

SECTION 11 40 21
FOOD SERVICE EQUIPMENT-UTILITY DISTRIBUTION SYSTEM

PART 1 – GENERAL

1.1 DESCRIPTION

A. Utility Distribution Systems:

1. Island style.
2. Wall mounted.

1.2 RELATED WORK

- A. Equipment Supports: Section 05 50 00, Metal Fabrications.
- B. Seismic Restraint of Equipment: Section 13 05 41, Seismic Restraint Requirements For Non-Structural Components.
- C. Cooking Equipment: Section 11 44 00, Food Cooking Equipment.
- D. Ventilating Hoods:
- E. Plumbing Connections: Section 22 13 00, Facility Sanitary Sewerage.
- F. Building Fire-Protection Systems: Section 21 13 13, Wet-Pipe Sprinkler Systems.

1.3 QUALITY CONTROL

- A. 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.
- B. NSF Compliance: Equipment bears NSF Certification Mark or UL Classification Mark indicating compliance with NSF/ANSI 2 and NSF 2-Supplement.
- C. UL Listing: Equipment is a "Commercial Appliance Outlet Center" listed by UL and labeled for intended use.
- D. Fire-Protection Systems: Comply with NFPA 96.
- E. Welding: Perform welding according to AWS D9.1.
- 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. Manufacturer's Literature and Data:
 1. Include manufacturer's address and telephone number.
 2. Include catalog or model numbers and illustrations and descriptions of utility distribution systems.
- C. Installation Drawings: Show dimensions, details of installation, coordination with plumbing and electrical work, and other work required for a complete installation.
- D. Operating Instructions: In accordance with requirements in .

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. American Welding Society, Inc. (AWS):

D9.1-2006 Sheet Metal Welding Code
- C. ASTM International (ASTM):

A666-10 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. NFPA International (NFPA):

96-11 Ventilation Control and Fire Protection of Commercial
Cooking Operations

- F. NSF International/American National Standards Institute (NSF/ANSI):
- 2-2010 Food Equipment
- 2-Supplement Descriptive Details for Food Service Equipment Standards
- G. Sheet Metal and Air Conditioning Contractors' National Association (SMACNA):
Kitchen Ventilation Systems and Food Service Equipment Fabrication and
Installation Guidelines, 2001.

PART 2 – PRODUCTS

2.1 MATERIALS

- A. Stainless Steel: ASTM A 666, Type 304, stretcher leveled.
1. Finish: No. 4 finish (bright, directional polish) according to NAAMM's AMP
500-505, Metal Finishes Manual.

2.2 UTILITY DISTRIBUTION SYSTEMS

- A. Island-Style Utility Distribution System: Floor mounted, to supply the utilities to
operate cooking equipment, with floor-to-ceiling risers at each end to house reset
switches, controls for water and other components indicated.
- B. Wall-Mounted Utility Distribution System: Supplies utilities to operate tray-line
equipment, with wall-mounted reset switches, controls for water, electric, and
other components indicated.
- C. Electrical Requirements: Isolated compartment with electrical bus bars.
1. Stainless-Steel Connection Plate: Interchangeable, with circuit breaker
and pilot light.
2. Circuit Breaker: Rated 10,000-A RS symmetrical interruption capacity.
- D. Plumbing: Water color-coded and quick disconnect.
- E. Valves: Ball type shutoff, quarter turn.
- F. Connector Assembly: Water, brass double shutoff quick disconnect multiflexible,
stainless-steel outer braiding.
- G. Utility Distribution System Units:

SYMBOL	LENGTH	TYPE	COMPONENTS
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K1081	As indicated on drawings	Island style	Control panel, ventilator Utility chase Interior waste drain line Water wash control panel Fire-protection system
K1221	1525 mm (60 inches)	Wall mounted	Remote status indicator lights or LED read-outs Point-of-use circuit breakers
K1222	3050 mm (120 inches)	Wall mounted	Remote status indicator lights or LED read-outs Point-of-use circuit breakers
K1223	4575 mm (180 inches)	Wall mounted	Remote status indicator lights or LED read-outs Point-of-use circuit breakers
K1224	7000 mm (240 inches)	Wall mounted	Remote status indicator lights or LED read-outs Point-of-use circuit breakers

PART 3 – EXECUTION

3.1 INSTALLATION

- A. Install utility distribution systems level and plumb; arranged for safe and convenient operation; with access clearances required for maintenance and cleaning; and according to manufacturer's written instructions.

- B. Coordinate installation of utility distribution systems with supports; see Section 05 50 00, METAL FABRICATIONS.
- C. Interconnect utility distribution systems to service utilities.
- D. Install seismic restraints for equipment.

3.2 CLEAN-UP

- A. At completion of the installation, clean and adjust 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.

END OF SECTION 11 40 21