

SECTION 11400
FOOD SERVICE EQUIPMENT

PART 1 - GENERAL

1.01 SUMMARY

- A. Provisions of the general and supplementary conditions and Division 01 apply to this section.
- B. Work included in this section:
 - 1. Furnish labor, tools, materials, equipment, transportation and services necessary for the assembly, setting in place and sealing for the complete installation of equipment as indicated and specified in the equipment schedule. Work must be in strict compliance and in accordance with the contract documents.
 - 2. Coordinating work of other sections and providing support and accommodation to related work.
 - 3. Cutting of holes in equipment, including holes for pipes, drains, electrical outlets, required for this section. Work shall include welded sleeves, collars, ferrules, escutcheons or rubber grommets for all equipment.
 - 4. Repair of damage to building resulting from work of this section.
 - 5. Remove debris resulting from work of this section.
 - 6. Clean and repair Kitchen Equipment Supplier furnished equipment for operation.
 - 7. Furnish faucets, sink wastes, drain fittings, tail pieces and strainers for food service equipment.
 - 8. Mechanical and electrical devices furnished for installation by others shall comply with requirements of Mechanical and Electrical sections.
 - 9. The furnishing of items required by regulations, but not specified or indicated.
 - 10. Provide General Contractor with locations for all wall reinforcement (backing plates) and special support systems.
 - 11. Coordinate with the General Contractor the location of all floor sinks and that they are installed flush with the floor so they do not become a tripping hazard.

1.02 RELATED WORK IN OTHER SECTIONS

- A. Electrical, gas, steam, water and waste services to rough-in points and final connections to fixtures, except where otherwise specified.
- B. Ventilation work and ducts above finished ceiling.
- C. Concrete work, including curbs, gutters, raised bases, floor depressions, cement finishings and tile overlay, including cold storage room floors and cove bases.
- D. Finish floor sealing or covering.

- E. Color and pattern selection of paints, stains, and plastic laminate material.
- F. Division 15, Mechanical
- G. Division 16, Electrical

1.03 ABBREVIATIONS

- A. Refer to Food Service Drawings for additional abbreviations.

AFF	Above Finished Floor
AGA	American Gas Association
ASHRAE	American Society of Heating, Refrigerating and Air Conditioning Engineers
ASME	American Society of Mechanical Engineers
ASTM	American Society of Testing Materials
BTU	British Thermal Unit
C	Centigrade Celsius
CFC	Chlorofluorocarbon
db	Decibel
DSA	Division of State Architect
F	Fahrenheit
FDA	Food and Drug Administration
GA	Gauge
HP	Horsepower
ID	Inside Diameter
KW	Kilowatts
LCD	Liquid Crystal Display
Min.	Minimum
NA	Not Applicable, or Not Available
NEMA	National Electrical Manufacturers Association
NFPA	National Fire Protection Association
NIC	Not in Contract
NSF	National Sanitation Foundation
OC	On Center
OD	Outer Dimension
OSHA	Occupational Safety & Health Administration
PSI	Pounds Per Square Inch
PVC	Polyvinylchloride
RPM	Revolutions per Minute
SMACNA	Sheet Metal & Air Conditioning Installers National Association
UL	Underwriters' Laboratories, Inc.
USDA	United States Department of Agriculture
V	Volts
W	Watts
°	Degree (Angle or Temperature)

1.04 BASE BID AND SUBSTITUTIONS

- A. The manufacturer's names and model numbers listed for the equipment in the following Equipment Schedule are used as design guidelines and set the standards for equipment, and not to limit bidders. Refer to Division 01 as it applies to this section.
- B. Base bid shall be for furnishing all equipment and material as specified. Failure to furnish bid exactly as specified may disqualify bidder. However, bidders may quote per Public Contract Code Section 3400-3410 on substitute products if they have been pre-approved prior to bid submittal by listing them on the substitution page of the bid form and by indicating the additional cost or credit. No request for substitution will be considered after the bid opening.

- C. Acceptance of proposed substitution is entirely at discretion of Owner or his Representative, and subject to the following qualifications:
 - 1. Equal in quality of materials used, in structural strength and in details of construction.
 - 2. Equal in performance, mechanically and productivity.
 - 3. Equal in finish, or in characteristics permitting specified finish to be applied.
 - 4. Availability of replacement parts and maintenance service.
 - 5. Brand names and models in current use at this facility or Owner's other facilities.
- D. The bid price for each proposed substitute shall include costs required to incorporate the substitute into the project. Later requests for additional monies for substitutes will not be considered.
- E. Proposed substitutes for the ventilators must base their exhausted air volumes, duct sizes, etc. on the bid drawings. Variation or modification of ventilators shall be the sole responsibility of the KEC (Kitchen Equipment Supplier) and shall bear the costs to incorporate the substitute into the project including modifications or required change-outs of air handling equipment.
- F. Proposed substitutions must meet the original design intent in storage capacity, production capacity, energy usage, physical size, material construction and finishes, ease of usage, ease of field changes, ease of serviceability, and warranty.
- G. The proposed substitution shall have no adverse effect on other trades or specified warranty conditions.

1.05 MODIFICATIONS/RESET OF EXISTING EQUIPMENT

- A. Equipment noted in the specifications as "Existing-Reset" shall be modified as required and relocated as shown on the drawings and/or specified in this section.
- B. Bidders shall carefully examine the construction documents and the project site including location and condition of existing equipment to determine cost for each "Existing-Reset" and "Existing-Modify" item to cover removal, modification, (including materials), bring up to code, cleaning, inspection for damage, repair if necessary to make operable or correct safety or sanitation issues and resetting.
- C. Each "Existing-Reset" item shall be clean, in good repair and operable when reset.

1.06 CONSTRUCTION DOCUMENTS

- A. Equipment drawings furnished are definitive only and should not be used as the exact construction drawings or shop drawings. The equipment drawings constitute a part of these specifications. They show locations of equipment and the general arrangement of mechanical and electrical services. Necessary deviation from the illustrated arrangements to meet structural conditions shall be considered a part of the work of this section.
- B. The drawings are for the assistance and guidance of the Kitchen Equipment Supplier. Exact locations shall be governed by the building configuration.
- C. Drawings and equipment specifications are intended to complement one another. Therefore, neither should be considered complete without the other.

- D. The KEC (Kitchen Equipment Supplier) shall visit the jobsite prior to making shop drawings. The purpose of the visit shall be to observe and measure existing field conditions including but not limited to wall(s), door(s), window(s), ceiling height and utility locations.
- E. Should there be a conflict between the drawings and the specifications, contact the Architect for clarification. Without clarification the higher quantity or greater amount shall govern.

1.07 REGULATORY AGENCIES

- A. All work shall be in accordance with the governing health, building and safety, and fire protection codes and regulations.
- B. Standards of the National Sanitation Foundation (NSF) shall serve as guidelines for the work of this section.
- C. All food protection devices (sneeze guards, breath protectors) shall be designed and installed to the criteria outlined in the booklet; Recommendations for Food Protection Devices, Cafeterias, Buffets, Chuck Wagons, and Smorgasbords published by the State of California, Department of Public Health.
- D. All electric equipment and accessories shall conform to the standards of the National Electric Manufacturers Association (NEMA), National Electrical Code (NEC), Underwriters Laboratories, Inc. (UL), Intertek Testing Services NA Inc. (ETL), or the local Electrical Testing Station.
- E. All gas-fired equipment and accessories shall conform to the standards of the American Gas Association (AGA).
- F. All steam generating equipment and accessories shall conform to the standards of the American Society of Mechanical Engineers (ASME).
- G. Rulings and interpretations of state and local enforcing agencies shall be considered a part of the regulations and shall include fees for licensing of equipment and necessary signatures and notaries on food service drawings as may be required for approval.
- H. The responsibility for obtaining applications and permits required by the SCAQMD (South Coast Air Quality Management District) and the State Fire Marshall's shall be the Kitchen Equipment Supplier's unless noted otherwise.
- I. American's with Disabilities Act shall be used as a guide to the equipment construction.
- J. Food service aisles shall be a minimum of 36" wide and tray slides shall be mounted at 34" maximum above the floor per CBC Section 1404B5.5. Food service equipment required to be accessible shall conform to all reach requirements in CBC Figures 11B-16 and 11B-17.
- K. All food service equipment and walk-in coolers and freezers shall have entry and exit door hardware that complies with all of the requirements of CBC Section 1133B2.5.1 and maneuvering clearances at the exterior side per CBC Section 1133B2.4.2.

1.08 MANUFACTURERS' INSTRUCTIONS

- A. Manufacturers' directions shall be used in this contract covering points not shown or noted in the drawings or specifications.

1.09 SUBMITTALS

- A. Provide in accordance with Division 01.
- B. Prior to submitting manufacturer's literature and shop drawings please send a signed letter to the Architect that the General Section, including Part 1, 2 and 3 of the Food Service Equipment Specifications, Section 11400 has been read and thoroughly understood.
- C. PRODUCT DATA:
 - 1. Submit bound sets of manufacturers' specifications and data sheets, describing articles and equipment, as specified, for approval under the provisions of Section 01300.
 - 2. Each submittal must show item number, units to be furnished, manufacturer's model number and list optional finish and accessories to be supplied. In addition, show electrical characteristics and BTU rating and indicate if electrical cord and plug will be furnished.
 - 3. Bound submittals shall be complete, accounting for each item number, including specified "buy-out" (standard manufactured equipment) item and custom fabricated equipment. Loose sheets or "piecemeal" submittals shall not be acceptable. If a manufacturer's catalog sheet is not obtainable, for a specific item, insert a typewritten sheet describing the item giving the required information. Where item numbers are listed as "Spare Number", "By Owner", etc., insert a typewritten sheet identifying such item number and type "Spare Number" or appropriate heading, in bold-type at a minimum size font of 18 point.
- D. SHOP DRAWINGS
 - 1. Drawings shall be submitted on drawing sheet size to match Contract Documents under provisions of Section 01300.
 - 2. Prepare and shop drawings, showing information necessary for fabrication and installation of the work of this section, for approval.
 - 3. Furnish 1/4 inch scale, dimensioned mechanical, electrical and plumbing rough-ins and building conditions drawings for kitchen equipment listed, including items as "Future", "By Owner", "By Vendor", and "By G.C."
 - 4. Furnish 3/4 inch scale elevation and 1 1/2 inch scale vertical cross section, dimensioned, drawings of fabrication details.
 - a. Show materials, gauges, and methods of construction, including relation to adjoining and related work when cutting or close fitting is required.
 - b. Show reinforcements, wall backing, anchorage and other work required for complete installation of fixtures.
 - 5. Reproductions of original Contract Drawings are not acceptable for use as shop drawing submittals.
 - 6. "Piecemeal" submittals of shop drawings will not be acceptable.

7. Provide prints of approved shop drawings for distribution.

1.10 MAINTENANCE DATA AND OPERATING INSTRUCTIONS

- A. Submit for approval, for Owner's use, under provisions of Section 01730 operating and maintenance instructions containing complete description, wiring diagrams, operating data and other information pertaining to the proper operation and up-keep of the various items of mechanical equipment having motors or other moving parts.
 1. Include names, addresses and telephone numbers of authorized service agencies, for items with mechanical equipment.
 2. Include complete warranty information including proof of warranty, number of years and special conditions.
 3. Include video films in standard VHS format depicting maintenance procedures for each piece of equipment.

1.11 WARRANTIES

- A. Equipment furnished for this food service facility shall be new and warranted for a period of one year, beginning on the date of final acceptance of the work of this section. Warranty shall protect against defective material, design and workmanship.
- B. In addition to the above, self-contained refrigeration equipment shall include in their warranty, installation, start-up and an additional, minimum four year extended warranty on sealed compressor/motor assemblies. The extended warranty shall include parts only.
- C. Upon receipt of notice of failure of any part, during the warranted period, the affected part or parts shall be replaced promptly at no cost to the Owner.
- D. In the event the replacement of an entire item is required, the Owner shall have the option of full use of the defective equipment until a replacement has been delivered and completely installed.
- E. All repairs and replacements shall be made at a time and during hours satisfactory to the Owner.

