



STATE OF NEW YORK  
OFFICE OF GENERAL SERVICES  
DESIGN AND CONSTRUCTION GROUP  
THE GOVERNOR NELSON A. ROCKEFELLER  
EMPIRE STATE PLAZA  
ALBANY, NY 12242



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**ADDENDUM NO. 1 TO PROJECT NO. 44178**

**CONSTRUCTION WORK, HVAC WORK, PLUMBING WORK & ELECTRICAL WORK  
REHABILITATE KITCHEN  
BUILDING NO. 12  
GREENE CORRECTIONAL FACILITY  
COUNTY ROUTE 9  
COXSACKIE, NY**

March 23, 2015

<p><b>NOTE:</b> This Addendum forms a part of the Contract Documents. Insert it in the Project Manual. Acknowledge receipt of this Addendum in the space provided on the Bid Form.</p>
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**C CONTRACT  
SPECIFICATIONS:**

1. Section 000110 TABLE OF CONTENTS:
  - a. DIVISION 3; **Add** Section 035400 CEMENTITIOUS SELF-LEVELING TOPPING.
  - b. DIVISION 10; **Remove** Section 102613 WALL AND CORNER GUARDS.
2. Section 012100 ALLOWANCES: **Remove** and **Replace** with specification in this addendum.
3. Section 013113 PROJECT SCHEDULE: **Remove** specification.
4. Section 035400 CEMENTITIOUS SELF LEVELING TOPPING: **Add** specification from this addendum.
5. Section 081102 STEEL DOORS AND FRAMES: **Remove** and **Replace** with specification in this addendum
6. Section 087100 FINISH HARDWARE: **Remove** and **Replace** with specification in this addendum.
7. Section 101423 SIGNS:
  - a. 2.02 A: **Replace** with “ Sand Carved (Sand Blasted) Process (SC): Sand carved (sand blasted) letters, numbers, symbols, Grade 2 Braille, and other graphic devices to produce precisely formed copy raised to a uniform height of 1/32 inch with sharply formed edges.
    1. Comply with ADA requirements.”

b. 3.02 D: **Replace** Paragraph 1. with:

“Mounting Locations:

1. Location A: Latch side of door, sign unit center 60 inches above finished floor and near edge of sign unit 2 inches from outside edge of door frame.”

c. 3.04: **Replace** Message Schedule with below:

Copy Style	Copy Position	Graphic Process	Sign Type	Message (Copy)	Mounting Location	Mounting Method
1	CC	SC		Mess Hall “C”	A	SM
1	CC	SC		Mess Hall “A”	A	SM
1	CC	SC		Mess Hall “B”	A	SM
1	CC	SC		Mess Hall “C”	A	SM
1	CC	SC		C.O. Office	A	SM
1	CC	SC		FSA Office	A	SM
1	CC	SC		Refrigerated Prep Room	A	SM
1	CC	SC		Daily Use Cooler	A	SM
1	CC	SC		Cook/Chill Cooler	A	SM
1	CC	SC		Dry Storage	A	SM
1	CC	SC		Storage	A	SM
1	CC	SC		Toilet	A	SM
1	CC	SC		Pipe Chase	A	SM
1	CC	SC		Left Overs Coolers	A	SM
1	CC	SC		Freezer	A	SM
1	CC	SC		Bread Cooler	A	SM
1	CC	SC		Toilet	A	SM
1	CC	SC		Bakery Storage	A	SM
1	CC	SC		Serving	A	SM
1	CC	SC		Caustic Storage	A	SM
1	CC	SC		Freezer	A	SM
1	CC	SC		Toilet	A	SM
1	CC	SC		Janitor’s Closet	A	SM
1	CC	SC		Kitchen	A	SM
1	CC	SC		Kitchen	A	SM
1	CC	SC		Kitchen	A	SM
1	CC	SC		Kitchen	A	SM

9. Section 102613 WALL AND CORNER GUARDS: **Delete** specification.

10. Section 102813 TOILET AND BATH ACCESSORIES:

- a. 2.04 B: **Revise** to state “Size: Unless otherwise indicated, furnish mirror units with overall frame size 24x36 inches.”

11. Section 114100 FOOD SERVICE EQUIPMENT: **Add** specification from this addendum.

**H, P, E CONTRACT  
SPECIFICATIONS:**

12. 002216 SUPPLEMENTARY INSTRUCTIONS TO BIDDERS – ASBESTOS PROJECTS:  
**Delete** specification.

**C CONTRACT  
DRAWINGS:**

13. A-101, A-103, A-105, A-108, A-110, A-113, A-115, A-119: **Revise** General Removal Notes: “2. Refer to Specification Section 017329 for items to remain property of the State.”
14. A-110: **Add** to Removal Note 4 “Include Room 009 CO Office.”
15. A-401: **Add** clarification for ACCESSORY TYPES tables under SPECIFICATION IDENTIFICATION column; “ By Owner indicates supplied by Owner and installed by “C” Contractor regarding items “D”, ”E”, ”F” & “G”:
16. A-601 Door/View Window Schedule, **Revise** per list below:
- a. Door/View Window Schedule – Phase 1:
    - A. Hardware Group 2 at opening 024.
    - B. Hardware Group 3 at openings T020A, T020B.
    - C. Hardware Group 4 at opening T042.
  - b. Door/View Window Schedule – Phase 2:
    - A. Hardware Group 1 at opening 025
    - B. Hardware Group 4 at opening T003.
    - C. Hardware Group 5 at openings T004, T005.
    - D. Hardware Group 6 at openings T006A, T006B.
    - E. Hardware Group 8 at openings T008, T009.
    - F. Hardware Group 9 at openings T010, T020C, T040.
    - G. Hardware Group 11 at opening T004C.
    - H. Hardware Group 12 at openings T006C.
  - c. Door/View Window Schedule – Phase 3:
    - A. Hardware Group 2 at opening 009.
    - B. Hardware Group 3 at opening T035.
    - C. Hardware Group 4 at opening T034.
    - D. Hardware Group 7 at opening T006.
    - E. Hardware Group 13 at openings 204A, 204B.
  - d. Door/View Window Schedule – Phase 4:
    - A. Hardware Group 2 at opening T035A.
    - B. Hardware Group 3 at opening T035.
    - C. Hardware Group 10 at openings 001A, 001B, 046A, 046B, 051, 053A, 053B.
    - D. Hardware Group 12 at opening 041A.
    - E. Hardware Group 14 at opening 038.
    - F. Hardware Group 15 at opening 039.
17. A-602 Room Finish Schedule:

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March 20, 2015

- a. Room Finish Schedule – Phase 2: Floor Finish at Room Nos. T002, T003, T003A, T004, T004C, T005, T006, T006A, T006B; **Replace** scheduled finish noted with Concrete Topping – Sealed.
- b. Room Finish Schedule – Phase 3: Room No. 009 Floor Finish; **Replace** scheduled finish note with Quarry Tile, replace schedule base note with Quarry Tile.

**H CONTRACT  
DRAWINGS:**

18. M-601: Refer to EF-4 in Fan Schedule; **Revise** VOLTS from 208 to 115.
19. M-601: Refer to Pump Schedule; **Add** the following note below the schedule: “Note: HCP-AHU-3 shall be re-balanced during Phase 4 to deliver 42 gpm; impeller shall be trimmed as necessary.

**E CONTRACT  
DRAWINGS:**

20. E-102: Refer to EF-4 in Fan Schedule; **Revise** VOLTS from 208 to 115.
21. E-102: Refer to Mechanical 015; Provide connection for AC-1, RP-1 and a water flow switch (WF).
22. E-601: **Add** General Note A as follows: “A. Provide a new circuit breaker in the MDP for each new panel fed from MDP.”
23. E-601: Refer to Riser Diagram (Phase 2). Feed Panel PP-TEMP1 from a feeder tap of Panel MDP via an 800 amp fused disconnect switch in lieu of as shown.

**END OF ADDENDUM**

Margaret F. Larkin  
Executive Director

## SECTION 035400

### CEMENTITIOUS SELF-LEVELING TOPPING

#### PART 1 GENERAL

##### 1.01 RELATED WORK SPECIFIED ELSEWHERE

- A. Resilient Tile Flooring: Section 096519.

##### 1.02 REFERENCES

- A. This system consists of a primer and a mix of special cements and binders which, when mixed with water, becomes a highly liquid cement compound that seeks its own level and produces a flat, smooth surface. Surface shall be true to plane within 1/8" maximum deviation under a 10' straight edge in accordance with ACI 302 1R-96, Flatness Tolerance.

##### 1.02 SUBMITTALS

- A. Product Data: Manufacturer's catalog sheets, specifications, and installation instructions for each item specified.
- B. Qualification Data: For installer.

##### 1.03 QUALITY ASSURANCE

- A. Material Container Labels: Material containers shall bear the manufacturer's label indicating manufacturer's name, trade name of product, lot number, self life of product, and mix ratio (if applicable).

##### 1.04 DELIVERY AND STORAGE

- A. Deliver materials to the site in original, sealed containers. Do not deliver materials which have exceeded shelf life limitation set forth by the manufacturer.
- B. Comply with manufacturer's printed instructions for storing materials.

