTERCEPTORS: Plumbing Connections.
- L. Section 22 14 00, FACILITY STORM DRAINAGE: Plumbing Connections.
- M. Section 22 42 26, COMMERCIAL DISPOSERS: Waste Disposers.
- N. Section 22 66 00, CHEMICAL-WASTE SYSTEMS FOR LABORATORY AND HEALTHCARE FACILITIES: Plumbing Connections.
- O. Section 26 05 11, REQUIREMENTS FOR ELECTRICAL INSTALLATIONS: Electrical Connections.
- P. Section 27 05 11, REQUIREMENTS FOR COMMUNICATIONS INSTALLATIONS: Electrical Connections.
- Q. Section 28 05 11, REQUIREMENTS FOR ELECTRONIC SAFETY AND SECURITY INSTALLATIONS: Electrical Connections.

### 1.3 QUALITY CONTROL

- A. Manufacturer Qualifications: Approved by NSF International (NSF) for manufacturing items indicated.
- B. Installer Qualifications: Experienced in food service equipment installation or supervised by an experienced food service equipment installer.
  - 1. Where required to complete equipment installation, electrician and plumber shall be licensed in jurisdiction where project is located.

SPEC WRITER NOTE: UL Environmental and Public Health (EPH) Classification Mark is currently used by UL to certify compliance with NSF/ANSI standards. Equipment evaluated by UL before 2001 may bear the UL Food Service Product Certification Mark.

- C. NSF Compliance: Equipment bears NSF Certification Mark or UL Classification Mark indicating compliance with NSF/ANSI 2.
- D. Electrical Components: Listed by UL and marked for intended use.
- E. Plumbing Fixture Fittings: Comply with ASME A112.18.1.

SPEC WRITER NOTE: Retain paragraph and subparagraphs below if required for project location.

- F. Seismic Restraint:
  - 1. Comply with requirements in Section 13 05 41, SEISMIC RESTRAINT REQUIREMENTS FOR NON-STRUCTURAL COMPONENTS.

2. Comply with applicable guidelines for seismic restraint of kitchen equipment contained in SMACNA's "Kitchen Ventilation Systems and Food Service Equipment Guidelines," Appendix A.

G. In-Use Service: At least one factory-authorized service agency for equipment shall be located in the geographical area of the installation and shall have the ability to provide service within 24 hours after receiving a service call.

**1.4 SUBMITTALS**

A. Submit in accordance with Section 01 33 23, SHOP DRAWINGS, PRODUCT DATA, AND SAMPLES.

B. Shop Drawings: Show dimensions, method of assembly, installation and conditions relating to adjoining work which requires cutting or close fitting, reinforcement, anchorage, and other work required for complete installation.

C. Operating Instructions: In accordance with requirements in Section 01 00 00, GENERAL REQUIREMENTS.

**1.5 WARRANTY**

A. Warrant food service equipment to be free from defects in materials and workmanship in accordance with requirements of "Warranty of Construction", FAR clause 52.246-21.

**1.6 APPLICABLE PUBLICATIONS**

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

B. ASME International (ASME):  
A112.18.1-11.....Plumbing Fixture Fittings

C. ASTM International (ASTM):  
A554-16.....Welded Stainless Steel Mechanical Tubing  
A666-15.....Annealed or Cold-Worked Austenitic Stainless  
Steel Sheet, Strip, Plate, and Flat Bar

D. National Association of Architectural Metal Manufacturers (NAAMM):  
AMP 500-06.....Metal Finishes Manual

E. NSF International/American National Standards Institute (NSF/ANSI):  
2-10.....Food Equipment

F. Sheet Metal and Air Conditioning Contractors' National Association (SMACNA): Kitchen Ventilation Systems and Food Service Equipment Fabrication and Installation Guidelines, 20081

**PART 2 - PRODUCTS****2.1 STAINLESS STEEL, GENERAL**

- A. Sheet, Strip, Plate, and Flat Bar: ASTM A 666, Type 304, stretcher leveled.
- B. Tube: ASTM A 554, Grade MT-304.
- C. Minimum Specified Thickness:
  - 1. Table // and Counter // Surfaces: 2.0 mm (0.0781 inch).
  - 2. Drain boards: 2.0 mm (0.0781 inch).
  - 3. Shelf Surfaces: 1.6 mm (0.0625 inch).
  - 4. Sink Bowls: 2.0 mm (0.0781 inch).
  - 5. Legs: 1.6 mm (0.0625 inch).
  - 6. Cross bracing: 1.6 mm (0.0625 inch).
- D. Finishes: Comply with NAAMM's AMP 500-505, Metal Finishes Manual. Grind and polish surfaces to produce uniform, directional textured, polished, free of cross scratches. Run grain with long dimension of each piece.
  - 1. Exposed Surfaces: No. 4 finish (bright, directional polish).
  - 2. Concealed Surfaces: No. 2B finish (bright, cold-rolled, unpolished finish).