1.12 SEISMIC PROTECTION

- A. All "hardwire and gas" kitchen equipment shall be installed with seismic restraints per Guidelines for Seismic Restraints of Kitchen Equipment as published by SMACNA and approved by DSA. Where anchorage details are not shown on drawings or in the guidelines, the field installation shall be subject to approval of the Architect and the DSA (Department of State Architect) Field Engineer. A copy of the "Guidelines" shall be provided by the Contractor and kept on the jobsite at all times.
 1. Make all stationary equipment in this contract conform to the following seismic requirements:
 - a. Construct all stationary floor mounted equipment in such a manner that all portions, elements, sub-assemblies and/or parts of said equipment and the equipment as a whole, including their attachments, will resist a horizontal load equal to the operating weights of those parts multiplied times the following factors:

- b. Rigidly supported equipment such as ranges, fryers, ovens, tables, refrigerators (reach-in and roll-in type), ice machines, serving counter, conveyors, dishwashers, pot washers and shelving - Factor $a_p=1.0$, $R_p=3.0$ per ASCE 7-05, CH13.
- c. Flexible or flexibly supported equipment such as compressors and hoods - Factor $a_p=2.5$, $R_p=3.0$ per ASCE 7-05, CH13.
- d. Apply load at the center of gravity of the part and in any direction horizontally. Make design stresses in accordance with the specifications for design of the American Institute of Steel Construction. Anchor, support and/or attach said prefabricated equipment to the structure in accordance with the details found in the SMACNA guidelines.
- e. The manufacturer and/or supplier of said equipment: submit calculations and certify in writing to the Architect and the Department of the State Architect that this equipment complies with these specifications.

1.13 DELIVERY, STORAGE AND HANDLING

- A. Deliver products to site under provisions of section 01600-Materials and Equipment.
- B. Storage of products will not be provided for on the job site.

1.14 QUALITY CONTROL

- A. Field Measurements: Required to establish fabrication dimensions.
- B. REFERENCE STANDARDS
 - 1. ANSI/ASTM A167-stainless and heat-resisting chromium/nickel steel plate, sheet and strip.
 - 2. ANSI/AWS D1.1-structural Welding Code.
 - 3. ASTM A466-steel sheet, galvanized by the Hot-dip Process, structural quality.
- C. QUALITY ASSURANCE
 - 1. Fabricator: Companies specializing in manufacture of commercial food services equipment with minimum three years experience.

PART 2 - PRODUCTS

2.01 MATERIALS

- A. METAL
 - 1. Stainless Steel: Shall be new, first grade, material; U.S. Standard Gauges as specified or shown; Austenitic 18-8, Type 304, with a content of 18 percent to 20 percent chrome, 8 percent to 10.5 percent nickel and a maximum carbon content of 0.08, No. 4 finish, ASTM A 167.

2. Galvanized Steel: Shall be new, commercial quality, zinc coated carbon steel; U.S. Standard Gauges as specified or shown, ASTM A 526, Armco, Toncan, or keystone Copper Bearing. Where galvanized iron has been welded, seams shall be cleaned and scale removed and finished with a prime coat of aluminum paint.
3. Steel Pipe: Shall be new, commercial quality, galvanized; rust resistant coating on threads.

B. WOOD

1. Plywood: Shall be new material; thickness as specified; waterproof glued, Marine grade. (Particle board not acceptable).
2. Hardwood: Birch, kiln dried, clear stock sizes.
3. Construction Lumber: Douglas fir, commercial construction grade, select.
 - a. "Wolmanize" where in contact with concrete or masonry.

C. PLASTIC LAMINATE

1. Shall be as manufactured by one of the following:
 - a. Formica, Nevamar, Textolite, Micarta, Consoweld, Wilsonart, unless specified otherwise.
2. Horizontal surfaces, standard grade 1/16 inch thick.
3. Vertical surfaces, standard 1/32 inch thick.
4. Curved surfaces, where 1/16 inch or 1/32 inch is impractical, use post forming grade, 0.050 inch thick.
5. Backing sheet, 0.025 inch thick, or reject 1/16 inch or 1/32 inch thick.

D. HARDWARE

1. Locks
 - a. Metal cabinet doors and drawers, shall be furnished with Standard-Keil cylinder locks Model 1230-4210-3000, Model 1230-4216-3000, or equal, keyed alike unless specified otherwise.
 - b. Wood cabinet doors and drawers, shall be furnished with Standard-Keil cylinder locks Model 1210-4210-3000, or equal, keyed alike unless specified otherwise.
 - c. Refrigerated and heated cabinets of the reach-in and roll-in type shall be furnished with heavy-duty cylinder locks, on all doors, keyed alike unless specified otherwise.
2. Catches
 - a. For cabinet doors, shall be Magna-Tite Model 592 self-aligning Magnetic, or equal, unless specified otherwise.

3. Door and Drawer Pulls

- a. For metal cabinet doors and drawers shall be stainless steel ADA type, Standard-Keil Model 1246-1012-1283, or equal, unless shown or specified otherwise.
- b. For metal sliding doors, shall be stainless steel recessed type Standard-Keil Model 1262-1014-1283, or equal, unless shown or specified otherwise.

4. Hinges

- a. For metal cabinet doors, shall be heavy-duty concealed pivot hinge of stainless steel or cadmium plated, unless shown or specified otherwise.
- b. For wood cabinet doors, shall be heavy-duty concealed pivot hinge finished to harmonize with cabinet finish unless shown or specified otherwise.

5. Casters

- a. Shall be heavy-duty, bright zinc or chrome plated, ball-bearing type with greaseproof rubber, neoprene or polyurethane tires. Wheels shall be 5 inches (1270mm) diameter with minimum width treads of 1 1/8 inches (28mm) and minimum capacity of 250 lb.'s per caster. Furnish with rubber donut bumpers and wheel brakes where specified.

- 6. All hardware shall be identifiable as to the manufacturer.

E. PLUMBING FIXTURES

1. Faucets

- a. Deck mounted mixing faucet assemblies shall be T & S Model 231-BWH.4 with 8 inch (203mm) swing nozzle and non-splash aerator, or equal, unless specified otherwise.
- b. Splash mounted mixing faucet assemblies for pot sinks shall be T & S Model BWH.4 with 14 inch (356mm) swing nozzle, or equal, unless specified otherwise.
- c. Splash mounted mixing faucets for preparation and utility sinks shall be T & S Model B-290 BWH.4 with 12 inch (305mm) nozzle and Model B-0199-01 non-splash aerator, or equal, unless specified otherwise.
- d. Single filler faucets when specified or shown for hot food units, bain maries, and steam tables, shall be T & S Model B-205-LN with 8 inch (203mm) swing spout and Model B-0199-01 non-splash aerator, or equal, unless
- e. All faucet assemblies shall be polished chromium plated.

2. Rotary Wastes

- a. Shall be T & S Model B-3913 with stainless steel basket strainer, or equal, unless specified otherwise.

2. Rotary Wastes with Overflow

- a. Shall be T & S Model B-3917-01 with stainless steel basket strainer or equal, unless specified otherwise.

4. Pre-Rinse Assemblies

- a. Splash mounted pre-rinse assemblies shall be T&S Model B-133B with wall bracket, or equal, unless specified otherwise.
- b. Deck mounted pre-rinse assemblies shall be T&S Model B-123B with wall bracket and remote control mixing valve, or equal, unless specified otherwise.
- c. All pre-rinse assemblies shall be polished chromium plated.

5. Pot Filler Assemblies

- a. Pot filler assemblies when specified or shown for kettles, braising pans, or ranges shall be T&S Model B-605 or 610 with 60" flexible hose, vacuum breaker and hook nozzle, or equal, unless specified otherwise.

6. Scrapping Troughs

- a. Furnish water inlet fitting and control valve as part of scrapping troughs ready for final connection. Furnish Fisher Model 2906 (or equal) Water Inlet Fitting with chrome plated control valve indexed "cold".

7. Vacuum Breakers

- a. Exposed piping above the backsplash shall be chrome plated.

8. Plumbing fixtures shall be identifiable as to the manufacturer.

9. Furnish built-in mechanically cooled water chillers and ice cooled cold plates with interconnecting insulated pipe between units and faucets installed and ready for final connection.

10. Backflow Preventors

- a. Furnish backflow preventors where required by governing agencies.
- b. Furnish Series 909 backflow preventor on all beverage equipment and ice makers.

F. HEATING EQUIPMENT

1. Furnish built-in gas and electric heating equipment as complete systems, in size and rating specified, ready for final connection.

- a. Controls shall be readily accessible.
- b. Equipment shall be readily cleanable or easily removable for cleaning.

2. Furnish thermostatic controls and low water protection on gas and electric heated ware-washer and utensil washer tanks.
3. Furnish thermostatic controls on gas heated appliances other than open burner units, hot plates, hot tops, and broilers, unless specified otherwise.
4. Furnish built-in steam heating equipment as complete systems, including valves, strainers, steam traps, gauges and pressure regulators in size or rating specified ready for final connection.
 - a. All control valves, gauges and safety valves shall be readily accessible.
 - b. All steam traps and check valves, shall be accessible.
5. Furnish buy-out steam operated equipment with necessary pressure regulators, traps and valves, etc., for final connection.

G. ELECTRICAL

1. Furnish a control switch and starter with overload protection for each motor driven appliance and electrical heating unit, unless specified otherwise. Switches shall be located out of the heat zone.
2. Furnish and install electrical devices, including hood lights unless specified otherwise, and do internal wiring of electrical apparatus built into or forming an integral part of fabricated equipment, complete to a J-box or breaker panel, as shown on plans, ready for final connection. Wiring shall be labeled for outlet or item served.
3. Make cutouts and install appropriate boxes or outlets in fabricated fixtures complete with wiring conduit, outlet and stainless steel or chrome cover plates.
4. Outlets and plugs shall conform to NEMA standards.
5. Electrical outlets and devices shall be first quality "Specification Grade".
6. Furnish cord and plug for mobile and portable equipment unless specified, or indicated otherwise.
 - a. Cord to be rubber covered, wire(s) of proper current capacity; furnish appropriate length.
 - b. Plug to be multi prong, ground type of proper NEMA configuration. (Verify for matching receptacle).
7. Where pedestal type service fittings are required, furnish T & S Model B-1508 or Model B-1518 with appropriate receptacle and satin stainless steel cover plate.
8. Furnish and install fluorescent (including ballasts) and incandescent fixtures, with lamps, when specified or shown on the drawings. Light switches and disconnects (unless a part of a fixture) shall be furnished and install by the Electrical Contractor.
9. Lamps in areas where food is prepared, cooked, served, open food is stored, or where utensils are cleaned shall be of shatterproof construction or shall be protected with shatterproof shields.
10. Furnish and install duplex, 120-Volt, convenience outlets on stationary work tables located away from a wall (island installation). The outlets should be mounted at each end and located just under the bottom edge of the work table top.

11. Where an electrical appliance, mobile or stationary, sets adjacent to a stationary island work table, furnish and install the electrical service outlet for that particular piece of equipment on the work table. The service outlet should be mounted at ends and located just under the bottom edge of the work table top.
12. Where an electrical appliance sits on a work counter, work table or serving counter, cutout the top and furnish a rubber or plastic grommet so the cord will be concealed below the work or serving surface.