##### 1.05 PROJECT CONDITIONS

- A. Environmental Requirements: Comply with the product manufacturer's printed limitations and instructions.

##### 1.06 TEST SAMPLE

- A. Provide field applied 5' x 5' x contract thickness sample of topping.

#### PART 2 PRODUCTS

## **2.01 MATERIALS**

- A. The following brand names are specified to establish product generic type and standard of quality. Other comparable products in the manufacturer's same product series may be required to closely fit the particular job conditions. Use appropriate product for depth of patch and temperature at time of application. More than one product may be required for a particular type of patching mortar. When choice of color is available, select color to match adjoining concrete. A bonding agent/primer and/or sealer shall be used as recommended by the patching mortar manufacturer.
- B. Cementitious Self-Leveling Topping: Cement Base, Self-Leveling, basis of design Ardex SD-T Self-Leveling Topping by ARDEX, or approved equal.
  - 1. Compressive Strength at 28 Days: ASTM C 109M, minimum 6,100 psi.  
Cement: One of the following complying with the indicated requirements:
  - 2. Flexural Strength at 28 Days: ASTM C 348, minimum 1200 psi.
  - 3. Relative humidity in concrete floor slabs using in situ probes: ASTM F2170
  - 4. Moisture vapor emission rate of concrete subfloor using anhydrous calcium chloride: ASTM F1869.
  - 5. Standard practice for preparing concrete floors to receive resilient flooring.
- C. Cleaning Agent, Bonding Agent/Primer, Sealer: As recommended by the patching mortar manufacturer.
- D. Water: Clean and free of deleterious amounts of acids, alkalis, and organic materials.
- E. Water-borne acrylic sealer: Basis of design ARDEX CG or approved equal.

## **PART 3 EXECUTION**

### **3.01 PREPARATION**

- A. Protection: Cover or otherwise protect adjacent surfaces not being repaired. Protect mortar after placement in accordance with the product manufacturer's printed instructions.
- B. Surface Preparation:
  - 1. Shot blast and prepare surface in accordance with the product manufacturers printed instructions.
  - 2. Remove paint, oils, grease, dirt, salt deposits, laitance and other contaminants from surfaces to be patched. Use cleaning agent where required.
  - 3. Clean areas to be filled with air or water under pressure, except as otherwise recommended by the mortar manufacturer.

- C. Coat contact surfaces of existing materials with a bonding agent/primer if recommended in the product manufacturer's instructions.

### **3.02 APPLICATION**

- A. Mixing Underlayment Mortar: Comply with mortar manufacturer's printed instructions. Proportion components and sizes of aggregate as recommended by mortar manufacturer for the particular job conditions. Do not over water underlayment mortar.
- B. Apply the underlayment mortar in accordance with the product manufacturer's printed instructions.

### **3.03 CLEANING**

- A. Clean up spatters and droppings.

**END OF SECTION**

## **SECTION 012100**

### **ALLOWANCES**

#### **PART 1 GENERAL**

##### **1.01 DESCRIPTION**

- A. Include in the contract sum the allowances stated in this Section.
- B. Should the net cost be more than the specified amount of the allowance, the contract sum will be adjusted by Order on Contract in accordance with the General Conditions. No Work in excess of the allowance will be permitted except by Order on Contract. Should the net cost be less than the specified amount of the allowance, the balance will be deducted from the final payment.

##### **1.02 TOTALS FOR ALLOWANCES**

- A. The sum of allowances required by the Construction Work Contract is \$181,800.00.
- B. The sum of allowances required by the HVAC Work Contract is \$71,500.00.
- C. The sum of allowances required by the Plumbing Work Contract is \$24,500.00.
- D. The sum of allowances required by the Electrical Work Contract is \$33,100.00.

##### **1.03 ALLOWANCES FOR CONTINGENCIES**

- A. Include in the contract sum the amount indicated below to cover the cost of additional labor and materials for contingent activities within the scope of the Contract as directed in writing by Field Order. The Field Order will include a description of the Work and a method for determining the cost of such Work.
  - 1. Construction Work Contract: \$181,800.00.
  - 2. HVAC Work Contract: \$71,500.00.
  - 3. Plumbing Work Contract: \$24,500.00.
  - 4. Electrical Work Contract: \$7,717.00.
- B. The value of the directed Work under this allowance will be determined by one or more of the methods authorized in Section 012200 which will be specified in the Field Order.

##### **1.04 ALLOWANCE FOR MODIFICATION TO EXISTING FIRE ALARM SYSTEM**

- A. Electrical Work Contract: Include in the contract sum the amount of \$25,383.00 to cover the cost of purchasing the products and services as specified in Section 283105.
  - 1. The cost of providing the Work of this allowance will be paid, up to the amount specified, based on documentation of actual costs. The actual amount will be determined, by the Director, by evaluating the

accuracy and completeness of the cost or pricing data submitted. Costs above the allowance amount, if any, will be paid by means of a Change Order.

2. Include overhead and profit for administering this allowance separately in the contract sum, not in the allowance.

3. Cause the products and services covered by this allowance to be furnished by such persons or firm and for such amount as designated by the Director.

4. The amount of the allowance includes furnishing the products and services in accordance with the requirements of referenced specification section. Labor for installation of the products covered by the referenced specification section shall be included in the contract sum (not in the allowance).

5. On notification, execute agreement with designated persons or firm.

a. Arrange for and process Samples, Shop Drawings, and Product Data as required.

b. Make arrangements for delivery of the products.

c. Coordinate the services of the designated persons or firm.

## **PART 2 PRODUCTS (Not Used)**

## **PART 3 EXECUTION (Not Used)**

**END OF SECTION**

## SECTION 081102

### STEEL DOORS AND FRAMES

#### PART 1 GENERAL

##### 1.01 SECTION INCLUDES

- A. Steel doors and frames, including borrowed lites; sidelights; vision lites; glass moldings and stops; louvers; panels; hardware reinforcements; and accessories as shown in the contract documents.

##### 1.02 REFERENCES

- A. ANSI- American National Standard Institute
  - 1. A250.4-2001 Test Procedure and Acceptance Criteria for Physical Endurance for Steel Doors and Hardware Reinforcings.
- B. NAAMM National Association of Architectural Metal Manufacturers
  - 1. HMMA 830-1997 Hardware Preparations and Locations for Hollow Metal Doors and Frames.
  - 2. HMMA 831-1997 Recommended Hardware Locations for Hollow Metal Doors and Frames.
  - 3. HMMA 840-1999 Guide Specification for Installation and Storage of Hollow Metal Doors and Frames.
  - 4. HMMA 861-2000 Guide Specification for Commercial Hollow Metal Doors and Frames.
- C. NFPA National Fire Protection Association
  - 1. NFPA 80- 2010 Standard for Fire Doors and other Opening Protectives.

##### 1.03 DEFINITIONS

- A. Steel Door and Frame Manufacturer: Manufacturer of steel doors and frames regularly engaged in the manufacturing of such products for use in commercial, institutional, educational and other similar applications.
- B. Company Field Advisor(s): An employee of the steel door and frame manufacturer who is certified in writing by the manufacturer to be technically qualified in design, installation, and servicing of products.
- C. Steel Door and Frame Distributor: Distribution Company who regularly engages in the distribution of steel doors and frames of the manufacturer whose doors and frames are submitted for this project.
- D. Certified Installation Supervisor: Designated supervisor/installer, who has a minimum three years experience in steel frame and door installation, and is certified in writing by the steel door and frame manufacturer as qualified and responsible to ensure approved steel frames and doors are installed, adjusted, and operate properly.

##### 1.04 SUBMITTALS

- A. Waiver of Submittals: "Waiver of Certain Submittal Requirements" in Section 01330 does not apply to this Section.

B. Submittals Packages

1. Door and Frame Schedule and Shop Drawings Package: Submit as a complete package. Incomplete packages will be returned un-reviewed.
  - a. Quality Assurance Submittal
    - 1) Certification of Compliance as described in the Quality Assurance Article.
    - 2) Company Field Advisor's Qualification Data
      - a) Name of Company Field Advisor and Employer's name, business address and telephone number and e-mail address.
      - b) Names and addresses of 3 similar projects Company Field Advisor has worked on during the past three years.
      - c) Written certification on steel door and frame manufacturer's letterhead that Company Field advisor is technically qualified in design, installation, and servicing of the products furnished for this Project.
    - 3) Certified Supervisor's and Installer's Qualification Data
      - a) Name of Supervisor and each Installer performing Work, and Employer's name, business address and telephone number.
      - b) Names and addresses of 3 similar projects Supervisor and each Installer has worked on during the past three years.
      - c) Written certification on steel door and frame manufacturer's letterhead that Supervisor/Installer is technically qualified to ensure approved steel frames and doors are installed, adjusted, and operate properly.
  - b. Door and Frame Schedule:
    - 1) Include a Cover Sheet that lists:
      - a) OGS project name, project number, and project address.
      - b) Manufacturer's name, address, and telephone number.
      - c) Distributor's name, address, and telephone number.
      - d) Shop drawing preparer's name, and telephone number and e-mail address.
      - e) Submission date.
    - 2) List by opening
      - a) Door and Frame number and location by building and room name. Use same reference numbers for openings and as those shown on Contract Drawings.
      - b) Door width, height, thickness, type, gage, and options
      - c) Frame type, width, height, jamb depth, gage, anchor type and options.
      - d) Door and frame elevations; head and jamb profiles and details; welding requirements; and reinforcements.
      - e) Fire Rating.
      - f) Glass type.

