

**SECTION 11 40 00
FOOD SERVICE EQUIPMENT**

0.01 REFERENCE STANDARDS

- A. NFPA 54 - National Fuel Gas Code; 2024.
- B. NFPA 70 - National Electrical Code; Most Recent Edition Adopted by Authority Having Jurisdiction, Including All Applicable Amendments and Supplements.
- C. NFPA 96 - Standard for Ventilation Control and Fire Protection of Commercial Cooking Operations; 2024.

PART 1 - GENERAL

1.01 GENERAL REQUIREMENTS

- A. Contractor is referred to the Instructions to Bidders and General Conditions, NYCHA Contracts; the Special Notice to Contractors; the Form of Proposal; the Form of Bid Bond; Division 01 - General Requirements of the Contract Specifications; the Contract Drawings and all Amendments and Addenda thereto; all of which govern the Work of this Section.

DESCRIPTION OF WORK

- A. PROVIDE AND INSTALL ALL KITCHEN EQUIPMENT SHOWN ON THE DRAWINGS AND SPECIFIED HEREIN, INCLUDING BUT NOT LIMITED TO THE FOLLOWING:
 - 1. HANDSINK
 - 2. MOBILE HEATED CABINET
 - 3. COLD/HOT FOOD TABLE
 - 4. SERVING SHELF
 - 5. CONVECTION OVEN
- B. RANGE WITH GRIDDLE
- C. REFRIGERATOR REACH-IN
 - 1. FREEZER REACH-IN
 - 2. TWO/THREE-COMPARTMENT SINK
 - 3. WALL SPLASH MOUNTED FAUCET
 - 4. CLEAN DISH TABLE
 - 5. CONDENSATE EXHAUST HOOD
 - 6. PRE-RINSE FAUCET ASSEMBLY
 - 7. SOILED DISH TABLE AND SINK
 - 8. WORK TABLE
 - 9. WORK TABLE CABINET BASE
 - 10. DISH CABINET
- D. EXHAUST HOOD/FIRE SUPPRESSION SYSTEM
 - 1. Installation to include uncrating, assembling, setting, leveling properly and securely and fastening to wall or floor all equipment as required with all necessary items such as braces, filler pieces and all other accessories.
 - 2. Installation to include all necessary connections to electrical, mechanical, and plumbing systems when integral to equipment. All other connections to be made by Electrical, Mechanical, or Plumbing Contractors as required.
 - 3. On completion of utility connections, all testing, checking and adjusting, and all other work necessary to put equipment in proper working condition.
 - 4. After all equipment is installed and tested, clean thoroughly and polish same.
 - 5. Receive, store, clean and reinstall existing equipment where indicated on plan.

1.02 RELATED WORK

- A. The following work is executed by the Electrical, Plumbing, or Mechanical Contractor(s) as required:

- B. Electrical service and connections to kitchen equipment, overload protection requirements, wiring between starters when starters and controls are not integral with the equipment.
- C. Plumbing work, connections, and fittings which are not an integral part of the equipment; floor drains; grease traps, water and waste lines to refrigeration compressors, including connections; and miscellaneous plumbing work, except as otherwise specified in this Section.

1.03 RELATED SECTIONS:

- A. Sealers and Joint Fillers Section 07 90 00
- B. Ceramic Tile Section 09 30 00
- C. Painting and Finishing Section 09 91 00
- D. Walk-In Cooler/Freezer Section 11 41 23
- E. Plumbing Division 22
- F. HVAC Division 23
- G. Electrical Division 26