H. MECHANICAL

1. Furnish and install stainless steel ducts, stacks and vents to finished ceiling connections from hoods, ventilators, ovens and other appliances furnished by this section, including installation of stainless steel trim at ceiling.
2. The flue risers of broilers, griddles, fryers, and other equipment furnished by this section, shall be verified for proper venting.
3. All equipment heights shall be verified for clearance under ceilings, beams, pipes, and exhaust devices including, hoods and ventilators.
4. Variation or modification of ventilators shall be the sole responsibility of the Kitchen Equipment Supplier.
5. In the event of construction modifications that would cause a deviation in the height of the ventilators and therefore effect the clearances between the ventilators and the cooking equipment, it shall be the sole responsibility of the KEC (Kitchen Equipment Supplier) to notify parties involved prior to the installation of the ventilators.

2.02 METAL FABRICATION

A. GENERAL

1. Custom fabricated items shall be fabricated by one manufacturer in an approved manner acceptable to Owner, Architect and Designer. The manufacturer shall have a minimum of three years experience in the manufacturing of food service equipment.
2. Weld top, splash, sink and panel construction, of 18 gauge or heavier, into uninterrupted integral units.
 - a. Seams and joints shall be shop welded where possible.
 - b. Exposed stainless steel to have No. 4 finish.
3. Grind and polish welds on stainless steel, with finish abrasion marks running longitudinally, to a No. 4 finish.
4. Grind smooth welds on galvanized steel and restore coating with Allstate No. 321 Galvanizing Powder or equal.

5. Conceal fasteners where possible; cap exposed bolts, nuts and pipe ends.
 - a. Use non-corrosive material.
6. Use 1 5/8 inch (41mm), 16 gauge stainless steel tubing for all legs, tubular supports and cross rails unless shown or specified otherwise.
 - a. Furnish stainless steel foot insert and leg socket for mounting each leg.
 - (1) Standard-Keil Model 1010-0802-1144 foot insert, or equal.
 - (2) Standard-Keil Model 1020-0206-1283 leg socket, or equal.
 - b. Furnish 6 inch (152mm) high cabinet base legs, including foot.
 - (1) Standard-Keil Model 1064-0642-1280 cabinet base leg, or equal.
7. For metal top tables, weld gussets to 14 gauge hat sections, or open channels.
8. Fully weld cross rails to legs 10 inches (254mm) above floor, grind smooth and polish.
9. Legs without shelves or cross rails shall have 1/2 inch (13mm) O.D. stainless steel pin for anchoring to floor.
10. Where tubular supports for overselves and utensil racks penetrate the top of work tables, sinks, counters, dishtables, etc. the tubular support shall be welded to the top, ground smooth and polished.
11. Underside of stainless steel tops for counters, tables, sinks, drainboards, and dishtables shall be coated with 1/8" (3mm) thick water-proof mastic material, non-asphaltic base, and painted with two coats of aluminum paint subject to current NSF requirements.

B. TOPS

1. Table tops, drainboards, counter tops, splashes and extensions shall be constructed of 14 gauge stainless steel, unless shown otherwise.
2. Tops with turned up rolled edges shall be reinforced with 14 gauge stainless steel closed hat sections, or open channels, spaced 30 inches (762mm) O.C. or less, fastened to threaded studs, welded to underside of top, with acorn nuts.
3. All tops with turned down rolled edges shall be reinforced with 14 gauge closed hat sections or open channels, spaced 30 inches O.C. or less, fastened to threaded studs, welded to underside of top, with acorn nuts.
4. All hat sections shall be sealed to underside of tops with pad of 3M-1000 sealant.
5. Raised rolled edges shall have a roll diameter of 1 1/2 inches (38mm). Corners shall be bull nosed.

6. Inside radius bends, wherever horizontal and vertical surfaces intersect, shall be 9/16 inches (15mm) or current NSF regulations.
7. All drainboard surfaces shall pitch toward drainers scrapping troughs, dishwashers and sinks.
8. Tops shall be turned down no less than 1 inch (25mm) into openings for ice bins; and a 1/4 inch (7mm) minimum raised embossment shall be provided on horizontal surface of top around entire perimeter of opening.
9. All openings for exposed foods shall be provided with 1/4 inch (7mm) minimum raised embossment on horizontal surface of top around entire perimeter of opening.

C. SINKS

1. Sinks that are integral with drainboards shall be fabricated and constructed of same gauge and material as drainboard and splash.
2. Sinks that are integral with table or counter top may be fabricated or die formed.
 - a. Fabricated sinks shall be of same gauge and material as top.
 - b. Die formed sinks shall be not less than 18 gauge stainless steel.
3. All interior vertical and horizontal corners shall be coved.
4. Partitions between adjacent sink compartments shall be one inch apart joined with continuously welded radius top closure.
5. Exterior front of multiple compartment sinks shall be continuous.
6. Bottom of sink compartments shall be "star- broken" to insure complete drainage to waste opening.

D. CABINETS

1. Fabricate visible parts of counter cabinets of 18 gauge stainless steel, unless shown otherwise, reinforced with formed steel sections, welded throughout to form a one-piece box-like structure, including front rails and mullions.

E. DRAWERS

1. Furnish all-welded 14 gauge stainless steel drawer front and interlocking channel supports, with large ball-bearing wheel suspension and stops; shall be easily removable; recessed stainless steel drawer pulls; 18 gauge stainless steel die-formed, easily removable, drawer bowl.
 - a. For drawers mounted on underside of open tables, furnish 18 gauge stainless steel enclosure on sides, rear and bottom. Furnish with keyed cylinder lock.
 - b. For drawers in refrigerated units, furnish large ball-bearing wheels and large flat track bearing surfaces; wheels and bearings of corrosion resistant, long wearing material, grease packed before assembly. Drawers shall be self-closing with easily removable drawer pans, perforated on all sides.

F. DOORS

1. Furnish double cased steel doors, unless specified otherwise; 18 gauge stainless steel outer pan with corners welded, ground smooth and polished; 20 gauge stainless steel inner pan fitted tightly into outer pan with sound deadening material, such as Celotex, used as a core; tack weld pans together and fill seams with Dow Corning No. 732, or equal, silicone rubber sealant; finished door shall be approximately 3/4 inches (19mm) thick and furnished with recessed pull.
 - a. Reinforce and stiffen with closed hat sections, single pan type doors, when specified.
2. Flush mount sliding doors; suspend with large ball-bearing quiet rollers in 14 gauge stainless steel overhead tracks; made easily removable.
3. Flush mount hinged doors.

G. SHELVES

1. All wall mounted shelves, elevated shelves and undershelves with open leg bases shall be constructed of 16 gauge stainless steel, unless shown otherwise.
2. Unless shown otherwise, wall mounted shelves shall be die-rolled down 1 1/2 inches (38mm) at front and ends, and turned up 4 inches (51mm) at back and flared. Where possible, shelves shall be mounted on concealed brackets. Otherwise, shelves shall be mounted on 14 gauge stainless steel brackets and anchored securely to wall.
3. Elevated and undershelves shall be as detailed. Where rolled edges are indicated, they shall be die-rolled down 1 1/2 inches (38mm). Elevated shelf supports shall extend below table or counter tops and be securely attached to structural frame. Where uprights supporting elevated shelves extend through counter tops the supports shall be welded to the tops and the welds ground and polished.
4. Shelf and flange of undershelf with open leg base shall be notched a full 90 degrees, with radius to match leg. Flange shall be welded to leg from back side, 10 inches (254mm) above floor.
5. Shelves in cabinet bases shall be constructed of 18 gauge stainless steel, unless shown otherwise.
6. Unless shown otherwise, shelves in cabinet bases shall be formed with minimum 2 inch (51mm) turn-up at back and sides and feathered to insure a tight fit to enclosure panels and shall be turned down at front.
 - a. Bottom shelves shall be removable unless shown otherwise.
7. Elevated shelves designed specifically to support appliances such as microwave ovens shall be constructed so support bracket flanges are not seen after the appliance is installed on the shelf.

H. EXPOSED DUCTS

1. Verify size and position of exhaust duct connections required for hoods, ventilators, washers and appliances; furnish and install 16 gauge stainless steel all welded ducts to ceiling connection locations. Welds on seams shall be continuous. Grind and polish welds to a No. 4 finish. Include stainless steel duct collar at exposed connection.

I. UNDERCOUNTER REFRIGERATORS

1. Outer casing shall be constructed of 18 gauge stainless steel, inner liner shall be of 20 gauge stainless steel with #2B finish unless shown otherwise.
2. Refrigerator shall be fully insulated with 2 inch (102mm) minimum thickness of urethane or styrofoam between outer casing and inner liner at top, bottom and sides including doors.
3. Entire perimeter of door opening shall be faced with a 1/8 inch (3mm) black bakelite thermal breaker strip approximately the width of mullion. Breaker strip at door sill shall be faced with 16 gauge stainless steel.
4. Door shall be constructed with 18 gauge stainless steel outer casing and 20 gauge stainless steel, #2B finish, inner lining, unless shown otherwise, moulded grey vinyl latex door gasket shall be attached to perimeter of doors with concealed fasteners.
5. Drawer fronts shall be of same materials as specified for doors. Insulation shall be of same material as used in refrigerator walls and shall be a minimum of 1 inch in thickness. Unless shown otherwise, drawers shall be provided with Standard-Keil Model 1260-1410-1283, or equal, flush style pulls.
6. All refrigerators shall be furnished with one 40 watt incandescent appliance light bulb and socket for each mullion connected in parallel with automatic door switch mounted in each door opening; full set of Kason No. 65 with No. 66 shelf clip bracket, or equal, stainless steel, removable adjustable pilaster standards for shelves for each refrigerator opening; two heavy-duty chrome plated wire shelves per compartment; one exterior reading, flush mounted dial type thermometer with -40 to +60 degree F. range.
7. All electrical wiring, including service for built-in evaporator coil fan shall be run in flexible conduit within refrigerator walls and shall terminate in external J-box mounted on end or rear of refrigerator cabinet in an accessible location for final connection.
8. Hardware for doors shall be Kason Model 218 self-closing edgemount hinge and Kason Model 171C, cylinder-locking, edgemount, magnetic latch, or equal, (all locks keyed alike).
9. All undercounter refrigerators shall be furnished with 20 gauge stainless steel box to house expansion valve located in base of fixture housing refrigerator or other concealed but accessible location.
10. Where cut-outs in refrigerator tops are specified or shown on detail drawings, raw edges of cut metal and insulation shall be covered with stainless steel sleeve. Counter top shall be turned down into opening to overlap sleeve with thermal barrier installed between. A stainless steel expanded metal guard shall be furnished for the full length and width of opening with sides attached to underside of refrigerator interior with closed bottom of guard located 6 1/2 inches (165mm) below counter top.

J. ICE BINS AND COLD PANS

1. Inner lining shall be constructed of 18 gauge stainless steel and outer casing shall be of 18 gauge galvanized iron, unless shown otherwise.

2. All ice bins and cold pans shall be fully insulated with 2 inch (51mm) minimum thickness of urethane or styrofoam between outer casing and inner liner.
3. Ice bins and cold pans shall be isolated from tops of supporting fixtures by means of thermal barrier.
4. Furnish 16 gauge stainless steel perforated false bottom raised one inch above bin or pan bottom.
5. Furnish one inch drain and extend to floor sink. Insulate with closed-cell foam sleeves secured with 10 mil pipe wrap tape.

K. BEVERAGE DISPENSERS

1. After the beverage lines have been installed in the chases the Kitchen Equipment Supplier shall seal the conduit with foam and cut flush with the top of the conduit and seal with two coats of black oil-based paint.
2. Insulate lines from the top of the conduit to the bottom of the dispensers with 3/4 inch (18mm) wall neoprene sleeve secured with 10 mil pipe wrap tape with no gaps.
3. Lines from point of entry into housing to be insulated with two layers of 1/8 inch (3mm) cork/tar insulation tape (as manufactured by Calgon Vestal, 1/8" x 2" x 30' rolls) in lieu of factory furnished insulation.
4. Factory and field-installed condensate drains to be insulated with closed cell foam sleeves secured with 10 mil pipe wrap tape.
5. Soda heads to be openable for brix (for adaptation to Pepsi from Coke and vice versa, Coke from Pepsi) the adjustment without dismantling the unit.
6. It is the responsibility of the Kitchen Equipment Contractor to furnish a Series 909 Backflow Preventor on all beverage dispensers.