- g) Undercut.
  - h) Electric preparations, if any.
  - i) Hardware Set.
  - j) Show dimensioned elevations; construction details of each door including vertical and horizontal edge details; and frame details for each type, including dimensions profiles; locations for finish hardware, including cutouts and reinforcements; gage of reinforcements; details of connections; anchors and accessories; and details of conduit and preparations for electrified door hardware and controls.
- 3) Product Data: Manufacturer's catalog sheets, specifications, and detailed installation instructions. Highlight products and options pertaining to this Project. Cross out information irrelevant to this Project.
  - 4) Manufacturer's Written Certification of Compliance that their products conform to the requirements of the references named in the References Article of this specification section, and as modified by this specification.
  - 5) Samples:
    - a) Frames: Corner sample of each type, 18 x 18 inches, with mortises and reinforcements, factory primed or factory finished, as required.
    - b) Doors: Corner sample of each type construction, 18 x 18 inches, with mortises and reinforcements, factory primed or factory finished, as required.
2. Closeout Submittals: Submit as a complete package.
- a. Operation and Maintenance Manuals: Furnish 2 (two) hard cover three ring binders with project name and number prominently displayed on the front cover and the spine.
  - b. Listing of Manufacturer, address and contact information
  - c. Approved Door and Frame Submittal including shop drawings and product data sheets
  - d. Manufacturer's dated warranty for this specific project identified by Facility, OGS project number, and manufacturer's order number.
  - e. Certification: Written certification from the Company Field Advisor that their products are installed according to manufacturer's printed installation instructions, and are operating properly.

## 1.05 QUALITY ASSURANCE

- A. Uniformity and single source responsibility:
  - 1. Provide steel doors and frames from a single source manufacturer who specializes in this type of work.
- B. Certification of Compliance: A statement, written on steel door and frame manufacturer's letterhead, that certifies their products, submitted for this Project, have been tested and comply with references named in the References Article of this specification section, and as modified by other requirements this specification.

- C. Construction Verification: In order to confirm the products furnished comply with the specifications, the Director's Representative will choose one door and frame, of each type, at random for examination. The examination will involve cutting the door and frame to expose the internal construction for inspection of the framing, reinforcements, welds, and other construction details. These doors and frames are in addition to the doors and frames identified in the Contract Documents. Should deviations from the Contract requirements be found, the Director's Representative reserves the right to inspect additional units to confirm compliance. The additional inspections and appropriate corrective measures shall be provided by the Contractor at no cost to the State.
- D. Field Measurements: Verify existing openings by field measurements before fabrication and indicate measurements on shop drawings.
- E. Pre-Submittal Conference: Pre-Submittal Conference: Before the steel door and frame submittals are written, the contractor, the steel door and frame distributor, the steel door and frame shop drawing preparer, and the steel door and frame designer shall attend a conference to discuss the contract requirements for the steel door and frame submittal package, including but not limited to, quality assurance items to be submitted, the cover sheet, index, page numbering, schedule formatting, product nomenclature, installation notes, preparations for electric hardware, LEED documentation, and product data sheets. The conference is led by the OGS steel door and frame designer.
- F. Pre-installation Conference: When steel frames are on site, and before steel frame installation begins, the Director's Representative shall call a conference at the site. The contractor, frame installers, certified Company Field Advisor, OGS designer; and OGS inspector shall attend the conference. Facility personnel may attend. The OGS steel door and frame designer will present installation information and lead a discussion to review the approved Steel Door and Frame Submittal, approved Finish Hardware Submittals, and proper installation procedures for the Work as well as:
  - 1. Pre-installation inspection of Doors and Frames
    - a. Use and coordination of approved Steel Door and Frame submittals with approved Finish Hardware Submittals in the pre-installation inspection process
    - b. Reading and understanding manufacturer's Door and Frame tags
    - c. Inspection and verification of labeling and label placement
      - 1) Specified fire labels (attached metal labels) on doors and frames,
      - 2) Label locations
      - 3) Label legibility
    - d. Inspection and verification of proper welding of frames
    - e. Inspection and verification of hardware reinforcement and preparations in frame head and jambs.
    - f. Inspection and verification of required anchors and fasteners.
    - g. Inspection and verification of glass kit preparations in doors
    - h. Inspection and verification of Electric hardware preparation in frames and doors

2. Review of maximum allowable clearances between frames and doors; doors and floor; and meeting stiles of doors, and verification methods.
3. Verification of plumb, square and level frame installation with jamb rabbets parallel to one another.
4. Review of proper frame installation tools.

#### **1.06 DELIVERY, STORAGE, AND HANDLING**

- A. Deliver doors and frames in heavy paper cartons or other protective packaging. Remove any plastic protective wrap from the package.
- B. Store doors and frames under cover, in a dry area, on raised platforms in vertical position with minimum 4 inch blocking between units to allow air circulation.
- C. Clearly label packaging and doors and frames for identification and installation location.

### **PART 2 PRODUCTS**

#### **2.01 MATERIALS**

- A. Hot-Rolled Steel Sheets and Strip: Commercial quality carbon steel, pickled and oiled, complying with ASTM A1011/A1011M-04a 2004.
- B. Cold-Rolled Steel Sheets: Commercial quality carbon steel complying with ASTM A1008/A1008M-04b 2004.
- C. Galvannealed Steel Sheets: Zinc Iron Alloy-Coated carbon steel sheets of commercial quality complying with ASTM A 653/653M, with A 60 zinc coating.
- D. Anchors and Supports: Fabricate of not less than 16 gage sheet steel unless otherwise indicated.
  1. Galvanized Units: Galvanize anchors and supports to be used with galvanized frames, complying with ASTM A 153, Class B.
- E. Anchorage Devices, Bolts, and Other Fasteners: Manufacturer's standard units unless otherwise indicated.
  1. Galvanized Units: Galvanize items and comply with ASTM A 153, Class C or D as applicable.
- F. Solid Block polyurethane core with minimum .07 U Factor.
- G. Polystyrene slab with a minimum .24 U factor.
- H. Extruded polystyrene rigid insulation.

#### **2.02 DOORS**

- A. General:
  1. Design and Thickness: 2 outer stretcher-leveled steel sheets not less than 14 gage, seamless, hollow construction, 1-3/4 inches thick.
  2. Construct doors with smooth flush surfaces without visible joints or seams on exposed faces or stile edges, except around glass and louver panels. Continuously MIG, ARC or laser weld vertical edges full height of door, grind smooth, and dress to achieve seamless edge. Tack welded,

3. putty filled edges are not acceptable.
  4. Reinforce vertical edges by a continuous steel channel not less than 14ga extending the full height of door.
  5. Close top and bottom of horizontal edges with 14 gage steel channel spot welded to the inside of the face sheets a maximum of 4 inches on center.
  6. Continuously weld the closing end channels to the vertical edge reinforcing channel at all four corners producing a fully welded exterior.
  7. Provide minimum 16 gage flush steel top and bottoms caps, notched at both ends to fit hinge and lock channels, installed with a minimum of 6 welds per cap. Grind welds, body fill and finish smooth.
  8. Sound Deadening (ASTM E 90): Minimum Sound Transmission Class of 25.
  9. Door Edges: Bevel lock and hinge stile edge of single acting hinged doors 1/8 inch in 2 inches. "V" bevel meeting stiles of pairs of doors, except at double egress locations where meeting stiles are parallel.
  10. Glazing Stops and Beads: Fixed steel stops, formed integral with door on non-threat side of doors. Removable steel beads, of not less than 14 gage formed steel sheet or solid bar stock, on other side of doors secured with torx head machine screws. Form corners with butted hairline joints. Coordinate width of rabbet between fixed stop and removable bead, and depth of rabbet, with type of glass and glazing required.
- B. Fire Rated Assemblies: Wherever a fire resistance classification is shown or scheduled for steel doors and frames; provide fire rated units that have been tested as fire door assemblies, and comply with National Fire Protection Association (NFPA) Standard No. 80 and these specifications.
1. Identify each door and frame with a factory applied metal UL, FM, or WHI label.
  2. Label shall remain legible, and shall not be obscured by prime painting or finish painting.
  3. Indicate the applicable fire rating on the door label.
  4. Locate labels on the hinge edge of door and jamb rabbet of frame.
  5. Where continuous hinges are specified, apply labels on the header rabbet of frame and on top exposed edge of door. Locate labels as close to hinge edge as possible.
  6. At the manufacturer's and/or contractor's expense, retain a third party inspector to recertify fire rated doors and frames, and to replace primed and finish painted labels. The third party inspector shall be a member of
    - a nationally recognized testing laboratory (NRTL).
- C. Oversize Assemblies Requiring Fire Rating: Whenever fire rated assemblies are larger than size limitations established by NFPA and nationally recognized testing laboratories, provide the manufacturer's certification, by affixing a metal label construction label, the assemblies have been constructed with materials and methods equivalent to requirements for fire rated construction.
- D. Exterior Doors:
1. Fabricate exterior doors with 2 outer stretcher-leveled, A60 galvanized steel sheets.
  2. Reinforce inside of doors with the following:
    - a. Solid block polyurethane core, with a minimum .07 U factor, that fills the entire door cavity and is chemically bonded to all surfaces.
- E. Interior Doors:

1. Fabricate doors with 2 outer stretcher-leveled, A60 galvanized steel sheets.
2. Reinforce inside of doors with polystyrene slab with a minimum .24 U factor, permanently bonded to inside of each face sheet.