1.04 CODES AND STANDARDS

- A. Applicable codes and standards of the following Agencies and Associations form a part of this Specification to the extent required by the references thereto.
- B. American Society of Testing and Materials (ASTM).
- C. American National Standards Institute (ANSI). Comply with applicable ANSI standards for electric powered and gas-burning appliances, for piping to compressed gas cylinders, and for plumbing fittings including vacuum breakers and air gaps to prevent siphonage in water piping.
- D. National Electrical Manufacturers Association (NEMA).
- E. National Associations of Food Equipment Manufacturers (NAFEM).
- F. Underwriters Laboratories, Inc. (UL). Provide UL labels on electrical components of food service equipment. Provide UL "recognized marking" on items with electrical components signifying listing by UL.
- G. National Sanitation Foundations (NSF) Standards: Comply with applicable NSF standards and recommended criteria. Provide each principal item of food service equipment with an NSF "Seal of Approval".
- H. National Fire Protection Codes (NFPA) Codes: Install food service equipment to comply with the following NFPA Codes:
 - 1. NFPA 54 National Fuel Gas Code.
 - 2. NFPA 70 National Electrical Code.
 - 3. NFPA 96 Removal of Smoke and Grease-Laden Vapors from Commercial Cooking Equipment.
- I. Health Code: Install food service equipment in accordance with applicable NYC Health Department and Building Code regulations.
- J. All kitchen equipment and installations shall comply with the accessibility requirements of the Uniform Federal Accessibility Standards (UFAS) and NYC Local Law 58.
- K. Occupational Safety and Health Administration (OSHA): All equipment, accessories, and methods of installation shall be in accordance with OSHA requirements.
- L. Balance of codes and standards shall be as set forth elsewhere in these specifications.
- M. Energy Star: All electrical equipment and appliances shall be Energy Star rated unless specifically noted.

1.05 SUBMITTALS:

- A. Drawings showing the arrangement of the equipment and mechanical and electrical services required for the equipment specified consisting of the following:

- B. 3/4" = 1' - 0" scale drawings showing service roughing-in details and accurate dimensions, all utility connections, drains, depressions, pass-through window openings, exhaust opening and partitions. Dimensions shall include height of all connections above finished floor.
- C. Manufacturer's standard catalog cuts and specification sheets for all equipment. Each shall include the item number, model number, manufacturer's name, size, construction details, required utilities, and all options and accessories specified and BS and A and MEA numbers. Equipment must be from an approved manufacturer.
- D. Detail fabrication drawings of custom fabricated items.
- E. Provide kitchen equipment with UL labels where applicable. Provide UL listing cards in 3" x 5" format.
- F. Submit Manufacturers Material Safety Data Sheet (MSDS) for each product.
- G. Samples: Submit samples of material and finish before fabrication, in accordance with requirements of Section 01 32 33 Submittals.
- H. Maintenance Data: Submit maintenance data and parts lists for each item of food service equipment. Include this data, product data, shop drawings, and wiring diagrams in the maintenance manual in accordance with requirements of Division 01. Typical details for all custom fabricated equipment shall include fully detailed plans, elevations and section on views of all applicable specified items.

1.06 QUALITY ASSURANCE:

- A. Qualifications:
- B. Manufacturer: firms regularly engaged in manufacture of food service equipment of types, capacities, and sizes specified, whose products have been in satisfactory services not less than 5 years.
- C. Installer's Qualifications: firm with at least three (3) years installation experience in projects with food s
- D. All equipment shall have NYC BS and A or MEA approvals and be so marked.
- E. Approval of Product Substitutions:
- F. Contractor shall submit requests for equipment substitution in accordance with the General Conditions and Division 01 - General, and shall include the following:
- G. Listing of five (5) similar installations having equipment being proposed for the project and date of completed installations.
- H. Complete product literature, performance and technical data describing the proposed equipment.
- I. Comparison with specified equipment, as per requirements of Section 01 33 00 Submittals.
- J. Location of service office and parts inventory for which equipment will be maintained, if required.
- K. The decision for approval or rejection of a product option or substitution shall rest solely with NYCHA.

1.07 DELIVERY, STORAGE, AND HANDLING:

- A. Deliver food service equipment in factory-fabricated containers designed to protect equipment until final installation. Store food service equipment in original containers. Ensure that deliveries are scheduled in a timely fashion and equipment arrives on site only when it is ready to be installed. The Authority will not be held responsible for unopened and uninstalled equipment damaged, lost or stolen.
- B. Handle food service equipment carefully to avoid damage to components, enclosures, and finish. Do not install damaged food service equipment. Replace and return damaged components to equipment manufacturer.