L. WALL FLASHING

1. Wall flashing shall be of 20 gauge minimum stainless steel affixed to wall with heavy-duty, heat-resistant adhesive.
2. Flashing shall be fabricated from maximum width sheets for minimum amount of vertical joints and shall be sealed with silicone and capped with one-inch wide "T" moulding, without exposed screws or fasteners.
3. When wall flashing includes capping of wall ends, capping shall be fabricated from 16 gauge stainless steel.

4. Stainless steel wall flashing shall be installed behind every utensil washer, dishwasher, dishtable, potwashing/utensil sink assembly, vegetable preparation sink assembly and cooking line. The flashing shall run the full width of the washing machines, dishtables and sink assemblies and the full width of the ventilators. The flashing will extend from the top of the floor coving to a minimum height of 8'-0" (2440mm) behind sinks and dishtables and to the bottom of the hood behind cooking lines and dish or utensil washing machines. Adjacent walls shall be flashed the full depth of the equipment or the hoods whichever is greater.

M. CORNER GUARDS

1. Corner guards shall be fabricated of 14 gauge stainless steel, 2 inch (51mm) by 2 inch (51mm) minimum, 6 feet 0 inches (1220mm) high and have a bull-nosed 90 degree bend. Where possible the corner guards should be affixed to wall with a heavy duty, moisture and heat resistant adhesive. An alternative is to provide Model 150D/160D as manufactured by IPC/InPro, S80 W18766 Apollo Drive, Muskego, WI 53150.

N. WALL PROTECTION

1. In lieu of stainless steel, guard rails, Model 1300, manufactured by IPC/Inpro shall be provided along service and receiving corridor walls where carts traverse. Walls adjacent to cart storage areas shall also be provided with guard rails for wall protection. The Contractor shall coordinate the size, type, style, color and material with the Architect and Owner.

2.03 WOOD AND LAMINATED CONSTRUCTION

A. GENERAL

1. Wood fixtures included under this section shall comply with the requirements of the drawings, and the following listed standard specifications.
 - a. Manual of Millwork (latest edition), issued by Woodwork Institute of California (WIC), 1833 Broadway, P.O. Box 11428, Fresno, California 93773.
 - b. Specification Guide for Cabinet and Fixture Work, (latest edition), issued by the Cabinet and Fixture Manufacturers' Guild, 1225 Post Street, Mezzanine, San Francisco, California 94109.
2. Wherever laminated plastic materials are specified for cabinet work, counter or top facing, they shall be veneered with Urea Based cement, and shall be waterproof and heatproof. Rubber based adhesives are not acceptable. Top sheets shall be placed on and over finished edges.
3. Selection of colors, pattern, laminates, paint, stain and varnish shall be made by the Architect.

B. INTERIOR FINISHES

1. Finish interior surfaces of cabinets, including shelves and drawers as follows: (except when specified otherwise).
 - a. Cabinets: Stain to match exterior finish of cabinets; finish with one coat of clear plastic varnish.

- b. Shelves: Stain to match exterior finish of cabinets; finish with two coats of clear plastic varnish.
- c. Drawers: Finish inside and outside with one coat clear plastic varnish.
- d. Doors and Panels: When exterior and edges are of plastic laminate, apply plastic laminate backing sheet and finish doors with one enamel coat to match exterior color.
 - (1) Omit enamel finish on sliding doors with plastic laminate backing.

PART 3 EXECUTION

3.01 UTILITIES, STORAGE AND SPECIAL HANDLING

- A. The Contractor will determine whether temporary power and light is provided. Verify openings and storage space to permit scheduled delivery of equipment.
- B. Verify door openings, passages and conditions at the building. Pay all special handling equipment and equipment charges.

3.02 CONDITIONS AND PREPARATION

- A. Verify all pertinent dimensions of the building and examine conditions affecting proper execution of this Section. Evaluate access to various areas for moving in of equipment and coordinate with General Contractor.
- B. Verify water pressure and provide necessary reducing valves.
- C. Inspect flooring and raised concrete bases, wall finishes; verify existence of required mechanical and electrical rough-ins; check painting, ceiling installation and all related work for readiness to receive installation of kitchen equipment.
- D. Sweep clean all floor areas and tops of raised concrete bases before setting equipment in place; remove any spillage of foreign matter.

3.03 EQUIPMENT CONNECTIONS

- A. Be sure equipment is complete with connections terminals as standardized by equipment manufacturers, except where specified otherwise for other to making plumbing, electrical, ventilation and refrigeration connections.
- B. Provide buy-out and fabricated refrigerators and freezers without electric condensate evaporator, including refrigerated drawer sections, ice pans, ice bins, sinks, and other equipment requiring indirect wastes, with drain tubing extended to drain location. Insulate drain tubing carrying chilled water with Armstrong Armofex #22 pipe insulation or equal.
- C. All exposed utility lines, valves, gauges, tubing, and conduit including mounting brackets, etc.: make chrome plated, stainless steel or sheathed in stainless steel.

3.04 TRIMMING AND SEALING EQUIPMENT

- A. Completely close and seal with stainless steel trim strips, welding, soldering, mastic or epoxy sealant: all gaps, joints and seams between fixtures and wall, ceiling and floor.
 - 1. Do not use mastic in joints or seams which exceed 3/16" width.

- B. Seal all hollow sections.
- C. Cap all exposed ends of back-splashes with stainless steel, welded, ground smooth and polished.
- D. Concrete bases indicated on drawings shall be supplied by the Contractor. Set fixtures resting on bases into a mastic bed to eliminate crevices between fixture and base, and caulk after installation has been completed.
- E. Where applicable, ends of all fixtures, splash backs, shelves, etc.: finish flush to walls or adjoining fixtures.

3.05 CLEANING

- A. Remove all debris, crates and packages resulting from this work are from the premises or the area designated by the project superintendent.
- B. Have all food service equipment cleaned and ready for use when the structure is turned over to the Owner.
 - 1. Protection of completed and cleaned work is the responsibility of the Contractor.
 - 2. Include cleaning of all "Owner Furnished" equipment listed in the Specifications or Schedule, or indicated on Drawings.

3.06 ADJUSTMENT OF EQUIPMENT AND DEMONSTRATION

- A. Turn on all mechanical equipment, test for leaks, poor connections, inadequate or faulty performance and correction if necessary; adjust for proper operation.
- B. Operate all thermostatically controlled equipment and equipment with automatic features for a sufficient length of time to prove controls are functioning as intended.
- C. Have the Owner select time and date to arrange for a demonstration of all mechanical equipment for the Owner and/or his appointed representatives, to be conducted by the representatives of the various equipment manufacturers, with the Contractor in attendance.

3.07 EQUIPMENT SCHEDULE

Item No. 1 - Cold Storage Rooms (1 UNIT REQ'D)

Provide necessary labor, material, equipment and tools for complete installations of Econocold System 34-1 Modular Thermal Barrier Panel room as manufactured by Refrigerator Manufacturers Inc., to conform with drawings and specifications as detailed herein. Unit shall have U.L. listing for both panels and electrical, shall bear the N.S.F. stamp of approval. and shall bear a label indicating Class 1- Insulated Panel as certified by an independent testing laboratory.

Shop Drawings

Wall partition and "T" panel, corner and ceiling panels

Finished floor and coved bases

Doors and finish hardware

Light fixtures and switches

Digital thermometer and alarm

Finish Trim

Enclosure panels

Coil supports

Utility penetrators

Escutcheon plates
Pressure relief vents
Freezer door fan switch
S/S Bumper guards

Interior ceiling height shall be 9'-0"

Related Work in Other Sections:

Mechanical Refrigeration System
Concrete work
Sealing and caulking utility penetration (included under section in which utility is installed)
Insulating refrigeration lines
Installation of light fixtures
Electrical service connections for: Light and switches, heater cables at freezer door, temperature alarms, as required.
Floor sinks or drains
Sub floor
Wearing floors

Materials:

All wall and ceiling panel insulation shall be 4 and 5 inches thick foamed-in-place. Urethane Foam Insulation: Rigid fluorocarbon filled, over 90 percent closed cell content, nominal density of 2.2 pounds per cubic foot +0.1 CF -0.

Dimensional Stability: No change from -100 degrees F. to +200 degrees F.

Flammability: Less than 25 flame spread and less than 450 smoke density when tested in accordance with ASTM E84 and UBC Section 1712.

Classification: Class 1, 0-25 flame spread in accord with UBC Std 42-1 (based on UL 723 which is similar to ASTM E84 (comparable to UL 723, ANSI/NFPA No. 255 and UBC No. 8-1) (the Steiner Tunnel Test); and Class "A" Interior Finish in accordance with NFPA 101, Section 6-2, and NFPA 255.

Thermal Conductivity: (K-Factor) shall not exceed 0.14 BTU per hour per square foot per degree F. per inch thickness as tested in accordance with ASTM C177 at 75 degrees F. mean temperature.

Sheet aluminum: ASTM B209, Alloy 5052 H34.

Stainless steel sheet: ASTM A167, type 304, No. 4 finish.

Galvanized steel sheet: ASTM A525, G90.

Silicone sealant: FDA approved sealant, GE1200 or other approved.

Foil laminated kraft paper: 0.01 perm per ASTM E96, Fortifiber "Poly Foil Barrier," or other approved.

PVC membrane: 0.01 perm per ASTM E96 or less.

Asphalt emulsion: ASTM D1187 clay type.

Fiber Glass Reinforced Plastic (FRP): Low smoke Fire-X Kemlite "Glasbord" or equal, USDA accepted, UL 790, smoke 75, fuel 5, class B flame spread less than 50.

Panel Fabrication:

Wall and ceiling panel shall be modular sandwich panel design based on frothed-in-place or foamed-in-place construction, without any wood or metal frame.

Sheet metal facing shall be flanged 1/2 to 3/4 inches perimeter of each sheet.

Corner panels and "T" panels shall be matching one-piece construction including 1/2-inch minimum radius at all inside vertical corners.

Panel joints shall be sealed with PVC gasket at interior and exterior panel edges, maintaining continuity.

Wall panels shall be set in concealed continuous 18 gauge galvanized steel or extruded aluminum floor track anchored to sub-floor with drive pins, 24 inches O.C. wall panels shall be sealed to building floor with continuous bead of sealant.

Roof panel joints shall offset or lap wall panel joints matching alignment of wall/roof joints will not be accepted. Typical 46" wall panels must have minimum of 2 connectors at wall/ceiling juncture.

Lateral alignment of adjoining panel shall be provided by continuous tongue and groove mating edges.

Panels shall be rigidly coupled by cam action locks, foamed in place, maximum 4 foot centers. Section lock parts shall be finished with PVC snap-in button.

Maximum deflection of ceiling panels shall not exceed 1/240 of the span under a loading of 20 pounds per square foot. If the ceiling spans require a support system, the contractor shall submit details and structural calculations demonstrating conformance with specified requirements.

Panel Facia:

Interior face of wall panels shall be clad with .040" stucco embossed aluminum.

Exterior exposed face of wall panels shall be clad with .18 Ga stainless steel, type 302 #4 finish.

Exterior unexposed face of wall and ceiling panels shall be clad with 24 gauge galvanized steel.

Interior face of ceiling panels shall be .040" aluminum with white acrylic finish.

Interior face of floor panels shall be 14 Ga stainless steel, type 302 #4 finish.