### 2.03 FRAMES

- A. General:
1. Furnish steel frames for doors, transoms, sidelites, borrowed lites, and other openings, as shown, of size and profile as indicated.
  2. Where frames will be grouted solid, factory coat throats using manufacturer's standard anti-corrosion coating system.
  3. Construction: Full welded unit construction, with corners mitered and continuously welded full depth and width of frame, unless otherwise specified or shown. Knock-down type frames will not be accepted.
    - a. Fixed Stops: Integral 5/8 inch stop unless otherwise shown.
    - b. Removable Beads: Removable steel beads secured with machine screws. Form corners with butted hairline joints.
  4. Do not drill frames for silencers.
  5. Weld steel shipping spreaders to the underside of the jamb legs, requiring removal of the spreaders prior to frame installation.
- B. Interior and Exterior Frames: Form of hot-rolled steel sheets, not less than 12 gage, zinc alloy iron coated A60 galvanized.
- C. Mullions and Transom Bars:
1. Furnish closed or tubular mullions and transom bars where shown. Fasten mullions and transom bars at crossings and to jambs by butt welding. Reinforce joints between frame members with concealed clip angles or sleeves of same metal and thickness as frame.
  2. Where installed in masonry, leave vertical mullions in frames open at the top so they can be filled with grout.
- D. Wall Anchors: Unless otherwise specified or shown, formed of not less than 16 gage galvanized steel.
1. Masonry Construction: Welded-in adjustable, corrugated or perforated T-shaped to suit frame size with leg not less than 2 inches wide by 10 inches long. Furnish at least 3 anchors per jamb up to 7'-6" jamb height; 4 anchors per jamb up to 8 foot jamb height; one additional anchor per jamb for each 24 inches or fraction thereof over 8 feet high.
  2. Steel Stud Construction: Weld-in type welded to back of frame unless otherwise indicated or approved. Furnish at least 4 anchors per jamb up to 7'-6" jamb height; 5 anchors per jamb to 8 foot jamb height; one additional anchor per jamb for each 24 inches or fraction thereof over 8 feet high.
  3. Anchors for Completed Openings: Welded-in anchorage devices designed to secure frame to in-place concrete or in-place masonry construction, as applicable. Furnish at least 5 anchors per jamb up to 7'-6" jamb height; 6 anchors per jamb to 8 foot jamb height; one additional anchor per jamb

for each 12 inches or fraction thereof over 8 feet high. Install anchors with “doubles” expansion bolts.

- E. Floor Anchors: Furnish floor anchor for each jamb and mullion which extends to floor, formed of not less than 16 gage steel, with 2 holes to receive fasteners, welded to bottom of jamb or mullion, and galvanized if used with galvanized frames. Where frames are installed in existing walls, provide welded-in reverse base anchors similar to the standard base anchor.

## **2.04 FABRICATION**

- A. Fabricate steel door and frame units to be rigid, neat in appearance, and free from warp, buckle and defects. Accurately form metal to required sizes and profiles, with minimum radius for thickness of metal. Where practical, fit and assemble units in manufacturer's plant. To assure proper assembly at Project site, clearly identify items that cannot be permanently factory-assembled before shipment.
- B. Exposed Fasteners: Countersunk flat, or oval head torx center pin screws and bolts. Unless otherwise indicated, locate fasteners 2 inches from ends of members and not more than 12 inches apart.
- C. Finish Hardware Reinforcements:
  - 1. Minimum 10 gage continuous reinforcement for continuous hinges.
  - 2. Install 7 gage reinforcement for butt hinges, or hinge reinforcement in door edge may be one piece 12 gage channel full door height with extruded hinge screw holes having an average minimum thread pull-out strength of 1600 pounds per hole.
  - 3. Minimum 12 gage reinforcement for other hardware.
  - 4. Weld 14 gage steel tongues, 1-1/2 inches high, inside lock mortise to keep lock body centered in door.
  - 5. Closer reinforce doors and provide full profile closer reinforcement in frames for full width of opening, whether or not closers are specified.
- D. Finish Hardware Preparation:
  - 1. Factory prepare doors and frames to receive mortised and concealed hardware, including cutouts; reinforcing; drilling and tapping, in accordance with approved Finish Hardware Schedule and templates furnished by hardware manufacturers.
  - 2. Factory reinforced doors and frames to receive surface applied hardware. Drill and tap for surface applied hardware at project site.
- E. Finish Hardware Locations: Locate hardware reinforcements and mortises so hardware locations comply with requirements of HMMA 831, “Recommended Hardware Locations for Custom Hollow Metal Doors and Frames”, and as follows:
  - 1. Knobs, Levers, Crescents: Centerline 3’2” from finished floor.
  - 2. Mortise Deadlocks: Centerline not to exceed 48” above finished floor.
- F. Clearances: Fabricate doors for their respective frames within the following clearances:
  - 1. Jambs and Head: 3/32 to 1/8 inch.
  - 2. Meeting Edges of Pairs: 1/8 to 3/16 inch.
  - 3. Bottom (no threshold): 3/4 inch, maximum to finished surface.
  - 4. Bottom (at threshold): 3/8 inch, maximum to top of threshold or carpet.

5. Fire Rated Doors: Comply with clearances specified in NFPA Standard No.80.
  6. Measure door clearances from stile edge to jamb.
- G. Factory Prefinish Paint Doors:
1. Chemically wash, rinse, and dry exposed and concealed surfaces of fabricated units.
  2. Apply one coat of primer with vinyl binder to surfaces and oven-bake units.
  3. Units shall be capable of passing the following tests:
    - a. Salt Spray Test complying with ASTM B 117-97 for 120 continuous hours.
    - b. Water Fog Test complying with ASTM D 1735-97 for 240 continuous hours.
  4. Factory pre-finish doors where indicated on the door schedule.
    - a. Provide custom color(s) as selected by the Director's Representative. One color is required for all six sides of a door.
    - b. Provide 6 (six) touch-up paint kits for field repair. Turn over remaining paint to the Facility.
- H. Factory Prime Paint Frames:
1. Chemically wash, rinse, and dry exposed and concealed surfaces of fabricated units.
  2. Apply one coat of primer with vinyl binder to surfaces and oven-bake units.
  3. Units shall be capable of passing the following tests:
    - a. Salt Spray Test complying with ASTM B 117-97 for 120 continuous hours.
    - b. Water Fog Test complying with ASTM D 1735-97 for 240 continuous hours.

## **PART 3 EXECUTION**

### **3.01 EXAMINATION**

- A. Verification of Conditions: Examine substrates, areas and conditions, with installer present under which frames are to be installed for defects that will adversely affect execution and quality of Work. Do not proceed until unsatisfactory conditions are corrected.

### **3.02 PREPARATION**

- A. Prior to installation adjust and securely brace door frames for squareness, alignment, twist, and plumb to the following tolerances:
1. Squareness: Plus or minus 1/16 inch, measured at door rabbet on a line 90 degrees from jamb perpendicular to frame head.
  2. Alignment: Plus or minus 1/16 inch, measured at jambs on a horizontal line parallel to plane of wall.
  3. Twist: Plus or minus 1/16", measured at opposite face corners of jambs on parallel lines, and perpendicular to plane of wall.
  4. Plumbness: Plus or minus 1/16 inch, measured at jamb face on a perpendicular line from head to floor.
- B. Drill and tap doors and frames to receive non-templated mortised and surface mounted hardware.

### 3.03 INSTALLATION

- A. General: Install steel doors and frames plumb, rigid, properly aligned, and securely fastened in place; comply with Drawings and manufacturer's written instructions.
  - 1. Frames: Install frame of size and profile indicated. Set frames accurately in position; plumbed, aligned, and braced securely until permanent anchors are set.
    - a) Remove temporary braces necessary for installation only after frames have been properly set and secured.
    - b) Check plumb, squareness, and twist of frames as walls are constructed. Adjust as necessary to comply with installation tolerances.
  - 2. Installation Tolerances: Adjust door frames for squareness, alignment, twist, and plumb to the following tolerances:
    - a) Squareness: Plus or minus 1/16 inch, measured at door rabbet on a line 90 degrees from jamb perpendicular to frame head.
    - b) Alignment: Plus or minus 1/16 inch, measured at jambs on a horizontal line parallel to plane of wall.
    - c) Twist: Plus or minus 1/16 inch, measured at opposite face corners of jambs on parallel lines, and perpendicular to plane of wall.
    - d) Plumbness: Plus or minus 1/16 inch, measured at jambs at floor.
- B. Doors: Fit non-fire-rated doors accurately in frames with the following clearances:
  - 1. Jambs and Head: 1/8 inch plus or minus 1/16 inch.
  - 2. Between Bottom of Door and Top of Threshold: Maximum 3/8 inch.
  - 3. Between Bottom of Door and Top of Finish Floor (No Threshold): Maximum 3/4 inch.