- C. Maintain protective covers on all units until installation is complete and unit is ready for final inspection.

1.08 REQUIREMENTS AND RESTRICTIONS:

- A. Provide electrical plugs and cords where required. Connections to outlets shall be made by the Electrical Contractor.
- B. Provide all motors with thermal overload protection and magnetic starters with reset buttons. All electrical equipment and connections within the equipment shall be UL approved and in accordance with local codes. Provide disconnect switches and all other items and accessories.
- C. Verify all services relative to electrical current availability. Notify immediately the respective trade of any changes in location of utility connections.
- D. All single-phase electrical plugs in equipment shall be equipped with three wire cords.
- E. All three-phase electrical plugs in equipment shall be equipped with four wire cords.
- F. Review the electrical, plumbing, and mechanical drawings to determine the proper electrical, plumbing and ventilating requirements of the equipment specified.
- G. All electrical connections and raceways shall be waterproof flexible conduit.

1.09 QUALITY CONTROL AND GUARANTEE:

- A. All equipment provided under this Section of the Specifications shall be guaranteed for a period of one (1) year from the date of completion of approved installation, with the exception of all refrigeration units and motors for mechanical equipment which shall carry a 5-year replacement and service guarantee starting from the date of completed and accepted installation. Any parts of the equipment which may need replacing due to defective materials or work during the guaranteed period, shall be replaced promptly with new parts without additional cost to the Authority.
- B. Provide all standard warranties as listed in the manufacturer's product data.
- C. NYCHA reserves the right to have detailed inspection made of each item as it is received at the site and unpacked prior to installation, and to require prompt replacement of any items not in accordance with the Specifications or otherwise unsatisfactory. NYCHA further reserves the right to have detailed inspections made in advance of shipment, at the plant of the Contractor or Supplier or to have the Contractor submit samples for complete and thorough analysis. Any equipment submitted by the Contractor that fails to conform to Specifications may be rejected.
- D. Any unspecified colors and finishes will be selected by the Authority. Contractor shall submit, for approval, any color or finish proposed to be used, except where the color or finish is specifically detailed in the Specifications and/or Drawings.

PART 2 - PRODUCTS

2.01 GENERAL

- A. All equipment and approved substitutions shall meet specifications in each respect and must be from the manufacturer listed, or equal.
- B. All equipment shall be pre-fabricated or shop-manufactured, delivered and installed in one piece, except where noted on the Drawings or Specifications.

2.02 THE FOLLOWING PRODUCTS SHALL BE USED, OR EQUAL:

2.03 HANDSINK

- A. Hand Sink, wall-mounted, 12"W x 16"D, splash guards on left & right, 4-1/2" deep bowl, 4" OC splash mount faucet holes, includes faucet, 7-1/4" backsplash, rounded top edge, basket drain and wall mounting clip,
- B. constructed of 20/304 stainless steel NSF.
- C. Manufacturer Sapphire Manufacturing Model No. SMHS-02-D or equal.

2.04 MOBILE HEATED CABINET

- A. C5 TM 1 Series Heated Holding Cabinet, mobile, half height uninsulated, clear polycarbonate door, removable bottom mount module, thermostat up to 190°F, fixed wire slides, lockable casters.
- B. 120v/60/1-ph, 2000 watts, 16.7 amps, NEMA 5-20p, cULus, NSF.
- C. Manufacturer: Metro model 3C515-HFC-4, C%1 Series, or equal.

2.05 COLD/HOT FOOD TABLE

- A. Cold/Hot Dual Temp Wells Six (6) standard inset pans installs in stainless steel base.
- B. Heavy duty stainless steel construction 88" W x 32" D x 34-1/8" H. Stainless steel control panel.
- C. 3/4 hp 120/208-240v, 1-ph, 3,000, 44.2/48.6 amps, UL service class D-6.

MANUFACTURER APW WYOTT MODEL NO. CHDT-6 OR EQUAL.