Floor :

Membrane: Asphalt emulsion ASTM D1187 clay type shall be applied to clean, smooth concrete subfloor. Cover with 6 mil Visqueen (polyethylene film) as determined by ASTM-E96-80 extending under wall panels, joints lapped 6 inches minimum.

Floor Insulation: Floors in refrigerator and freezer shall be insulated with rigid, Urethane foam of same density and conductivity as panel insulation with 3/4 " marine grade plywood.

Vapor Permeable Separation: 15 pound felt, protective slip sheet shall be applied over insulation, flashed up height of cove and joints lapped 6 inches minimum.

Freezer Door:

Door opening size shall be 3 feet wide by 6 feet 8 inches high, or sized as shown on drawing.

Door shall be insulated with 3 inches thick core of same insulating material specified for wall panels. The ambient side of freezer door perimeter and door jamb, including threshold shall be provided with 120 volt, 500 watt heating element, including thermostat control, factory wire to "GS" splice box located above door at interior face of wall panel.

Front, back and edges of doors shall be clad with stainless steel, 304, #4 finish. Sheet metal joints of doors and door frames shall be heliarc welded, ground smooth and polished.

Door casing shall be raised $\frac{3}{4}$ inch and 4 inches wide, at sides and head, clad with 18 gauge steel metal, matching door face.

The threshold shall be a removable $\frac{1}{8}$ " thick stainless steel plate.

Provide 22 inch by 40 inch, tempered hermetically sealed multipane glass vision panel in prefabricated refrigerator and freezer door. Freezer door vision panel shall be furnished with electrically conducting, transparent tin coating on interior face of ambient pane connected to main door circuit.

Each door shall have interior and exterior kickplate of 16 gauge stainless steel, type 304 #4 finish, and shall be 3 feet high and full width of door.

Three hinges, each door, shall be nylon cam stainless steel pin, zinc die cast, polished chrome finish.

Lock shall be mortise deadlock, including inside release, with bronze or stainless steel components. Exposed surfaces chrome plated. Cylinders shall be keyed differently and master keyed.

Door pull shall be high pressure die cast zinc highly polished chrome plated.

Hydraulic rack and pinion door closer shall have automatic hold open. Finish shall be three coat aluminum with lacquer final coat.

Gasket shall be extrude polyvinyl chloride with corners vulcanized and continuous magnetic core at side and head of door jamb.

Sill wiper shall be extruded neoprene secured by removable stainless steel retainer strip and stainless steel fasteners.

Hardware shall be mounted with reinforced steel tapping plates and stainless steel machine screws.

Interior door cart bumper bar shall be $\frac{1}{4}$ " X 2" aluminum bar, 3'-0" A.F.F..

Interior door jamb guards of 3/16 aluminum tread plate 48" high.

Refrigerator Door Plexecon:

Plexecon Cooler Door;

- 36" x 80"

- 1" thick clear acrylic panel

- 14 gauge stainless steel, vertical back to back door pulls, secured with $\frac{1}{4}$ " #20 stainless steel machine screws and stainless steel acorn nuts

- 14 gauge stainless steel kickplates, 12" high, front and back

- Minimum 3 cam lift hinges, chrome finished

- Hydraulic rack and pinion door closer

- Rim night latch with key cylinder

- Close cell neoprene gasket
- Neoprene adjustable sill wiper
- 14 gauge stainless steel one piece casing and jamb heliarc welded, ground and polished
- .3/16" mild steel reinforcing plates
- Thermostatically controlled frame heater at sides, head and sill
- Threshold; removable 1/8" stainless steel plate with flathead counter sunk stainless steel machine screw

Pressure Relief Valve:

Factory mount in head section, above each freezer door, and connect to 115 volt splice box electrically heated, screened aluminum vent, designed to automatically equalize room pressure.

Light Fixtures and Switches:

Quantity of light fixture shall be as indicated on the Food Service Equipment Electrical Plan.

Fixtures shall be Marco Model N721001 or Luminaire Model LVP1212-STSC-GASK-CLBS with night light, or equal, cast aluminum, fully enclosed and gasketed for vaportight, weathertight operation, with shatterproof diffuser and furnished with two 100-watt lamps and one 10-watt lamp.

Provide vaportight cast junction box and galvanized steel nipple of proper length to terminate at exterior of roof panel.

Factory install and wire interior and exterior companion 3-way and 4-way AC press-switches, where indicated, mounted "FS" boxes adjacent to latch sided of door openings.

Switch covers shall be neoprene, weatherproof press-switch plates, or equal.

Provide pilot light with unbreakable red plastic lens embedded in neoprene plate.

1. Interior red light - constant burning
2. Exterior red light - indicating

Rigid zinc coated steel conduit and wiring shall be run within insulated wall panel. Conduit shall be terminated in vaportight splice box mounted on inside wall of compartment near ceiling.

Provide 1 1-1/4 inch diameter hole in ceiling panel through which electrical contractor shall make power connection.

Only conduit and wiring within wall panel, including boxes, light fixture, switches and cover plates, shall be furnished as part of this section.

Digital Thermometer and Alarm:

Each refrigerated compartment shall be monitored by a digital electronic temperature alarm Datalarm, (flush mount enclosure). The alarm shall provide a constant digital readout status indicators, a green safe light and a red alarm light. Under normal conditions, the green light extinguishes and the red light begins to blink, indicating that an abnormal temperature remains abnormal beyond the allotted time delay, the red light comes on constantly. Simultaneously, the horn will sound to provide audible annunciation, and the self contained relay will be reset manually with the alarm control switch. Fail safe circuitry shall prevent accidental disabling of the unit. The alarm shall be enclosed in drawn aluminum enclosure with a stainless steel faceplate.

Finish Trim:

Furnish and install matching sheet metal angles to fill tolerance gaps between face of refrigerator walls and building walls.

Coil Supports:

Furnish to the mechanical refrigeration contractor sufficient quantity of 1/2 inch diameter nylon threaded rods with stainless steel nuts and washers to accommodate support of refrigeration coils.

Utility Penetrations:

Provide penetrations at refrigerator and freezer wall and ceiling panels to accommodate electrical, refrigeration lines and drain lines.

Escutcheon Plates:

Furnish sufficient quantity of 5 inch diameter stainless steel escutcheon plates for each trade to dress off utility penetrations.

Each trade shall be responsible for cutting hole in blanks and sealing of respective penetrations.

Item No. 2 - Refrigeration System, Preassembled Remote (1 REQ'D)

Furnish and install Omni Temp water pre-cooler model WA1-AC-H-2-0-3 outdoor air-cooled remote refrigeration rack system, UL listed for outdoor use. Refrigeration system shall maximize the BTUH capacity per kilowatt hour, thus reducing energy consumption and increasing compressor efficiency and life.

Outdoor Air-Cooled Refrigeration System

The systems shall be enclosed in a single cabinet. The cabinet shall be made up of an angle iron frame with a minimum of two (2) welded surfaces at each joint. The frame shall receive a minimum of two (2) coats of rust resistant paint. Frame shall contain four (4) 2" O.D. lifting eye bolts. The frame shall be enclosed with a sheet metal enclosure consisting of 24 gauge sheet metal top, sides, plenum and free flow louvered side panels. The entire enclosure shall be pre-assembled, welded, cleaned, primed and finish painted with Baja Beige polyurethane acrylic enamel paint.

Condensing Units

Refrigeration Engineering Summary and utilize Refrigerant R404-A.

Each condensing unit shall have an automatic reset high-low pressure control switch having an adjustment range differential with quick acting type operating from the low pressure side and high pressure side cutout switch if head pressure becomes excessive. Each unit shall be prepped with a liquid line sight glass, filter drier, isolation valves and vibration eliminator.

The condensing units shall have installed head pressure control devices and crankcase heater for low ambient conditions. Condenser fans will cycle by sensing head pressure, not ambient temperature.

All freezer condensing units of two horsepower and greater shall be provided with accumulators on the suction line at the compressor location and oil separators.

The air-cooled unit condenser to be tubular cross-finned design. Each shall be evenly cooled and ducted to the Omni Temp Plenum system for horizontal flow of 85 degree Fahrenheit air across the condenser surface, not allowing for any recirculation of discharge air. Plenum depth shall be engineered for maximum air flow with no carry over from the Omni Temp hydroboost system. Condenser surfaces shall be treated with Omni Temp Protecto-Coat to resist salt spray, oils, grease, acid and oxides.

The receiver shall be sized on each compressor unit with the pump down capacity large enough to contain the total system refrigerant without exceed its volumetric capacity. Each receiver shall be furnished with "King," "Queen," and "Ozone Free" isolation valves and "Omni Temp Removal System."

Electrical Control Panel

All remote refrigeration systems shall be UL or equivalent test laboratory listed and bears the label. The system shall have a factory mounted NEMA3 electrical control completely prewired with individual electrical controls including breakers, fuses, contractors, time clocks crankcase heaters and switches to a main disconnect for a single point power connection in the field.

Pre-Piping

All refrigeration lines shall be type "L" copper tubing and extended to one side of the remote refrigeration package in a neat and orderly manner. All lines shall be securely supported and anchored with uni-strut channel and clamps. Suction lines shall be insulated to prevent condensation. Piping shall be pressure tested at the factory with nitrogen at 150 psi on the low side and 400 psi on the high side, sealed and sipped with a nitrogen holding charge.

Water Pre-cooler

The remote refrigeration system shall include precooling package consisting of a specially coated media panel for maximum evaporative efficiency and an extremely low resistance factor for air flow. The media panel is contained within a PVC holding frame.

Evaporator Coils

The evaporator coils as specified by the drawings shall be the direct expansion type, compressor BTUH matched low profile, endmount style. Each evaporator coil shall be treated with Omni Temp Protecto-Coat to resist salt spray, oils, grease, acid and oxides. Evaporators shall be equipped with thermostat, liquid line solenoid valve and balanced port expansion valve.

Energy Management Control

Omni Temp Energy Management control significantly reduces monthly operating costs by reducing the operating discharge pressure in relation to the ambient condition. With a reduced compression ratio and liquid subcooling, management system operation dramatically reduces system run time and adds the long term benefit of increased compressor life.

SYSTEM A - WALK-IN FREEZER

1Required

Provide an air-cooled scroll condensing unit 208 volt, 3 phase current having a capacity at -20 degrees evaporating and 90 degrees F. ambient air temperature. Provide additional equipment as follows:

- A. Hot gas defrost evaporator.
- B. Liquid line solenoid and thermostat, accumulator in suction line.
- C. Dryer, strainer, expansion valve and heater exchanger.
- D. Defrost timer and cycle to maintain a frost free evaporator.
- E. Drain line heaters and drain from evaporator to floor sink.
- F. Oil line shut-off valve and oil separator.
- G. Liquid and suction lines to compressor, "P" trap on Suction line.
- H. Low and High pressure head pressure devices to protect compressor from damage.

SYSTEM B - WALK-IN REFRIGERATOR

1Required

Provide an air-cooled scroll condensing unit 208 volt, 1 phase current having a capacity at 25 degrees F. evaporating and 90 degrees F. ambient air temperature. Provide additional equipment as follows:

- A. Evaporator.
- B. Liquid line solenoid, thermostat, expansion valve and heat exchanger.
- C. Drain from evaporator to floor sink.
- D. Liquid and suction lines to compressor, "P" trap on suction line.