### 3.04 ADJUSTING AND CLEANING

- A. Final Adjustments:
  - 1. Check and readjust operating hardware items immediately before final inspection.
  - 2. Leave work in complete and proper operating condition.
  - 3. Remove and replace defective work including doors or frames that are warped, bowed, or otherwise unacceptable.
- B. Clean foreign materials off steel doors and frames immediately after installation.

### 3.05 FINAL INSPECTION

- A. Upon completion of the project, the Director's representative will schedule a final inspection to verify doors and frames are properly installed and adjusted. The contractor, door and frame installer, and design representative will attend.
- B. Upon verification, the design representative will certify in writing components are properly installed and adjusted within referenced tolerances in accordance with this specification. Include this certification in the Close-out Submittals.

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**END OF SECTION**

CEH

## **SECTION 087100**

### **FINISH HARDWARE**

#### **PART 1 GENERAL**

##### **1.01 REFERENCES**

- A. NFPA 80 Fire Doors and Windows (2013)
- B. NFPA 101 Life Safety Code (2012)
- C. Building Code of New York State (2010)
- D. ICC/ANSI A117.1-1998 Accessible and Usable Buildings and Facilities
- E. ANSI/BHMA Standard A156.1 Butts and Hinges (2006)
- F. ANSI/BHMA Standard A156.4 Door Controls – Closers (2008)
- G. ANSI/BHMA Standard A156.6 Architectural Door Trim (2005)
- H. ANSI/BHMA Standard A156.7 Template Hinge Dimensions (2009)
- I. ANSI/BHMA Standard A156.8 Door Controls – Overhead Stops and Holders (2005)
- J. ANSI/BHMA Standard A156.13 Mortise Locks and Latches Series 1000 (2005)
- K. ANSI/BHMA Standard A156.16 Auxiliary Hardware (2008)
- L. ANSI/BHMA Standard A156.22 Door Gasketing Systems (2005)
- M. ANSI/BHMA Standard A156.26 Continuous Hinges (2006)
- N. DHI - Door and Hardware Institute
- O. NAAM Standard HMMA 800-96- Hollow Metal Manufacturers Association
- P. NAAM Standard HMMA 831-97 Recommended Hardware Locations for Custom Hollow Metal Doors and Frames.
- Q. 2010 Standards for State and Local Government Facilities: Title II

##### **1.03 DEFINITIONS**

- A. Architectural Hardware Consultant (AHC): A Door and Hardware Institute certified expert in complex architectural openings requiring advanced knowledge of model building codes and safety standards, ADA requirements, access control knowledge and installation expertise.

- B. Architectural Hardware Distributor: A company that regularly purchases architectural hardware from manufacturers and specializes in the sale, service and support of that hardware to contractors and/or end users.
- C. Company Field Advisor(s): Hardware manufacturers' representatives who are certified in writing by manufacturer to be technically qualified in design, installation, and servicing of products.
- D. Installation Supervisor: Designated supervisor/installer, who has a minimum three years experience in finish hardware installation, and is qualified and responsible to ensure approved finish hardware is installed, adjusted, and operates properly.
- E. Benchmark: Finish hardware installed on full size door and frame assembly that is constructed on-site. Benchmarks are constructed to verify qualities of materials and execution; to review coordination between frames, doors, and architectural hardware; to show interface between partitions and frames; and to demonstrate compliance with specified installation tolerances. Benchmarks are not samples. Unless otherwise indicated, approved benchmarks establish the standard by which the Work will be judged. The approved benchmark may be incorporated into the work of this section.

#### **1.04 SUBMITTALS**

- A. Waiver of Submittals: The Waiver of Certain Submittal Requirements in Section 01330 does not apply to this Section.
- B. Re-Evaluation Fee: In accordance with the General Conditions 07213 Article 4.7.
- C. Submittal Package Cover Sheets: The Hardware Distributor shall provide a cover sheet, which identifies each package by:
  - 1. OGS project number
  - 2. Project name
  - 3. Facility name and location
  - 4. Submittal Package name
  - 5. Specification section name and number
  - 6. Construction Contractor's company name, address, e-mail address, and telephone number
  - 7. Finish Hardware Distributor's company name, address, e-mail address, and telephone number
  - 8. Certified Architectural Hardware Consultant's name, company name, address, e-mail address, and telephone number
  - 9. Submittal Date
- D. Submittal Packages
  - 1. Quality Control Package: Do not submit balance of packages until this package is approved.
    - a. Architectural Hardware Consultant Data:
      - 1) Provide name, business address, and telephone number of DHI certified Architectural Hardware Consultant.

- 2) Submit photocopy of Door and Hardware Institute's certificate demonstrating individual is an Architectural Hardware Consultant.
  - b. Company Field Advisor Data:
    - 1) Provide name, business address, and telephone number of Company Field Advisor(s) for continuous hinges, door bolts, locksets, exit devices, overhead stops, door closers, and gasketing.
    - 2) List services and products for which company field advisor(s) is/are certified by manufacturer. Provide written certifications.
  - c. Hardware Distributor's Qualification Data:
    - 1) Provide the Finish Hardware Distributor's company name, address, e-mail address, and telephone number.
    - 2) Provide the hardware distributor's company history, including number of years in the hardware distribution business, the number of AHC's employed, and the number of employees. Describe the distributor's major market.
    - 3) Include the names and contact information of physical plant managers for 3 facilities, similar to this project, for which the distributor has furnished architectural hardware within the past 2 years.
  - d. Supervisor's/Installer's Qualification Data:
    - 1) Name of Supervisor and each installer performing Work, and employer's name, business address and telephone number.
    - 2) Names and addresses, and contact information of physical plant managers for 3 facilities, similar to this project, on which each installer has worked on during past 2 years.
2. Finish Hardware Package:
- a. Finish Hardware Schedule: Use vertical format and indicate finish hardware items, both mechanical and electrical in one document, required to complete Work of this section. Submit Hardware Schedule that includes complete hardware sets for each door and frame shown on Door Schedule.
    - 1) Preface schedule with following:
      - a) Certified Architectural Hardware Consultant's statement of preparation of/or certification of, Finish Hardware Schedule
      - b) Index
      - c) List of manufacturers
      - d) List of finishes
      - e) Explanation of abbreviations
      - f) Keying instructions and key schedule
    - 2) Create hardware groups, each group consisting of similar doors and hardware. Do not combine labeled and non-labeled openings. Do not combine doors and frames with dissimilar door sizes and/or materials.
    - 3) For each opening include the following:
      - a) Door and frame materials and dimensions

- b) Fire rating
  - c) Door number, location and handing
  - d) Degree of opening required for closer and/or overhead stop
  - e) Installation and detailing notes
  - 4) Under each group heading, list hardware items in detail, required for ordering. For each hardware item include:
    - a) Type (Hinges)
    - b) Quantity (Hinges 3ea)
    - c) Manufacturers' name (Hinges 3ea Stanley)
    - d) Catalog number (Hinges 3ea Stanley FBB199)
    - e) Size (Hinges 3ea Stanley FBB199 4 ½ x 4 ½)
    - f) Options or accessories (Hinges HTFBB199 4 ½ x 4 ½)
    - g) Finish Hinges HTFBB199 4 ½ x 4 ½ x 630)
    - h) Fasteners (Hinges HTFBB199 4 ½ x 4 ½ x 630 x torx with center security pin)
    - i) Indicate location of protection plates: Push side or pull side.
    - j) Installation Notes, as written in this section, for each hardware group
  - 5) Use a separate hardware group in Hardware Schedule that lists attic stock hardware items, key cabinets, key control system, special tools required to install hardware, lubricants, and Operations and Maintenance Manuals.
  - b. Product Data: Furnish six copies of manufacturers' catalog sheets, specifications, sizing charts, and installation instructions, for each item specified. Highlight information pertaining specifically to product (s) submitted.
  - c. Submit samples as requested.
3. Close-Out Submittals: Submit as a complete package.
- a. Operation and Maintenance Manuals: Furnish 2 hardcover three ring binders with the project name and number displayed on the front cover and spine. Include:
    - 1) List of Manufacturers
    - 2) Approved Finish Hardware Schedule
    - 3) Approved Manufacturers' Product Data Sheets
    - 4) Manufacturer's operation, installation, maintenance, and repair instructions for each type of hardware furnished
    - 5) Templates for kind of hardware furnished
    - 6) Parts List for each type of finish hardware furnished
    - 7) Manufacturers' dated written warranty for each type of finish hardware furnished
    - 8) Certifications: Written certification from Company Field Advisors that their products are installed according to manufacturers' printed installation instructions, are operating properly, and manufacturers' written warranty will be in effect upon physical completion of the Work
    - 9) Special Tools: List of special tools required to install hardware, and their purpose

- b. Special Tools:
  - 1) At conclusion of finish hardware installation, turn over to Director's Representative 2 of each special tool required to install hardware together with a list of these tools and their purpose.