3.01 BASE:

- 1. Custom Fabricated and Installed stainless steel.
- 2. Three 3 Bar Drop Down Tray Rail.
- 3. Casters for mobile usage.
- 4. Three sided base, no doors.

3.02 SERVING SHELF

- A. 14 gauge 304 stainless steel serving shelf 88" W x 13-1/2" D - V.I.F.
- B. Manufacturer Advanced Tabco, or equal.

3.03 CONVECTION OVEN

- A. Gas-fired convection oven, glass-fronted doors, single-deck, standard depth, thermostatic controls, Casters and anti-tip over restraining device.
- B. Stainless steel front, 26" high legs, painted cabinet painted cabinet NSF.
- C. 115v/60/1-ph, 3.5 amps with cord and plug per deck.
- D. Manufacturer Duke Manufacturing, model No. E101-G, or equal.

3.04 RANGE WITH GRIDDLE

- A. Restaurant Series Range, gas, 60", six (6) 40,000 burners, 24" griddle with 1" thick polish plate, two (2) 26" standard ovens, two (2) chrome plated racks per oven. Set of 6 casters (3 with brakes and 3 without).
- B. Stainless steel front, ledge, sides, back guard with shelf and kick plate.
- C. 360,000 total, cETLus, ETL-Sanitation.
- D. Manufacturer Bakers Pride Restaurant Series model #60-BP-6B-G24-S26, or equal.

3.05 REFRIGERATOR REACH-IN

- A. Existing Arctic-Air / Avantco, AR49 / AR-19R-HC 20.

3.06 FREEZER REACH-IN

- A. Existing Arctic-Air / Avantco, AF49 .

3.07 TWO/THREE-COMPARTMENT SINK

- A. Sink, 3-compartment 59" W x 23-1/2" D x 45" H overall size. Three 3 18" W x 18" front to back x14" deep compartments, 10-1/2" backsplash, one 1 set of splash mounted faucet holes with 8" centers, 1-1/2" rounded edge on working sides.
- B. 18 gauge 304 stainless steel construction, galvanized steel legs, 1" adjustable plastic bullet feet, KD, NSF.
- C. Manufacturer Sapphire Manufacturing Model #SMS 1818-3 or equal.

3.08 WALL SPLASH MOUNT FAUCET

- A. Krowne Royal Series Faucet, splash mounted, 8" centers 12" swing spout, quarter turn ceramic cartridge valve, low lead compliant, NSF. Includes internal check valves to prevent backflow and cross contamination.
- B. Manufacturer Krowne Metal. Model No.14-812L or equal.

3.09 CLEAN DISH TABLE

- A. Right to left operation, 7-1/2" H backsplash, 3" rolled front and side rims stainless steel legs with cross rails 26" W x 30" D x 34" H.
- B. 16gauge 304 stainless steel construction, NSF.
- C. Manufacturer Advance Tabco. Model #DTC-S70-26L-X or equal.

3.10 CONDENSATE EXHAUST HOOD SEE MECHANICAL SECTION 23 38 13.

- A. Manufacturer Captive-Aire. Model Custom.
- B. Architect equal.

3.11 PRE-RINSE FAUCET ASSEMBLY, WITH ADD ON FAUCET

- A. Krowne Royal Series, pre rinse Assembly, with add on faucet, wall mount, 8" centers spring action flexible gooseneck, 38"H stainless steel hose with f15" overhang and 1.2 GPM spray head, built in check valves, 2.0 GPM add on faucet with 12" swing spout, quarter turn ceramic cartridge valves, includes wall bracket and mounting kit, chrome plated brass base and cross contamination, NSF ships preassembled.
- B. Manufacturer Krowne Metal. Model No. 17-109WL or equal.

3.12 SOILED 'L' SHAPED DISH TABLE AND SINK

- A. Dishlanding-Soil Dishtable, L shaped with landing, right to left 10-1/2"H backsplash, with pre-rinse sink, stainless steel legs, with crossrails, 71' long,
- B. 16gauge 304 stainless steel construction.
- C. Manufacturer Advance Tabco. Model DTS-D70-72R7 or equal.
- D. Manufacturer Globe model No. SP20 Planetary Mixer, or equal.