Item No. 3a - Shelving, Wire (10 REQ'D)

Eagle Group Model QA2436C

QuadAdjust™ Wire Shelf, 36"L x 24"W, interlocking corners, tapered split sleeves,

QuadTruss® design, chrome finish, NSF

Accessories:

8 ea Post, 74"H, chrome finish, for stem casters (mobile application)

8 ea Stem Caster, brake, 5" diameter, 1-1/4"W face, polyurethane wheel tread, 300 lb. capacity, stainless steel, donut bumper

Item No. 3b - Shelving, Wire (40 REQ'D)

Eagle Group Model QA2442C

QuadAdjust™ Wire Shelf, 42"L x 24"W, interlocking corners, tapered split sleeves,

QuadTruss® design, chrome finish, NSF

Accessories:

32 ea Post, 74"H, chrome finish, for stem casters (mobile application)

32 ea Stem Caster, brake, 5" diameter, 1-1/4"W face, polyurethane wheel tread, 300 lb. capacity, stainless steel, donut bumper

Item No. 4a - Shelving, Wire (10 REQ'D)

Eagle Group Model QA2148C

QuadAdjust™ Wire Shelf, 48"L x 21"W, interlocking corners, tapered split sleeves,

QuadTruss® design, chrome finish, NSF

Accessories:

8 ea Post, 74"H, chrome finish, for stem casters (mobile application)

8 ea Stem Caster, brake, 5" diameter, 1-1/4"W face, polyurethane wheel tread, 300 lb. capacity, stainless steel, donut bumper

Item No. 4b - Shelving, Wire (20 REQ'D)

Eagle Group Model QA2442C

QuadAdjust™ Wire Shelf, 42"L x 24"W, interlocking corners, tapered split sleeves,

QuadTruss® design, chrome finish, NSF

Accessories:

16 ea Post, 74"H, chrome finish, for stem casters (mobile application)

16 ea Stem Caster, brake, 5" diameter, 1-1/4"W face, polyurethane wheel tread, 300 lb. capacity, stainless steel, donut bumper

Item No. 4c - Shelving, Wire (120 REQ'D)

Eagle Group Model QA2448C

QuadAdjust™ Wire Shelf, 48"L x 24"W, interlocking corners, tapered split sleeves,

QuadTruss® design, chrome finish, NSF

Accessories:

96 ea Post, 74"H, chrome finish, for stem casters (mobile application)

96 ea Stem Caster, brake, 5" diameter, 1-1/4"W face, polyurethane wheel tread, 300 lb. capacity, stainless steel, donut bumper

Item No. 5 - Bag in Box/Syrup Tank Rack (1 REQ'D)

Eagle Group Model 3B2148C

Bag-N-Box System, 21"W x 48"L x 54"H, (3) slanted shelf & (2) standard shelves, chrome-plated finish w/MasterSeal® coating

Item No. 6 - Ice Maker, Cube-Style (1 REQ'D)

Scotsman Model C0630SA-32B

Prodigy™ Ice Maker, Cube Style, air-cooled, self-contained condenser, up to 776-lb production/24 hours, stainless steel finish, small cube size, 208-230v/60/1-ph, 18.2 amps

Accessories:

- 1 ea 3 year parts & labor warranties
- 1 ea 5 year parts & labor warranties on Evaporator
- 1 ea 5 year parts on compressor and condenser
- 1 ea Prodigy™ Vari-Smart™ Ice Level Control, program ice bin levels to match ice needs
- 1 ea Prodigy SmartBoard™, uses additional operational data for fast diagnosis
- 1 ea Ice Bin, w/top-hinged front-opening door, up to 536-lb ice storage capacity, for top-mounted ice maker, stainless steel exterior, polyethylene liner, includes 6" legs
- 1 ea Legs w/Flanged Feet, 6", for B series bins
- 1 ea Ice Scoop Holder, fits all modular ice storage bins, stainless steel
- 1 ea Water Filter Assembly, dual system, designed for ice makers & beverage equipment, includes AquaArmor by AgION for antimicrobial protection

Item No. 7 - Equipment Stand, for Slicer (1 REQ'D)

Sammons Equipment Model 2607-2730-3

Portable Table/Slicer Stand, heavy duty, 27-5/8" x 30-3/8" x 30"H, open w/3 sets of slides, welded stainless steel construction, 5 " all swivel casters, NSF

Accessories:

- 4 ea 5" polyurethane casters, in lieu of standard
- 2 ea Additional brakes on 2 casters

Item No. 8 - Food Slicer (1 REQ'D)

Bizerba Model SE12D PRO W/LIFT

(345706) PRO Slicer w/ seamless aluminum rear wall, w/Lift Device, automatic or manual, gravity feed, 13" (330mm) dia. hard chromium-plated blade, anodized aluminum carriage and gauge plate, slice thickness 0" - 0.94" (0-24mm), aluminum housing, 120v/60/1-ph with servo assist

Accessories:

- 1 ea 120v/60/1-ph, 6.6 amps, 740 watts

Item No. 9 - Sink Unit, Prep (1 REQ'D)

Custom Fabricated. See Details. Furnish T&S #B-0290-04 Faucets and T&S # B-3990 modular wastes.

Item No. 10 - Spare No.

Item No. 11 - Rack, Pots, Pans, Mobile (4 REQ'D)

Eagle Group Model L2336PSM-M

LifeStor® Shelf, Louvered, 23"W x 36"L, complete shelf with stainless steel frame and (4) connector kits, stainless steel front-to-back side braces and side-to-side rails, Microgard™ treated shelves, NSF, for mobile applications

Accessories:

- 4 ea LifeStor® Caster Post, 63"H, 1-1/4" outside diameter, grooved at increments, with top cap, casters are not included, stainless steel
- 4 ea Stem caster, swivel with brake, 5" diameter, urethane, 250 lb. capacity, (stainless steel or zinc sides braces are required for use)

Item No. 12 - Pot Table (1 REQ'D)

Custom Fabricated, See details.

Item No. 13 - Potwasher, Door/Hood Type (1 REQ'D)

Champion Model D-HBT-E(70)

Dishwasher, door type, extended hood, high temp. with built-in 70° rise electric booster, straight thru design, adjustable 1, 2, 4 or 6 minute cycle, door safety switch, auto-fill, s/s front & side panels, s/s construction, electric tank heat

Accessories:

- 1 ea One year limited warranty, std.
- 1 ea 208v/60/3, 58.0 amps
- 1 ea Water pressure regulating valve (unmounted)

Item No. 14 - Hood, Type II, Heat & Vapor (1 REQ'D)

Furnish Halton model CH exhaust Ventilator complete per the manufacturers standard specifications.

Item No. 15 - Sink Unit, Pot Washing (1 REQ'D)

Custom Fabricated. See Details. Furnish T&S #B-0290-04 Faucets and T&S # B-3990 modular wastes.

Item No. 16 - Scrapper, Waste Collector (1 REQ'D)

Salvajor Model S914

Scrap Collector, scrapping, pre-flushing & collecting system (widely accepted in areas where disposers are restricted), w/salvage basin and silverware trap, 3/4 HP corrosion-resistant pump, stainless steel construction, start/stop pushbutton control panel, w/safety line disconnect

Accessories:

- 1 ea 115v/60hz/1-ph, 11.0 amps

Item No. 17 - Hose Reel, Wall Mounted (1 REQ'D)

Shall be BusBoy #BSR900-SS wall mounted Hose Reel. Include pressure type backflow device, 30' of pressure hose, two check valves, temperature control, water hammer arrestor, 16 Ga SS removable enclosure, shut-off valves, all hard copper piping.

Item No. 18 - Sink, Hand (2 REQ'D)

Eagle Group Model HSA-10

Hand Sink, wall model, 14-3/4" x 18-7/8" with 7-1/2" backsplash, stainless steel construction, requires splash mounted faucet, deep-drawn seamless design-positive drain, NSF approved

Accessories:

- 1 ea Extra Heavy Duty Gooseneck Faucet, wrist handles, splash mount 4" O.C., NSF
- 1 ea Crumb Cup Strainer Assembly, with 1-1/2" outlet, drain assembly for P1916 or W1916
- 1 ea Paper Towel Dispenser, wall mounted, folded towel dispenser, stainless steel construction, NSF
- 1 ea Soap Dispenser, conventional, NSF
- 1 pr Side Mount Wall Brackets, one pair, fits standard HSA models only

Item No. 19 - Table with Sink (1 REQ'D)

Custom Fabricated. See Details. Furnish T&S #B-0327 Faucet and T&S # B-3990 modular waste.

Item No. 20 - Spare No.

Item No. 21 - Food Processor, Electric (1 REQ'D)

Robot Coupe Model R602V

Combination Food Processor, 7 qt. stainless steel bowl with handle, continuous feed kit with half moon shaped & cylindrical shaped hoppers, "S" blade, 28058 1/8" (3mm) grating disc, 28064 1/8" (3mm) slicing disc, variable speed, 370 - 3450 RPM, 120v/60/1-ph, 15 amps, 3 HP, NEMA 5-15P, ETL, cETL

Accessories:

- 1 ea 1-Year parts & labor warranty

Item No. 22 - Equipment Stand, for Mixer (1 REQ'D)

Sammons Equipment Model 2607-2730-2SL

Portable Table/Slicer Stand, heavy duty, 27-5/8" x 30-3/8" x 34"H, solid middle and bottom shelves, welded stainless steel construction, 5 " all swivel casters, NSF

Accessories:

- 4 ea 5" polyurethane casters, in lieu of standard
- 2 ea Additional brakes on 2 casters
- 1 ea Accessory utensil/pots & pans storage rack

Item No. 23 - Food Mixer (1 REQ'D)

Varimixer Model W20A

Mixer, Food, Bench, 21-qt. capacity bowl, variable speed, 1HP motor, powder coating finish, 15 min. timer, includes: s/s bowl, s/s dough hook, s/s wire whip, s/s flat beater, thermal overload protection, #12 attachment hub, s/s lid, bowl screen

Accessories:

- 1 ea One year parts and labor warranty
- 1 ea 115v/60/1, standard

Item No. 24 - Counter (1 REQ'D)

Custom Fabricated, See details.

Item No. 25 - Rice Cooker (1 REQ'D)

Thunder Group Model SEJ-50RC

Rice Cooker/Warmer, electric, 30 cup capacity, cooks in 30 minutes, hinged cover, stainless steel exterior, 110-120V, 60Hz, 1500 watts, NSF

Item No. 26a - Combi Oven, Gas, Full Size (1 REQ'D)

RATIONAL Model SCC 62G

SelfCooking Center® with CareControl, full-size, gas, SelfCooking control w/9 modes, Combi-Steamer w/3 modes, (6) 18"x26" or (12) 12"x20" pan cap., CleanJet auto-clean, CDS self-clean, core temp probe w/6 point measurement, retractable hand shower, hinging rack rails & 3 s/s grids, USB interface, 81000BTU

Accessories:

- 1 ea Standard warranty: 2 year parts and labor warranty with registration of unit (subject to terms defined in the full warranty), first instruction
- 1 ea Natural Gas, AGA/PRV
- 1 ea 120/60/1ph
- 1 ea RATIONAL Certified Installation, includes: 1. Travel within 50 miles (100 miles RT) of installer, 2. Pre-Installation site survey, 3. Assembly of the unit, 4. Placement of the unit, 5. Leveling of the unit, 6. Connection of utilities within 3 feet of unit, 7. Operational functional test. Installation of units outside of a major metropolitan area will require an additional travel charge payable by the customer, installation does not include removal of old equipment.
- 1 ea Installation Kit "10", for gas SCC/CM 61G (120/60/1), SCC/CM 101G (120/60/1), SCC/CM 62G (120/60/1) (for detailed information, contact factory for details)
- 1 ea Door hinged on left
- 1 ea Combi-Duo Kit, Mobile, casters with locks, for electric or gas SCC62 or CM62 stacked on electric SCC62, CM62, SCC102 or CM102
- 1 ea 3/4" quick disconnect w/48" hose
- 1 ea 36" restraining device

Item No. 26b - Combi Oven, Gas, Full Size (1 REQ'D)