#### **1.05 TEMPLATES**

- A. After receipt of approved submittals, furnish templates to affected trades, to enable fabricators to make provision for finish hardware without delaying the Work of the Project.

#### **1.06 DELIVERY AND STORAGE**

- A. Coordinate delivery to avoid delay.
- B. Clearly label each item for identification and installation location as it corresponds to the approved Finish Hardware Schedule and subsequent information bulletins.
- C. Deliver hardware to the jobsite in the manufacturers' original packages complete with fasteners, parts, installation instructions, and templates required for proper installation.
- D. Inventory hardware at jobsite to identify shortages or backorders. Resolve delivery shortages and damaged items prior to installing hardware.
- E. Store finish hardware where directed by Director's Representative. Provide locked, dry storage for finish hardware.

#### **1.07 QUALITY ASSURANCE**

- A. Hardware Distributor's Qualification
  - 1. Hardware Distributor who has been in the business of furnishing, and/ or installing finish hardware for a minimum of three years.
  - 2. Hardware Distributor shall have the DHI certified Architectural Hardware Consultant prepare or certify the Finish Hardware Submittal meets specification requirements, and the schedule is written accurately and in accordance with DHI recommendations, and requirements of this specification.
- B. Company Field Advisors: Employ advisor(s) for continuous hinges, door bolts, mortise locksets, surface overhead stops, door closers, and gasketing.
- C. Installation Supervisor: Employ a qualified Installation Supervisor who will be responsible to ensure approved finished hardware is installed, adjusted and operates properly.

- D. Installers: Employ experienced finish hardware installers who have been regularly employed by a Company installing finish hardware for a minimum of 5 years.
- E. Pre-submittal Conference: Before Finish Hardware Submittals are written for submission, the Director's Representative will call a teleconference to review Finish Hardware Submittal requirements including but not limited to format, cover sheet, headings, hardware sets, level of detail, installation notes, description of operation, keying, and product data sheets. The Contractor, the Finish Hardware Distributor, the Finish Hardware Detailer, and consulting hardware designer, and OGS Designers shall attend. The OGS Finish Hardware Reviewer shall conduct the conference.
- F. On Site Pre-installation Conference: Before finish hardware installation begins, the Director's Representative will call a conference at the site to review Finish Hardware Specifications, approved Finish Hardware Submittals, and to discuss requirements for the Work including:
1. Hardware delivery and storage
  2. Hardware labeling by door number
  3. Hardware locations
  4. Potential location conflicts
  5. Hardware installation sequence and responsibility
  6. Required accessories and fasteners
  7. Continuous hinge installation
  8. Surface overhead stops and closer templating and adjustments
  9. Special tools and maintenance items
  10. Hardware Closeout requirements
  11. Hardware Warranties

The Construction Contractor, Company Field Advisors, authorized Finish Hardware Installers, and the Finish Hardware Distributor's Architectural Hardware Consultant shall attend the conference. OGS's Finish Hardware Reviewer conducts the meeting. OGS designers and facility personnel may attend. The Company Field Advisors will present installation instruction and advice.

- G. Pre-Benchmark-Construction Meeting
1. Prior to the construction of the mock-up, a meeting will be held at the site to review the requirements, and discuss the intent of the mock-up. The meeting will be scheduled by the Director's Representative and conducted by the Hardware Designer. The meeting shall be attended by the Director's Representative, the Hardware Designer, the Contractor's onsite foreman, the person supervising this phase of the Work (if different), and the person (people) who will be performing the work.
- H. Construction of Benchmark
1. Before installing portions of the Work requiring benchmarks, install benchmarks for each form of construction required to comply with the following requirements, using materials indicated for the completed Work.

- a. Build hardware benchmark in door and frame assembly, specified in Section 081102, in locations as directed, and include continuous hinge, lockset, closer, surface overhead stop and gasketing.
  - b. Notify the Director's Representative in advance of dates and times when benchmark will be constructed.
  - c. Install benchmark with supervisor oversight and workers who will be employed during the construction of the Work.
  - d. Construct benchmarks using the exact materials, products, methods, and workmanship that were approved for the Work.
  - e. Obtain Director's Representative's approval of benchmarks before starting work, fabrication, or construction.
  - f. Maintain benchmarks during construction in an undisturbed condition as a standard for judging the completed Work.
  - g. Failure to maintain this standard of quality will be cause for rejection of the Work.
  - h. Benchmark may be used in the Work unless otherwise indicated.
- I. Uniformity of Hardware and Single Source Responsibility: For each kind of hardware provide product(s) of a single manufacturer.
- J. Size Variations: Manufacturers' products may vary slightly from sizes specified except where minimum size or thickness is specified.

## **1.08 WARRANTY**

- A. Manufacturer's Warranty: Ten year minimum warranty for door closers.
- B. Manufacturer's Warranty: Three year minimum on locksets.

## **1.09 MAINTENANCE**

- A. Special Tools: At the conclusion of finish hardware installation, turn over to Owner's Representative 2 sets of each special tools required for proper installation and adjustment of hardware, together with a list of these tools and their purpose.
- B. Lubricants: Provide manufacturer's recommended lubricants for locksets and closers sufficient for 1 year of maintenance. Turn over to Director's Representative.

## **PART 2 PRODUCTS**

### **2.01 ACCESSORIES**

- A. Provide brackets, plates, arms, spacers, and special templates to mount door closers in combination with overhead stops and coordinators, on narrow top rails and for special ceiling and jamb conditions.

- B. Provide curved lip strikes, with wrought boxes, specific to individual lock functions. Universal strikes that fit a variety of lock functions are not acceptable.

## **2.02 FASTENINGS**

- A. Provide fasteners that harmonize with finish hardware material and finish.
- B. Provide torx center pin security fasteners for exposed hardware, including full mortise hinges.
- C. Provide machine screws for hardware secured to metal; and machine screws and metal expansion shields for attachment to masonry substrates. Self-tapping or self-drilling screws are not acceptable.
- D. Provide undercut shallow head torx center pin security fasteners where necessary for proper seating.
- E. Attach door closers and overhead stops with machine screws..

## **2.03 MATERIALS AND FINISHES**

- A. General: Requirements for design, grade, function, finish, size, and other distinctive qualities of each type of finish hardware are indicated in this section and in the Hardware Groups.
- B. Continuous Hinges
  1. Full height barrel-type manufactured from 14-gauge 304 stainless steel.
  2. .25" diameter stainless steel pins.
  3. Provide hinges without covers.
- C. Locks, Latches and Bolts
  1. Comply with UL requirements for throw of bolts and latch bolts on rated fire openings.
  2. Provide 3/4" minimum throw on other latch bolts.
  3. Provide 1" minimum throw deadbolts.
- D. Closers and Door Control Devices
  1. Closer bodies: Provide closer bodies with the same hole template pattern regardless of type or application.
  2. Closer arms: Non-handed forged steel.
  3. Closer size: Provide closers factory set at size 3.
  4. Provide all-weather fluid to eliminate seasonal adjustment of closer speed.
  5. Powder coat closer body, arm, and adapter plate or pre-treat closer body, arm, and adapter plate with rust-inhibiting coating before painted finish is applied.

## **2.04 FINISH HARDWARE**

A. Group 1:

1. Continuous Hinge: 2ea – Zero 919 STST x HT x marked “Top” x Torx with center security pin x 630
2. Combination Flush Bolt Set: 1set - Rockwood 1845 x Torx with center security pin x 626 @ inactive leaf.
3. Mortise Deadlock: 1ea – Yale 351 x less cylinders x collars as required x 30S strike x 31S strike box x torx with center security pin x 630 @ active leaf
4. Mortise Lock Cylinder: 2ea - Compatible with specified lock above and Facility’s existing Best key system x 626.
5. Pulls: 2 ea Rockwood D133 US32D
6. Coordinator: 1ea - Rockwood 1660 x torx with center security pin x black primer.
7. Coordinator Mounting Bracket: 1ea - Rockwood 1601AB or 1601C, as required soffit size x torx with center security pin x black prime @ RHR leaf.
8. Overhead Stop: 2ea - Glynn Johnson 814S x thru-bolt x torx with center security pin x 630 x inactive leaf only. See installation note.
9. Closer: 1ea – LCN 4214 x ST3456 arm x SRI x thru-bolt x torx with center security pin x AL @ RHR leaf. See installation note.
10. Kick Plate: 2ea – Rockwood K1062 10” x 1 ½” LDW x B4E x CSK x torx with center security pin x 630
11. Flat Astragal: Pemko 357 SS x torx
12. Perimeter Gasketing: 1set – DHSI CNS105 x anti-ligature x 3 fin @ hinge jamb x dark brown.