**2.2 COMPONENTS, GENERAL**

- A. Sink Fittings:
  - 1. Faucets: Equip sinks with one faucet per sink bowl, unless otherwise indicated.
    - a. // Deck // Splash // mounted.
    - b. Lever handles.
    - c. Chrome-plated copper alloy.
  - 2. Drains: Equip sinks with 50 mm (2 inch) diameter, nickel-plated bronze, rotary-handle wastes and stainless-steel strainer plates with chrome-plated brass connected overflows.
- B. Spray Rinse Assemblies: As specified in Section 22 42 26, COMMERCIAL DISPOSERS.
- C. Splashes:
  - 1. Where backs of units abut walls, equip with splashbacks.
  - 2. Where units abut walls on sides, equip with side splashes.
- D. Legs: Fitted to top with 3 mm (1/8 inch) thick flange welded to underside of table/body.
  - 1. Feet: Adjustable, stainless steel, NSF certified.
  - 2. Spacing: Maximum 1825 mm (72 inches) o.c.

- E. Under counter Shelves: // Stainless-steel sheet // 25 mm (1 inch) diameter, stainless-steel tubing, running left to right, at 100 mm (4 inches) o.c. front to back //.
- F. Sink Covers: To fit within sink opening; perforated with 10 mm (3/8 inch) holes at 50 mm (2 inches) o.c.; and with turned down edges and two recessed handles.
- G. Baskets: Stainless-steel wire baskets, 406 by 406 by 356 mm (16 by 16 by 14 inches); 32 mm (1-1/4 inch) square mesh, of 3 mm (0.12 inch) wire. Handles and frame supports are of 8 mm (5/16 inch) diameter rod. Handles welded to top and bottom frame members and extended 150 mm (6 inches) above top of basket. Equip handle with 125 mm (5 inch) wide, coil wire grip.
- H. Waste Disposers: As specified in Section 22 42 26, COMMERCIAL DISPOSERS.
- I. Waste Hoppers: Shaped to funnel waste into waste disposer and with safety cover interconnected with waste disposer.
- J. Conveyors: As specified in Section 11 40 21, FOOD SERVICES EQUIPMENT-UTILITY-DISTRIBUTION SYSTEM.
- K. Pot Washers: As specified in Section 11 48 00, CLEANING AND DISPOSAL EQUIPMENT.

## SPEC WRITER NOTES:

1. Size units according to operational requirements and floor space available. Show sizes on drawings.
2. Show quantity and size of sinks on drawings.
3. Select components according to expected usage and location of unit.
4. Symbols below correspond with "Room Equipment Guide" identification system. Verify project requirements before specifying equipment that deviates from "Room Equipment Guide."
5. Edit symbols to coordinate with identification shown on drawings.

## 2.3 TABLES

### A. Tables with Sinks:

SYMBOL	DESCRIPTION	COMPONENTS
K1010	Table with sink	Prep/scullery sink Overhead shelf // Undercounter stainless-steel drawers // // Undercounter shelf // //Electrical receptacle, 120 V, 15 A // // Waste disposer //

### B. Ware washing Tables:

1. Troughs (Scuppers): 150 mm (6 inches) wide by 100 mm (4 inches) deep, equipped with a removable strainer basket and perforated top drain plate, and located at entrance to dish or pot washer.
2. Warewashing Table Requirements:

SYMBOL	DESCRIPTION	COMPONENTS
K1014	Table, soiled and clean, for use with dishwasher	Trough Sink Sink cover Spray rinse assembly Disposer Undercounter shelf
K1015	Table, soiled and clean, for use with pot washer	Trough Sink Sink cover Spray rinse assembly Disposer Undercounter shelf
K1016	Table, soiled, for use with dishwasher	Trough Spray rinse assembly Waste disposer Glass-rack overshelf Rack storage shelf
K1013	Table, soiled, for use with dishwasher	Conveyor Trough Spray rinse assembly Disposer mounted in cone Glass-rack overshelf Rack storage shelf

K1017	Table, soiled, for use with dishwasher	Conveyor Trough Spray rinse assembly Disposer mounted in sink Glass-rack overshelf Rack storage shelf
K1019	Table, Work	-

## C. Food Disposal Tables:

SYMBOL	DESCRIPTION	COMPONENTS
K1018	Table, food waste disposal	Spray rinse assembly Waste disposer Waste hopper // One drainboard //

## D. Steam-Jacketed Kettle Tables:

SYMBOL	DESCRIPTION	COMPONENTS
K1168	Table for steam- jacketed kettle	Gooseneck faucet with lever handle, deck mounted Trough with removable grate Drain
K1680	Wall-mounted table for steam- jacketed kettles	Gooseneck faucet with lever handle, deck mounted Trough with removable grates Drain