RATIONAL Model SCC 62G

SelfCooking Center® with CareControl, full-size, gas, SelfCooking control w/9 modes, Combi-Steamer w/3 modes, (6) 18"x26" or (12) 12"x20" pan cap., CleanJet auto-clean, CDS self-clean, core temp probe w/6 point measurement, retractable hand shower, hinging rack rails & 3 s/s grids, USB interface, 81000BTU

Accessories:

- 1 ea Standard warranty: 2 year parts and labor warranty with registration of unit (subject to terms defined in the full warranty), first instruction
- 1 ea Natural Gas, AGA/PRV
- 1 ea 120/60/1ph
- 1 ea RATIONAL Certified Installation, includes: 1. Travel within 50 miles (100 miles RT) of installer, 2. Pre-Installation site survey, 3. Assembly of the unit, 4. Placement of the unit, 5. Leveling of the unit, 6. Connection of utilities within 3 feet of unit, 7. Operational functional test. Installation of units outside of a major metropolitan area will require an additional travel charge payable by the customer, installation does not include removal of old equipment.
- 1 ea Installation Kit "10", for gas SCC/CM 61G (120/60/1), SCC/CM 101G (120/60/1), SCC/CM 62G (120/60/1) (for detailed information, contact factory for details)

- 1 ea Door hinged on left
- 1 ea 3/4" quick disconnect w/48" hose
- 1 ea 36" restraining device

Item No. 27 - Range, 36" Four Burners, Oven, Mobile, Gas (1 REQ'D)

Southbend Model 4367D

Ultimate Restaurant Range, Gas, 36", 4 Pyromax burners with standard grates, standard oven base, 214,500 BTU

Accessories:

- 1 ea Standard three year limited warranty (CKD 91011)
- 1 ea Natural Gas, AGA/PRV
- 1 ea Battery spark ignition includes applicable open top burners, griddles and oven base pilots
- 1 ea Electric spark ignition
- 1 ea Casters, 4 locking, in lieu of legs
- 1 ea 10" riser in lieu of standard 22.5" high back riser
- 1 ea 3/4" quick disconnect w/48" hose
- 1 ea 36" restraining device

Item No. 28 - Pot Filler Faucet (1 REQ'D)

T & S Brass Model B-0610-JJ

Pot Filler Faucet, splash-mounted, 8" centers, vacuum breaker, flexible stainless steel hose, 68"L, hooked nozzle with self-closing valve, "JJ" 1/2" IPS female inlets with loose key stops, built-in check valves

Item No. 29 - Wok Range, Three Rings, Gas (1 REQ'D)

AllStrong Model ARE-3-13-20-13

Wok Range, Gas, (3) chambers, fire brick lined chambers, water cooled top, chinese swing faucets, knee "L" lever gas handle, s/s sides, ETL, NSF

Accessories:

- 1 ea Natural gas, AGA/PRV
- 1 ea 1st Chamber: 13" Chamber size
- 1 ea Ring Burner, 2 ring burner/nipple, Gas, simmer to saute heat, excellent for soup, low maintenance, natural 75,000 BTU
- 1 ea 2nd Chamber: 20" Chamber size
- 1 ea Ring Burner, 3 ring burner/nipple, Gas, simmer to saute heat, low maintenance., for ranges w/16" chamber or larger, natural 137,000 BTU
- 1 ea 3rd Chamber: 13" Chamber size
- 1 ea Ring Burner, 2 ring burner/nipple, Gas, simmer to saute heat, excellent for soup, low maintenance, natural 75,000 BTU
- 1 ea Range Deck, (3) chamber deck, s/s laminated to steel subdeck
- 1 ea Front Gutter/Waterfall Backsplash, (3) chambers, spraybar on top of backsplash, to keep range cool and clean
- 1 ea Two openings for round oil containers

Item No. 30 - Spare No.

Item No. 31 - Ventilator, Exhaust, Type I (1 REQ'D)

Custom Model VENTILATOR, TYPE I EXHAUST

Furnish Halton model KVE exhaust Ventilator complete per the manufacturers standard specifications. The exhaust airflow will be based on the convective heat generated by the appliances underneath each canopy. Capture and Containment must be validated by and based upon ASTM F1704-05. The elimination of Convective Heat Gain to space must be validated and based upon ASTM F2474-5. NSF Listed.

The hood shall be equipped with model KSA multi-cyclone stainless steel grease extractors. The grease extraction efficiency is 93% on particles with a diameter of 5 microns and 98% on particles with a diameter of 15 microns or larger, based upon ASTM F-2519-05 method of test. Sound levels shall be between 40 and 55 NC.

Item No. 32 - Fire Suppression System, Wet Chemical (1 REQ'D)

Furnish Halton model #WC-R101 wet chemical system complete per the manufacturers standard specifications, UL 300 Listed.

Item No. 33 - Cart, Ingredients, Mobile (1 REQ'D)

Sammons Equipment Model 2006

Deluxe Bussing/Pacemaker Cart, standard duty, 18" x 28" x 36-3/16"H, enclosed on three sides, (3) 16" x 24" shelves, 500 lb. capacity, legs and push handle bumpers, stainless steel construction, 5" deluxe all swivel casters, NSF (contact factory for price)

Item No. 34 - Refrigerated Counter, Sandwich Top, Mobile (1 REQ'D)

Traulsen Model UST4818-LR-SB

Dealer's Choice Compact Prep Table Refrigerator, 48"W, two-section, reach-in, holds (18) 1/6 pans 4" dp (included), can accommodate up to 6" deep pans, s/s exterior top, sides & door, hinged left/right, anodized aluminum interior, galvanized exterior back & bottom, rear-mounted self-contained refrigeration, 1/4 hp, UL, NSF

Accessories:

- | | |
|------|--|
| 1 ea | 115v/60/1ph, 6.3 amps, NEMA 5-15P |
| 1 ea | 1 yr service/labor & 5 yr compressor warranty, standard |
| 1 ea | Work Top w/4" High Backsplash, 22 gauge, for 48" wide models |
| 1 ea | Casters, 4", set of 4, for 27" & 48" wide models |

Item No. 35 - Counter with Sink (1 REQ'D)

Custom Fabricated. See Details. Furnish T&S #B-0327 Faucet and T&S # B-3990 modular waste.

Item No. 36 - Heated Cabinet, Mobile, Full-Height (1 REQ'D)

Carter-Hoffmann Model SR1820

EnduraHeat Satellite Transport Cart, heavy duty, mobile, heated, adjustable universal slides, holds (12) 18"x26" trays or (24) 12"x20" pans, slides on 3-1/2" centers, stainless steel construction, 6" swivel casters, 120/60/1-ph, 1900watts, 15.8amps, NEMA 5-20P, cUL, NSF, ENERGY STAR®

Accessories:

- | | |
|------|---|
| 1 ea | 1 Year parts and labor (exclusions apply) |
|------|---|

Item No. 37 - Counter, Cooking (1 REQ'D)

Custom Fabricated, See details.

Item No. 38 - Toaster, Electric Conveyor Type (1 REQ'D)

Toastmaster Model TC17D3663

Conveyor Toaster, electric, countertop, 17", horizontal conveyor w/angled rack, toasts bread/buns/bagels, standby mode, variable speed, approximately 400+ slices/hour capacity, s/s construction, cool to touch exterior, 3" opening, front or rear exit, w/cord & NEMA 6-20P plug, 208v/60/1ph, 12.6 amps

Accessories:

- 1 ea For warranty service on pop-ups and light countertop equipment, an "exchange program" will supersede an on-site call, Contact factory for a "Warranty Exchange Authorization Form"

Item No. 39 - Burner Unit, Four, Gas (1 REQ'D)

Garland/US Range Model GTOG24-SU4

Step-Up Hotplate, 24" W, countertop, gas, heavy-duty, (4) 30,000 BTU Starfire Pro open burners, manual controls, s/s front, sides and back, 3-1/2" front rail, 4" high adjustable legs, 120,000 BTU (Garland)

Accessories:

- 1 ea One year limited parts and labor warranty, covers products purchased and installed in the USA only, standard
- 1 ea Natural gas, AGA/PRV
- 1 ea Electric spark ignition system

Item No. 40 - Spare No.

Item No. 41 - Griddle, Counter Unit, Gas (1 REQ'D)

Garland/US Range Model UTGG36-G36

Griddle, countertop, gas, heavy-duty, 36" W, 1" thick smooth steel griddle plate, 36" x 23" grill area, manual hi-lo controls, piezo pilot igniters, 4" deep front grease trough, s/s front, sides and back, 4" adjustable feet, 78,000 BTU (US Range)

Accessories:

- 1 ea One year limited parts and labor warranty, covers products purchased and installed in the USA only, standard
- 1 ea Natural gas, AGA/PRV
- 1 ea Electric spark ignition system, on 36" wide griddle

Item No. 42 - Refrigerated Counter, Cooking Stand (1 REQ'D)

Traulsen Model TE084HT

Spec-Line Refrigerated Equipment Stand, 84" long, (8) 12" x 20" x 6" deep pan capacity, side by side, (4) drawers, self-contained refrigeration, microprocessor control, s/s marine top, s/s interior & exterior, curb mounting, INTELA-TRAUL™, 1/3 hp, UL, NSF

Accessories:

- 1 ea 115v/60/1ph, 6.7 amps, with cord & NEMA 5-15P plug
- 1 ea 1 yr service/labor, 5 yr compressor, 2 yr control & 3 yr drawer warranty, standard
- 1 ea Compressor located on left side, std

Item No. 43 - French Fry Warmer, Rod Type (1 REQ'D)

Hatco Model GRFFBL

Glo-Ray® Portable Foodwarmer, with incandescent lights, heats from above & below, with thermo controlled base, 870 watts, 7.7 amps

Accessories:

- 1 ea NOTE: Includes 24/7 parts & service assistance, call 800-558-0607
- 1 ea 120v/60/1-ph, NEMA 5-15P
- 1 ea 14" Clearance
- 1 ea Infinite Control

Item No. 44a - Fryer, Floor Model, Gas, Full Pot, Mobile (1 REQ'D)

Dean Industries Model HD50G

High Efficiency Decathlon Fryer, Gas-Fired, floor model, 50 pound fat capacity, rack type basket support, Thermatron solid state controls, s/s pot, door & sides, 6" adjustable steel legs, EnerLogic™ Technology, 95,000 BTU, ENERGY STAR®

Accessories:

- 1 ea Natural gas, AGA/PRV
- 1 ea 120v/60/1-ph, fryer control
- 1 ea Electronic ignition
- 1 ea Basket lifts w/mechanical timer
- 1 ea NOTE: Casters are required with basket lifts, for gas fryers
- 1 ea Super Cascade Fryer Filter, built-under (2) fryers, 4 gallons per minute pump, internally plumbed oil drain/return lines, with filter starter kit: sample of powder, 25 papers, cleanout rod, gloves & brush (add to SM40G, SM50G, SM50GDD, D50G, D50GDD, HD50, HD50GDD & HD60 fryers)
- 1 ea 120v/60/1-ph, 6.2 amps for filter system
- 1 ea Casters are std. w/built-in filters
- 1 ea Quick Disconnect, 3/4" x 36"

Item No. 44b - Drain Cabinet (1 REQ'D)

Dean Industries Model 15MC

Fryer Drain Cabinet, fryer match design, free-standing design with s/s flat top, 15-1/2" overall width, baked enamel exterior, stainless steel door, UL, NSF, CSA

Accessories:

- 1 ea NOTE: Must specify location of cabinet in fryer line-up
- 1 ea 120v/60/1, 6.9amps, standard
- 1 ea Cabinet top: Solid top (no cut out std.)
- 1 ea Casters, set of 4

Item No. 45 - Ventilator, Exhaust, Type I (1 REQ'D)

Furnish Halton model KVE exhaust Ventilator complete per the manufacturers standard specifications. The exhaust airflow will be based on the convective heat generated by the appliances underneath each canopy. Capture and Containment must be validated by and based upon ASTM F1704-05. The elimination of Convective Heat Gain to space must be validated and based upon ASTM F2474-5. NSF Listed. The hood shall be equipped with model KSA multi-cyclone stainless steel grease extractors. The grease extraction efficiency is 93% on particles with a diameter of 5 microns and 98% on particles with a diameter of 15 microns or larger, based upon ASTM F-2519-05 method of test. Sound levels shall be between 40 and 55 NC.