Installation Note: Install surface overhead stop; then install closer. Install lock strike; then install meeting stile gasket on edge of inactive leaf, offset towards push side.

B. Group 2:

1. Continuous Hinge: 1ea – Zero 919 STST x HT x marked “Top” x Torx with center security pin x 630
2. Mortise Lockset: 1ea – Yale CO x CN x 8860-2 x less cylinder x curved lip strike\* x 202 strike box x torx with center security pin x 630
3. Mortise Lock Cylinder: 2ea - Compatible with specified lock above and Facility’s existing Best key system x 626.
4. Overhead Stop: 1ea – Glynn Johnson 814S x thru-bolt x torx with center security pin x 630
5. Closer: 1ea – LCN 4213 x ST3456 x SRI x torx with center security pin x AL.
6. Kick Plate: 1ea – Rockwood K1062 10” x 1 ½” LDW x B4E x CSK x torx with center security pin x 630
7. Mop Plate: 1ea – Rockwood K1062 4” x ½” LDW x B4E x CSK x torx with center security pin x 630

Installation Note: Install surface overhead stop; then install closer.

C. Group 3:

1. Continuous Hinge: 1ea – Zero 919 STST x HT x marked “Top” x torx with center security pin x 630
2. Mortise Lockset: 1ea – Yale CO x CN x 8860-2 x less cylinder x curved lip strike\* x 202 strike box x torx with center security pin x 630
3. Mortise Lock Cylinder: 2ea - Compatible with specified lock above and Facility’s existing Best key system x 626.
4. Overhead Stop: 1ea – Glynn Johnson 815S x thru-bolt x torx with center security pin x 630
5. Closer: 1ea – LCN 4214 x ST3456 x SRI x torx with center security pin x AL.
6. Kick Plate: 1ea – Rockwood K1062 10” x 1 ½” LDW x B4E x CSK x torx with center security pin x 630
7. Mop Plate: 1ea – Rockwood K1062 4” x ½” LDW x B4E x CSK x torx with center security pin x 630

Installation Note: Install surface overhead stop; then install closer.

D. Group 4:

1. Continuous Hinge: 1ea – Zero 919 STST x HT x marked “Top” x torx with center security pin x 630
2. Mortise Lockset: 1ea – Yale CO x CN x 8860-2 x less cylinder x curved lip strike\* x strike box x torx with center security pin x 630
3. Mortise Lock Cylinder: 2ea - Compatible with specified lock above and Facility’s existing Best key system x 626.
4. Overhead Stop: 1ea – Glynn Johnson 815S x thru-bolt x torx with center security pin x 630
5. Closer: 1ea – LCN 4514T x SRI x torx with center security pin x AL.
6. Kick Plate: 1ea – Rockwood K1062 10” x 1 ½” LDW x B4E x CSK x torx with center security pin x 630
7. Mop Plate: 1ea – Rockwood K1062 4” x ½” LDW x B4E x CSK x torx with center security pin x 630

E. Group 5:

1. Continuous Hinge: 1ea – Zero 919 STST x HT x marked “Top” x Torx with center security pin x 630
2. Mortise Lockset: 1ea – Yale CO x CN x 8860-2 x less cylinder x curved lip strike\* x strike box x torx with center security pin x 630
3. Mortise Lock Cylinder: 2ea - Compatible with specified lock above and Facility’s existing Best key system x 626.
4. Closer: 1ea – LCN 4213 x SRI x torx with center security pin x AL.
6. Kick Plate: 1ea – Rockwood K1062 10” x 1 ½” LDW x B4E x CSK x torx with center security pin x 630
7. Mop Plate: 1ea – Rockwood K1062 4” x ½” LDW x B4E x CSK x torx with center security pin x 630

Installation Note: Install surface overhead stop; then install closer.

F. Group 6:

1. Continuous Hinge: 1ea – Zero 919 STST x HT x marked “Top” x Torx with center security pin x 630

2. Mortise Lockset: 1ea – Yale CO x CN x 8860-2 x less cylinder x curved lip strike\* x strike box x torx with center security pin x 630
3. Mortise Lock Cylinder: 2ea - Compatible with specified lock above and Facility's existing Best key system x 626.
4. Closer: 1ea – LCN 4213 x SRI x torx with center security pin x AL.
5. Kick Plate: 1ea – Rockwood K1062 10" x 1 ½" LDW x B4E x CSK x torx with center security pin x 630
6. Mop Plate: 1ea – Rockwood K1062 4" x ½" LDW x B4E x CSK x torx with center security pin x 630
7. Wall Stop: 1 ea Rockwood 402 x 626 x torx.

G. Group 7:

1. Continuous Hinge: 1ea – Zero 919 STST x HT x marked "Top" x Torx with center security pin x 630.
2. Mortise Lockset: 1ea – Yale CO x CN x 8860-2 x less cylinder x curved lip strike\* x strike box x torx with center security pin x 630.
3. Mortise Lock Cylinder: 2ea - Compatible with specified lock above and Facility's existing Best key system x 626.
4. Overhead Stop: 1ea – Glynn Johnson 816S x thru-bolt x torx with center security pin x 630.
5. Closer: 1ea – LCN 4215 x SRI x torx with center security pin x AL.
6. Kick Plate: 1ea – Rockwood K1062 10" x 1 ½" LDW x B4E x CSK x torx with center security pin x 630.
7. Mop Plate: 1ea – Rockwood K1062 4" x ½" LDW x B4E x CSK x torx with center security pin x 630.
8. Threshold: National Guard 713 x torx x AL.
9. Door Bottom: 1ea National Guard 200N x torx x AL.
10. Perimeter Gasketing: CNS105 x anti-li x 3 fin at Hinge Jamb x adhesive x brown.

H. Group 8:

1. Continuous Hinge: 1ea – Zero 919 STST x HT x marked "Top" x Torx with center security pin x 630
2. Mortise Lockset: 1ea – Yale CO x CN x 8860-2 x less cylinder x curved lip strike\* x strike box x torx with center security pin x 630
3. Mortise Lock Cylinder: 2ea - Compatible with specified lock above and Facility's existing Best key system x 626.
4. Closer: 1ea – LCN 4214 x SRI x torx with center security pin x AL.
5. Kick Plate: 1ea – Rockwood K1062 10" x 1 ½" LDW x B4E x CSK x torx with center security pin x 630
6. Mop Plate: 1ea – Rockwood K1062 4" x ½" LDW x B4E x CSK x torx with center security pin x 630
7. Wall Stop: 1 ea Rockwood 402 x 626 x torx.

I. Group 9:

1. Continuous Hinge: 1ea – Zero 919 STST x HT x marked "Top" x Torx with center security pin x 630
2. Mortise Lockset: 1ea – Yale CO x CN x 8860-2 x less cylinder x curved lip strike\* x strike box x torx with center security pin x 630

3. Mortise Lock Cylinder: 2ea - Compatible with specified lock above and Facility's existing Best key system x 626.
4. Overhead Stop: 1ea – Glynn Johnson 815S x thru-bolt x torx with center security pin x 630
5. Closer: 1ea – LCN 4214 x SRI x torx with center security pin x AL.
6. Kick Plate: 1ea – Rockwood K1062 10" x 1 ½" LDW x B4E x CSK x torx with center security pin x 630
7. Mop Plate: 1ea – Rockwood K1062 4" x ½" LDW x B4E x CSK x torx with center security pin x 630

J. Group 10:

1. Hinge Fillers: 3 ea Rockwood DFF4 or DFF5 as required x field painted to match existing frame.
2. Continuous Hinge: 1ea – Zero 919 STST x HT x marked "Top" x Torx with center security pin x 630.
3. Mortise Lockset: 1ea – Yale CO x CN x 8860-2 x less cylinder x curved lip strike\* x strike box x torx with center security pin x 630.
4. Mortise Lock Cylinder: 2ea - Compatible with specified lock above and Facility's existing Best key system x 626.
5. Overhead Stop: 1ea – Glynn Johnson 815S x thru-bolt x torx with center security pin x 630.
6. Closer: 1ea – LCN 4216 x SRI x torx with center security pin x AL.
7. Kick Plate: 1ea – Rockwood K1062 10" x 1 ½" LDW x B4E x CSK x torx with center security pin x 630.
8. Mop Plate: 1ea – Rockwood K1062 4" x ½" LDW x B4E x CSK x torx with center security pin x 630.
9. Door Bottom: 1ea National Guard 200N x torx x AL.
10. Perimeter Gasketing: CNS105 x anti-li x 3 fin at Hinge Jamb x adhesive x brown.

K. Group 11:

1. Mortise Cylinders: 2ea - Compatible with lockset specified in specification section 102213 and Facility's existing Best key system x cam as required x 626.
2. Balance of hardware by specification Section 102213.