## E. Tables, Work

SYMBOL	DESCRIPTION	COMPONENTS
K1910	Table, Work	Prep/Bake Prep/Mobile Overhead shelf // Undercounter stainless- steel drawers // // Undercounter shelf // Casters with Brakes // Marine Edge// Rolled Rim// Raised Rolled Rim// // Electrical receptacle, 120 V, 15 A //

## 2.4 SINKS

### A. Prep and Scullery Sinks:

<b>SYMBOL</b>	<b>DESCRIPTION</b>	<b>COMPONENTS</b>
K1411	One compartment	// Overhead shelf // // Undercounter shelf // // Waste disposer //
K1412	One compartment	One drainboard // Overhead shelf // // Undercounter shelf // // Waste disposer //
K1413	One compartment	Two drainboards // Overhead shelf // // Undercounter shelf // // Waste disposer //
K1414	Two compartments	// Overhead shelf // // Undercounter shelf // // Waste disposer //
K1415	Two compartments	One drainboard // Overhead shelf // // Undercounter shelf // // Waste disposer //
K1416	Two compartments	Two drainboards // Overhead shelf // // Undercounter shelf // // Waste disposer //
K1431	One compartment	Two drainboards // Overhead shelf // // Undercounter shelf // // Waste disposer //
K1441	One compartment	// Overhead shelf // // Undercounter shelf // // Waste disposer //
K1442	Two compartments	One drainboard // Overhead shelf // // Undercounter shelf // // Waste disposer //
K1444	Two compartments	// Overhead shelf // // Undercounter shelf // // Waste disposer //



<b>SYMBOL</b>	<b>DESCRIPTION</b>	<b>COMPONENTS</b>
K1445	Two compartments	One drainboard // Overhead shelf // // Undercounter shelf // // Waste disposer //
K1446	Two compartments	Two drainboards // Overhead shelf // // Undercounter shelf // // Waste disposer //
K1451	Three compartments	One drainboard One basket // Overhead shelf // // Undercounter shelf // // Waste disposer //
K1461	One compartment	Two drainboards // Overhead shelf // // Undercounter shelf // // Waste disposer //
K1471	Two compartments	Two drainboards // Overhead shelf // // Undercounter shelf // // Waste disposer //

B. Pot-Washer, Prep, and Scullery Sinks:

<b>SYMBOL</b>	<b>COMPARTMENTS</b>	<b>COMPONENTS</b>
K1417	One	One swing-spout faucet, splash mounted, four-arm handles One drainboard Pot washer // Waste disposer // // Spray rinse assembly //
K1421	Three	Two swing-spout faucets, splash mounted, four-arm handles One drainboard Pot washer Two baskets // Waste disposer // // Spray rinse assembly //

<b>SYMBOL</b>	<b>COMPARTMENTS</b>	<b>COMPONENTS</b>
K1422	One	One swing-spout faucet, splash mounted, four-arm handles Two drainboards Pot washer Two baskets // Waste disposer // // Spray rinse assembly //
K1447	Two	One swing-spout faucet, splash mounted, four-arm handles One drainboard Pot washer// Waste disposer // // Spray rinse assembly //
K1452	Three	Two swing-spout faucets, splash mounted, four-arm handles Two drainboards Pot washer Two baskets // Waste disposer // // Spray rinse assembly //

## 2.5 HOODS, CONDENSATE, WAREWASHING

- A. Condensate Hoods: With perimeter condensate gutter and stainless-steel drain, and as follows:

<b>SYMBOL</b>	<b>DESCRIPTION</b>	<b>ACCESSORIES</b>
K1380	Condensate hood for warewasher // K8015 // // K8310 // // K8320 // [ _____ ]	[ _____ ]

## 2.6 URN STANDS

- A. Cabinet Bases: Open on one side, with one shelf; and with 150 mm (6 inch) high legs.
- B. Drip Troughs: With // one // two // removable grate(s).
- C. Service Openings: Raised, die-stamped openings for electrical and mechanical services.
- D. Urn Stand Requirements:

<b>SYMBOL</b>	<b>DESCRIPTION</b>	<b>COMPONENTS</b>
K1011	Urn stand for use with single-sided urn	Cabinet base One drain trough

K1012	Urn stand for use with dual-sided urn	Cabinet base Two drain troughs
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**PART 3 - EXECUTION**

**3.1 INSTALLATION**

- A. Install custom-fabricated equipment level and plumb; arranged for safe and convenient operation; with access clearances required for maintenance and cleaning.
- B. Interconnect equipment to service utilities.

SPEC WRITER NOTE: Retain paragraph below if required for project location.

- C. Install seismic restraints for equipment.

**3.2 CLEAN-UP**

- A. At completion of the installation, clean and adjust custom-fabricated equipment as required to produce ready-for-use condition.
- B. Where stainless-steel surfaces are damaged during installation procedures, repair finishes to match adjoining undamaged surfaces.

**3.3 INSTRUCTIONS**

- A. Instruct personnel and transmit operating instructions in accordance with requirements in Section 01 00 00, GENERAL REQUIREMENTS.

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