Item No. 46 - Fire Suppression System, Wet Chemical (1 REQ'D)

Furnish Halton model #WC-R101 wet chemical system complete per the manufacturers standard specifications, UL 300 Listed.

Item No. 47 - Refrigerator/Freezer, Reach-in (1 REQ'D)

Traulsen Model RDT132WUT-HHS

Spec-Line Refrigerator/Freezer Dual Temp Cabinet, Reach-in, One-Section, self-contained refrigeration, stainless steel exterior and interior, standard depth cabinet, half-height doors with INTELA-TRAUL™

Accessories:

- 1 ea 115v/60/1ph, 10.3 amps, NEMA 5-15P, standard
- 1 ea 1 yr service/labor, 5 yr compressor & 2 yr control warranty, standard
- 1 ea Door hinged on right, standard
- 1 ea Additional plated shelf
- 1 ea S/S Flanged legs, 6" high (set of 4)

Item No. 48 - Stand, Trays, Silver (1 REQ'D)

Custom Fabricated, See details.

Item No. 49 - Counter, Serving, Grille (1 REQ'D)

Custom Fabricated, See details. Include BSI sneeze guards, display lights and heat lamps.

Item No. 50 - Spare No.

Item No. 51 - Drop-In Hot Server Unit, Electric (1 REQ'D)

Wells Model MOD-400TDM/AF

Food Warmer, top-mount, built-in, electric, auto-fill, (4) 12" x 20" openings w/manifolded drains w/valve, wet/dry operation, thermostatic control, s/s interior, insulated aluminum steel housing, 1240w/1650w, UL listed

Accessories:

- 1 ea 208/240v/60/3-ph, 4.96/6.6kw, 14.5/17.8 amps, direct, with single control panel, (field convertible to single phase)
- 1 ea Drain Screen

Item No. 52 - Refrigerated Counter, Sandwich Top, Mobile (1 REQ'D)

Traulsen Model UST279-L

Dealer's Choice Compact Prep Table Refrigerator, 27"W, one-section, reach-in, holds (9) 1/6 pans 4" dp (included), can accommodate up to 6" deep pans, s/s exterior top, sides & door, hinged left, anodized aluminum interior, galvanized exterior back & bottom, rear-mounted self-contained refrigeration, 1/5 hp, UL, NSF

Accessories:

- 1 ea 115v/60/1ph, 4.5 amps, NEMA 5-15P
- 1 ea 1 yr service/labor & 5 yr compressor warranty, standard
- 1 ea Casters, 4", set of 4, for 27" & 48" wide models

Item No. 53 - Refrigerated Counter, Sandwich Top, Mobile (1 REQ'D)

Traulsen Model UST4818-LR-SB

Dealer's Choice Compact Prep Table Refrigerator, 48"W, two-section, reach-in, holds (18) 1/6 pans 4" dp (included), can accommodate up to 6" deep pans, s/s exterior top, sides & door, hinged left/right, anodized aluminum interior, galvanized exterior back & bottom, rear-mounted self-contained refrigeration, 1/4 hp, UL, NSF

Accessories:

- 1 ea 115v/60/1ph, 6.3 amps, NEMA 5-15P
- 1 ea 1 yr service/labor & 5 yr compressor warranty, standard
- 1 ea Work Top without 4" High Backsplash, 22 gauge, for 48" wide models
- 1 ea Casters, 4", set of 4, for 27" & 48" wide models

Item No. 54 - Stand, Trays, Silver (1 REQ'D)

Custom Fabricated, See details.

Item No. 55 - Refrigerated Display, Furnished by Vendor. (1 REQ'D)

Refrigerated Display furnished by vendor.

Item No. 56 - Rack, Slanted Shelf, Mobile (1 REQ'D)

Metro Model DC36EC

Slanted-Shelf Merchandiser/Dispenser Rack, 5 slanted shelves, 36" L, 70" H, 18" W, open wire construction, adjustable 1" intervals, 5" casters brake lock

Item No. 57 - Counter, Beverage (1 REQ'D)

Custom Fabricated, See details.

Item No. 58 - Paper Cup Dispenser (2 REQ'D)

San Jamar Model C2803

Gourmet® EZ-Fit® Box System, contains (3) EZ-Fit One Size Fits All dispensers mounted into a 22 gauge 304 stainless steel box, 24-1/8"H X 8-1/8"W X 24-5/8"D

Item No. 59 - Lid Dispenser, Countertop (2 REQ'D)

San Jamar Model L2913BK

EZ-Fit™ Lid Dispenser, counter model, 22-3/8"H x 7-3/4"W x 25"L, box system w/(2) L2200C & (1) L2400C, black finish trim ring

Item No. 60 - Spare No.

Item No. 61 - Soft Drink Dispenser, Furnished by Vendor. (1 REQ'D)

Soft Drink Dispenser furnished by vendor.

Item No. 62 - Dispenser, Juice, Furnished by Vendor. (1 REQ'D)

Dispenser, Juicer furnished by vendor.

Item No. 63 - Coffee Brewer for Satellites, Furnished by Vendor (1 REQ'D)

Curtis Co. Model GEM-12D-10

Gemini® ADS Digital Satellite Coffee Brewer, 36 cup brew/batch, twin head, auto, fresh brew, touch key controls, programmable brew volume & temp, sleep mode, hot water faucet, s/s gourmet brew basket, s/s construction, 4" adjustable legs, (2) 1.5 gallon double wall ins. servers, 220v/60/1-ph, 29 amps, 6.3kw

Item No. 64 - Dispenser, Hot Beverages, Furnished by Vendor. (1 REQ'D)

Dispenser, Hot beverages furnished by vendor.

Item No. 65 - Cash Register, Furnished by Owner. (2 REQ'D)

Cash register furnished by owner.

Item No. 66 - Counter, Serving (1 REQ'D)

Custom Fabricated, See details. Include BSI sneeze guards, display lights and heat lamps.

Item No. 67 - Drop-In Hot Server Unit, Electric (1 REQ'D)

Wells Model MOD-300TDM/AF

Food Warmer, top-mount, built-in, electric, auto-fill, (3) 12" x 20" openings w/manifolded drains w/valve, wet/dry operation, thermostatic control, s/s interior, insulated aluminum steel housing, 1240/1650w per well, UL listed

Accessories:

1 ea 208/240v/60/3-ph, 3.72/4.95kw, 10.3/11.9 amps, direct (field convertible to single phase)

1 ea Drain Screen

Item No. 68 - Cold Food Pan, Drop-In, Refrigerated (1 REQ'D)

Marsal and Sons Inc. Model 8145

Drop-In Cold Food Unit, mechanical cold pan, 46-7/8"L, (3) 12" x 20" pan opening accommodates (1) full size pan each, s/s liner with drain, 6' cord with NEMA 5-15P plug, 1/4hp

Accessories:

1 ea 115v/60/1-ph, 6' cord w/NEMA 5-15P plug, std.

Item No. 69 - Refrigerator, Reach-in (1 REQ'D)

Traulsen Model RHT132WUT-HHS

Spec-Line Refrigerator, Reach-in, One-Section, self-contained refrigeration, stainless steel exterior and interior, standard depth, wide half-height doors, INTELA-TRAUL™ microprocessor controls

Accessories:

1 ea 115v/60/1ph, 7.0 amps, w/cord & NEMA 5-15P, standard

1 ea 1 yr service/labor, 5 yr compressor & 2 yr control warranty, standard

1 ea Door hinged on right, standard

1 ea S/S back w/rear louvers

Item No. 70 - Spare No.

Item No. 71 - Cold Food Pan, Drop-In, Refrigerated (1 REQ'D)

Marsal and Sons Inc. Model 8159

Drop-In Cold Food Unit, mechanical cold pan, 60-3/4"L, (4) 12" x 20" pan opening accommodates (1) full size pan each, s/s liner with drain, 6' cord with NEMA 5-15P plug, 1/4hp

Accessories:

1 ea 115v/60/1-ph, 6' cord w/NEMA 5-15P plug, std.

Item No. 72 - Freezer, Ice Cream, Drop-In (1 REQ'D)

Silver King Model SKCTMDI

Display Freezer, drop-in, stainless steel interior, clear insulated hinged lid, capacity - 15 to 20 doz. ice cream novelties, 1/5 hp

Accessories:

1 ea Warranty - 1 year parts & labor, standard

1 ea Warranty - additional 4 year compressor, standard

1 ea 115v/60/1ph, 2.7 amps, NEMA 5-15P

Item No. 73 - Stand, Condiments (1 REQ'D)

Custom Fabricated, See details.

Item No. 74 - Paper Napkin Dispenser (2 REQ'D)

San Jamar Model H4000XC

Tabletop Napkin Dispenser, two-sided, mini-fold, 4-1/2" x 7-3/4" x 6", maximum capacity 170 folded paper napkins, stainless steel with chrome finish

Item No. 75 - Microwave Oven (2 REQ'D)

Panasonic Model NE-1064

Pro Microwave Oven, 1000 Watts, single shelf, 10 programmable memory pads, with double Quantity pad and Braille key pad, 6 power levels, s/s cabinet & cavity, digital display, cavity: 13"Wx13"Dx8-1/16"H, 120v/60/1-ph, 13.4 amps, UL, NSF

Accessories:

1 ea 1 year parts & labor warranty

1 ea NEMA 5-15P

Item No. 76 - Cart, Soiled Trays, Mobile, Enclosed (2 REQ'D)

Sammons Equipment Model 9150-13

Tray Delivery & Storage Cabinet, mobile, 70" high, non-insulated, (13) 18" x 26" pan capacity, universal, adjustable on 1-1/2" centers, solid door, aluminum frame with extruded aluminum side panels, 5" swivel casters, NSF

Accessories:

1 ea 5" polyurethane casters

1 ea Wheel brakes (pair) for 5" casters

1 ea Floor lock (5")

1 ea Corner bumpers (set of 4)

2 ea Push handle (each) with 2 donut bumpers

1 ea 3-sided top rail (for transport of light objects)

Item No. 77 - Corner Guard (11 REQ'D)

Custom fabricated. See details.

Item No. 78 - Water Filter Assembly, Combi (1 REQ'D)

Everpure Model EV9797-22

KleenSteam® II Twin System, Water Filter System, total system for boiler base steamers, 1.75 gpm flow rate, deliming, (2) 7CB5 carbon filter, SS-10 scale inhibitor cartridge, dip tube, pressure gauge, water shut-off valve & wall bracket

Item No. 79 - Lockers, Half Height (5 REQ'D)

Win-Holt Equipment Group Model WL-21/15

Locker, Double Tier, 1 column, 2 lockers per column, 12" x 15" x 36" compartment, doors are mesh grid vented

Accessories:

1 ea Slope top crown kit, 15"D, fits 3 columns wide, includes: 3 slope tops, 3-back supports, 2 end pieces

Item No. 80 - Spare No.

Item No. 81 - Air Screen (1 REQ'D)

Curtron Model E-IBD-42-1

Save-T Air Curtain, for insect control on service entrances, (1) 3/4 HP motor, (2) blower wheels, anodized aluminum housing, automatic plunger style door switch, covers area up to 42" wide x 120" high

Accessories:

1 ea Unheated - 120v/60/1-ph, 10.0 kw, 2.5 amps, std

END OF SECTION