3.13 DISH CABINET

- A. Floor-mounted open-front dish cabinet, Dish cabinet, 96" W x 15" D x 35-1/2" H, open base with mid-shelf and 4 four 24" hinged doors.
- B. Stainless steel body 18 ga, with bolt on stainless steel legs with 1-1/2" adjustable hex feet NSF.
- C. Manufacturer Advance Tabco model No. DC-158, TA-35A-HINGED or equal.

3.14 REFRIGERATOR REACH-IN

- A. Existing Traulsen, Model #AF49/G1000 30.

3.15 REFRIGERATOR REACH-IN

- A. Existing: Avantco, AR49 / AR-19R-HC 20.

3.16 EXHAUST HOOD AND FIRE SUPPRESSION SYSTEM SEE MECHANICAL SECTION 23 38 13 AND PLUMBING SECTION 21 00 00.

- A. Manufacturer Captive-Aire. Model Custom.
- B. Or equal.
 - 1. STORAGE SHELVING

3.17 WALL-MOUNTED ADJUSTABLE WIRE SHELVING, LENGTHS, SIZES AND CONFIGURATIONS AS SHOWN ON DRAWINGS.

- A. Include all brackets and supports as shown on Drawings.
- B. Chrome-plated, corrosion-resistant steel, integral anti-microbial protection.

- C. Twelve (12) years manufacturer's warranty against rust and corrosion.
- D. Available Manufacturers:
 - 1. Advance Tabco, www.advancetabco.com, (800) 498-6634.
 - 2. Metro Shelving, www.metroshelving.net, 1-800-400-7500.
 - 3. Or equal.

PART 3 - EXECUTION

4.01 PRE-INSTALLATION INSPECTION:

- A. Prior to all work, examine all areas prepared by others to receive work of this Section. Notify the Authority of any unsatisfactory conditions necessary for proper installation of the food service equipment.
- B. Do not proceed with fabrication and installation until unsatisfactory dimensions and conditions have been corrected.
- C. Contractor shall field verify all dimensions prior to ordering equipment, shop fabrication of items and installation and shall assume complete responsibility for accuracy. All variations of adjacent construction shall be taken into account and properly provided for.

4.02 INSTALLATION:

- A. The installation and erection of all kitchen equipment specified in this section shall be performed under the supervision of an approved representative of the food service equipment subcontractor and in strict accordance with the specifications and the approved printed directions of the manufacturer.
- B. The food service equipment subcontractor shall notify the Authority in writing of any walls, door bucks or conditions which should be left uncompleted until the entry of items of equipment of unusually large size that would not normally pass through finished openings or door bucks.
- C. All methods of installing, mounting and securing equipment provided hereunder shall comply with applicable NSF standards.
- D. Provide a continuous covered bead of clear silicone caulking to seal joints of all fixed equipment setting directly against wall surfaces, such as backsplashes on work tables, dish tables, pot sinks, wall cabinets, and all other items and accessories.
- E. If joints exceed a 3/8" gap but not more than 2", provide stainless steel trim strips to seal and then apply silicone.
- F. Fixtures intended to be over 2" away from wall shall not be trimmed or sealed.
- G. Set each item of non-mobile and non-portable equipment securely in place, level and adjust to correct height. Anchor to supporting structure where indicated and where required for sustained operation and use without shifting or dislocation. Fasteners to be stainless steel, of manufacturer's standard types and sizes. Conceal anchorages where possible.
- H. Adjust counter tops and other work surfaces to level tolerance of 1/16" maximum offset, and maximum variation from level or indicated slope of 1/16" per foot.
- I. Field Joints: Where required, field joints shall be carefully ground to a hair line fit and reinforced with a metal strip of the same material and gauge as the parts joined. The strip shall be welded to one section of the part. After making final adjustments, if required, joint shall be finish welded, ground smooth and polished.
- J. Welds and Grinding: All welded corners, joints and connections on all equipment shall be electrically welded, seamless with the joints invisible, finished smooth to match the adjoining surface. Parts welded are to be made homogenous and free from imperfections. All joints shall be strong and ductile with exposed excess metal ground off so as not to show parts of concentration or deflection at points of grind and the finished surface will simulate one-piece construction. All sharp edges shall be ground smooth and polished.
- K. Soldering/Tinning: Unless otherwise specified, solder shall not be used to fill in pits, crevices or corners in stainless steel.

