

**SECTION 114100
FOOD STORAGE EQUIPMENT**

PART 1 - GENERAL

1.1 DESCRIPTION

- A. This section specifies self-contained refrigeration equipment as follows:
1. Automatic ice making and dispensing stations.
 2. Refrigerators full and undercounter.

1.2 RELATED WORK

- A. Seismic Restraint of Equipment: Section 130541, SEISMIC RESTRAINT REQUIREMENTS FOR NON-STRUCTURAL COMPONENTS.
- B. Plumbing Connections: Section 221100, FACILITY WATER DISTRIBUTION.
- C. Electrical Connections: Section 260521, LOW-VOLTAGE ELECTRICAL POWER CONDUCTORS AND CABLES (600 VOLTS AND BELOW)

1.3 QUALITY CONTROL

- A. Installer Qualifications: Factory-trained refrigeration technicians and experienced with food service refrigeration equipment installation or supervised by an experienced food service equipment installer.
- B. NSF Compliance: Equipment bears NSF Certification Mark or UL Classification Mark:
1. Refrigerators and Freezers: Evaluated according to NSF/ANSI 7.
 2. Ice Makers: Evaluated according to NSF/ANSI 12.
- C. UL Listing: Equipment is listed and labeled by UL:
1. Refrigerators and Freezers: Evaluated according to UL 471.
 2. Ice Makers: Evaluated according to UL 563.
- D. Seismic Restraint:
1. Comply with requirements in Section 130541, 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 Publication 1767," Appendix A.
- E. 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 013323, 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 refrigeration equipment and accessories.
 - 3. Proof of appliances being Energy Star qualified.
- 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

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, except warranty period for refrigeration compressors shall be five years.

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. NSF International/American National Standards Institute (NSF/ANSI):
 - 7-07.....Commercial Refrigerators and Freezers
 - 12-07.....Automatic Ice Making Equipment
- C. Sheet Metal and Air Conditioning Contractors' National Association (SMACNA): Publication 1767
Kitchen Ventilation Systems & Food Service Equipment Fabrication and Installation Guidelines, 2001.
- D. Underwriters Laboratories Inc. (UL):
 - 471-06.....Commercial Refrigerators and Freezers, 8th
Edition: Revised 2004
 - 563-95.....Ice Makers, 7th Edition: Revised 2006

PART 2 - PRODUCTS

2.1 AUTOMATIC ICE MAKING AND DISPENSING STATIONS

- A. General Requirements: Automatic ice makers and dispensers as follows:
 - 1. Stainless-steel exterior, front and sides.

2. Air-cooled compressor.
 3. Insulated storage bin with agitator.
 4. Cube-type ice.
 5. Dispensing area located between 813 and 1016 mm (32 and 40 inches) above the floor.
 6. Ice dispenser.
 7. Countertop type.
 8. Accessories:
 - a. Stainless-steel stand with 152 mm (6 inch) stainless-steel legs.
 - b. Water filter with 0.1-L/s (1.67-gpm) maximum flow rate.
 9. Provide Energy Star qualified appliances.
- B. Automatic Ice Making and Dispensing Units: 27 kg (60 lb) bin storage.

2.2 FULL HEIGHT REFRIGERATORS

- A. General Requirements:
1. Refrigerator: 22.4 cu. Ft. with ice maker.
 2. Freezer: 6.9 cu. Ft. with auto defrost.
 3. Exterior Finish: Stainless steel, door, sides, and top.
 4. Interior Finish: Stainless steel.
 5. Door Style: Contoured.
 6. Control Locations: Upfront electronic touch with digital display.
 7. Freezer and Refrigerator Doors: Lockable.
 8. Refrigeration System: Self-contained, air cooled.
 9. Accessories:
 - a. Cord and plug.
 - b. Stainless-steel back.
 10. Provide Energy Star qualified appliances.

2.3 UNDERCOUNTERT REFRIGERATORS

- A. General Requirements:
1. Refrigerator: 5.7 cu. Ft.
 2. Exterior Finish: Stainless steel, door, sides, and top.
 4. Interior Finish: Stainless steel.
 6. Control Locations: Adjustable temperature on base grille.
 7. Door: Lockable.
 8. 115 volts, 15 or 20 amps
 8. Design for built in application.
 9. Size: 35 1/8" high and 23 3/4" wide.
 8. Refrigeration System: Self-contained, air cooled.

9. Accessories:
 - a. Cord and plug (5' long).
 - b. Stainless-steel back.
10. Provide Energy Star qualified appliances.

PART 3 - EXECUTION

3.1 INSTALLATION

- A. Install self-contained refrigeration equipment 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. Install seismic restraints for equipment.

3.2 CLEAN-UP

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

Instruct personnel and transmit operating instructions in accordance with requirements in.

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