- L. Cut-Outs: Provide cutouts in food service equipment where required to run plumbing, electric or gas lines through equipment for final connections. Do not make any cutouts in manufactured equipment without the expressed written approval of the Authority. All penetrations in any work table or serving counter tops required to run mechanical services to any equipment items shall be fitted with rubber grommets.
- M. Set or trim gaskets flush.
- N. Repair any adjacent surfaces damaged by improper installation to the satisfaction of the Authority's representative.

4.03 TESTING:

4.04 AFTER INSTALLATION AND BEFORE DEMONSTRATION OF THE EQUIPMENT TO NYCHA OPERATING PERSONNEL, TEST ALL MECHANICAL AND ELECTRICAL EQUIPMENT, THROUGH AUTHORIZED SERVICE AGENCIES, FOR OPERATING EFFICIENCY AND FOR CONFORMANCE TO ALL REQUIREMENTS HEREIN SPECIFIED AND TO ALL APPLICABLE REGULATIONS OF ANY GOVERNING AGENCIES.

- A. Equipment shall be tested under normal operating conditions; in addition, where possible, all safety devices shall be tested under simulated emergency conditions.
- B. Such testing shall include, but not be limited to:
 1. All valves, regulators, gauges, safety devices and sensors.
 2. All controls and operating mechanisms.
 3. Factory interwiring and/or piping connections.
 4. Motor and pump rotations.
 5. All heating devices to eliminate hot spots and to assure even heating patterns.

4.05 AFTER TESTING, PERFORM THE FOLLOWING AS NECESSARY:

- A. Calibrate all thermostats, thermometers, heat switches, and temperature sensing controls.
- B. Calibrate and balance all refrigeration systems.
- C. Adjust and pilots and test automatic pilots and gas pressures.
- D. Adjust water level controls.

4.06 CLEANING:

- A. When all work by this Contract, together with the work of other trades, has been completed, clean each item of equipment so that all traces of grease, stains, protective coatings, abrasive dusts, markings, scratches, and other foreign matter are completely removed. Leave all equipment ready to be used and operated by NYCHA personnel.

4.07 MAINTENANCE:

- A. All equipment described herein shall be provided with service at no cost to NYCHA for a period of one year after final acceptance of the renovation. This service shall include adjustment of all equipment and repair or replacement of electrical and mechanical parts of the equipment whenever this is required during maintenance periods. Only genuine standard parts produced by the manufacturer of the equipment shall be used. Any necessary renewals and repairs due to ordinary wear and tear shall be included as part of this maintenance service. All work under this maintenance and callback provision shall be performed by competent personnel under the manufacturer's supervision. Work shall be done during regular working hours and days, but local callback emergency service shall be available at all times.
- B. For the refrigeration equipment, in addition to the above, a representative of the local servicing organization shall be present at start-up and adjustment of the various systems.
- C. Provisions shall be made for properly trained authorized personnel to demonstrate to the NYCHA the operation of all equipment. In addition, four (4) complete printed copies of the instructions shall be furnished to the NYCHA covering the operation and maintenance of all equipment. This information shall be submitted in the following manner for initial review:

- D. A covered, bound booklet containing Manufacturer's current printed Installation/ Operation/Maintenance/Parts manuals for all equipment hereinafter specified (including all accessories, components, faucets, etc.). Each manual shall be clearly labeled with their respective item number designation as hereinafter specified.
- E. Booklets shall include a table of contents listing each equipment item included, complete with corresponding item number, quantity and description as shown on the Schedule of Equipment and the Drawings.
- F. Booklets shall also include a service agency listing. This listing shall include the complete name, address and phone number of the local service agency for all equipment included within the booklet.

END OF SECTION 11 40 00