L. Group 12:

1. Continuous Hinge: 1ea – Zero 919 STST x HT x marked "Top" x Torx with center security pin x 630.
2. Mortise Lockset: 1ea – Yale CO x CN x 8860-2 x less cylinder x curved lip strike\* x strike box x torx with center security pin x 630.
3. Mortise Lock Cylinder: 2ea - Compatible with specified lock above and Facility's existing Best key system x 626.
4. Kick Plate: 1ea – Rockwood K1062 10" x 1 ½" LDW x B4E x CSK x torx with center security pin x 630.
5. Mop Plate: 1ea – Rockwood K1062 4" x ½" LDW x B4E x CSK x torx with center security pin x 630.
6. Wall Stop: 1 ea Rockwood 402 x 626 x torx.

M. Group 13:

1. Spring Hinges: 2ea – Stanley 2060R 4 ½” x 4 ½” x torx x 630.
2. Mortise Lockset: 1ea – Yale CO x CN x 8860-2 x less cylinder x curved lip strike\* x strike box x torx with center security pin x 630.
3. Mortise Lock Cylinder: 2ea - Compatible with specified lock above and Facility’s existing Best key system x 626.
4. Kick Plate: 1ea – Rockwood K1062 10” x 1 ½” LDW x B4E x CSK x torx with center security pin x 630.
5. Mop Plate: 1ea – Rockwood K1062 4” x ½” LDW x B4E x CSK x torx with center security pin x 630.
6. Wall Stop: 1 ea Rockwood 402 x 626 x torx.
7. Perimeter Gasketing: CNS105 x anti-li x 3 fin at Hinge Jamb x adhesive x brown.

N. Group 14:

1. Hinge Fillers: 3 ea Rockwood DFF4 or DFF5 as required x field painted to match existing frame.
2. Continuous Hinge: 1ea – Zero 919 STST x HT x marked “Top” x Torx with center security pin x 630.
3. Mortise Lockset: 1ea – Yale CO x CN x 8860-2 x less cylinder x curved lip strike\* x strike box x torx with center security pin x 630.
4. Mortise Lock Cylinder: 2ea - Compatible with specified lock above and Facility’s existing Best key system x 626.
5. Overhead Stop: 1ea – Glynn Johnson 814S x thru-bolt x torx with center security pin x 630.
6. Closer: 1ea – LCN 4214 x SRI x torx with center security pin x AL.
7. Kick Plate: 1ea – Rockwood K1062 10” x 1 ½” LDW x B4E x CSK x torx with center security pin x 630.
8. Mop Plate: 1ea – Rockwood K1062 4” x ½” LDW x B4E x CSK x torx with center security pin x 630.
9. Threshold: National Guard 713 x torx x AL.
10. Door Bottom: 1ea National Guard 200N x torx x AL.
11. Perimeter Gasketing: CNS105 x anti-li x 3 fin at Hinge Jamb x adhesive x brown.

O. Group 15:

1. Continuous Hinge: 1ea – Zero 919 STST x HT x marked “Top” x Torx with center security pin x 630.
2. Mortise Lockset: 1ea – Yale CO x CN x 8860-2 x less cylinder x curved lip strike\* x strike box x torx with center security pin x 630.
3. Mortise Lock Cylinder: 2ea - Compatible with specified lock above and Facility’s existing Best key system x 626.
4. Overhead Stop: 1ea – Glynn Johnson 815S x thru-bolt x torx with center security pin x 630.
5. Closer: 1ea – LCN 4514T x SRI x torx with center security pin x AL.
6. Kick Plate: 1ea – Rockwood K1062 10” x 1 ½” LDW x B4E x CSK x torx with center security pin x 630.

7. Mop Plate: 1ea – Rockwood K1062 4” x ½” LDW x B4E x CSK x torx with center security pin x 630.

- P. Group 16: Furnish a quantity of 1 (one) as follows:
1. 100 Key Blanks to match existing key system
  2. 1 set Special Tools: See paragraph 1.09 A.
  3. Lubricants: See paragraph 1.09 B.
  4. 2ea Maintenance and Operations Manuals

## **2.05 KEYING**

- A. Continue existing Best key system established for Facility.
1. Provide uncombined cylinders with sufficient springs, drivers, pins, and scalps for keying by the Facility.
  2. Provide 2 key blanks per cylinder stamped, “Do Not Duplicate”, on one side of key.
  3. When lockset and cylinder are by different manufacturers, identify and furnish correct cylinder cam to operate lockset.
  4. Provide compression rings and spacers to achieve proper spacing relationship between cylinder and face of door.
- B. Keying Information
1. Detailed keying information will be provided in the reviewed 087100 Submittal including number of pins, and keyway.

## **PART 3 EXECUTION**

### **3.01 EXAMINATION**

- A. Examine doors and frames and related items for conditions such as, but not limited to, incorrect hardware preparation, incorrect or missing hardware reinforcements, and misaligned lock and strike preparations that would prevent proper application of finish hardware. Do not proceed until defects are corrected.
- B. Report improper conditions and hardware applications that are incorrect to the Director’s Representative.

### **3.02 INSTALLATION**

- A. Do not proceed with installation of finish hardware prior to attending referenced pre-installation conference.
- B. Installation Sequence: Use proper installation sequence, i.e., install coordinators, and overhead stops and holders before surface mounted door closers.

- C. Install hardware in accordance with manufacturer's printed installation instructions, and adjust for smooth operation, free of sticking, binding or rattling.
  - 1. Center punch, drill ,and tap for continuous hinge fasteners.
  - 2. Template surface overhead stops and holders for proper operation.
  - 3. Template and adjust closers for proper operation.
- D. Use proper tools and methods to prevent scratches, burrs or other defacement.
- E. Threshold Installation:
  - 1. Drill holes 3 inches from each end of threshold and intermediate holes 12 inches maximum oc for required fasteners. Prepare holes for countersunk fasteners.
  - 2. Level and align thresholds with frames and doors. Where required, use non-corrosive shims.
  - 3. Exterior Doors: Set thresholds in a solid bed of Type 3 sealant.
  - 4. Secure thresholds to substrate with countersunk fasteners.
- F. Door Bottom Installation:
  - 1. Mount sweep type door bottom protection/drip caps on exterior side of doors.
  - 2. Before mounting apply Type 2 sealant on the back side of bearing surface. Secure to door with required fasteners.
- G. Gasketing Installation:
  - 1. Install continuous stripping at each opening without unnecessary interruptions.
  - 2. Where fasteners are required, secure fasteners for stripping and seals so they will not work loose during door operation. Exposed heads of fasteners shall be free of sharp edges.
  - 3. Coordinate meeting stile gasketing with hardware before installation.
  - 4. Install units plumb and level at the optimum location to maintain a permanent effective seal.
- H. After installation, cover and protect hardware to prevent damage during remaining construction. Remove protection upon completion of construction.

### 3.03 LOCATIONS

- A. Locate hardware as follows:
  - 1. Mortise Deadlock: Locate centerline of deadbolt at 48" above finish floor.
  - 2. Pulls: Locate centerline of pull at 40" above finish floor.
  - 3. Door Closers: Template for maximum door swing allowed by wall placement and jamb conditions. Where overhead stop prevents door from swinging to wall, template closer to exceed degree of opening allowed by overhead stop.
  - 4. Protection Plates: 1/8 inch from door bottom.
  - 5. Wall Stops: Centerline of bumper to match centerline of locking trim.

### **3.04 FIELD QUALITY CONTROL**

- A. Post Installation Review: After hardware is adjusted for proper operation, Director's Representative will hold a Post-Installation Review with the Contractor, Hardware Designer, Company Field Advisors, Hardware Distributor and Hardware Installers.
  - 1. Physically inspect to verify proper application, installation, adjustment and operation of finish hardware, and in particular that:
    - a) Latches engage freely without binding. Filing of strike plates to relieve latch bind is not acceptable.
    - b) Closers are adjusted for proper spring power; sweep speed, latching speed; and hydraulic back check.
    - c) Locations and proper attachment of installed protective hardware are as specified.
    - d) There is no field modification of fasteners.
    - e) Damaged fasteners are replaced.
  - 2. Defective hardware is repaired or replaced.
  - 3. Hardware is to be left clean and free from disfigurement.
- B. Turn referenced Operations and Maintenance Manuals over to Facility through Director's Representative.

**END OF SECTION**

CEH

## SECTION 114100

### FOOD SERVICE EQUIPMENT

#### PART 1 GENERAL

##### 1.01 RELATED REQUIREMENTS SPECIFIED ELSEWHERE

- A. Prefabricated Walk-in Refrigerated Boxes: Section 114102.
- B. SST Pan and Trough Drain System: Section 114103
- C. Refrigeration: Section 236000.
- D. Joint Sealer: Section 079200.
- E. Wet Chemical Extinguishing System: Section 212300

##### 1.02 PRODUCTS FURNISHED BUT NOT INSTALLED UNDER THIS SECTION

- A. Deliver the following items to the Electrical Work Contractor for installation and connection to power wiring:
  - 1. Receptacles.
- B. Deliver the following items to the Plumbing Work Contractor for installation and connection to piping:
  - 1. Plumbing trim.
  - 2. Wet chemical extinguishing system electric gas valves.
- C. Deliver the following items to the HVAC Work Contractor for installation and connection to piping:
  - 1. HVAC Trim.

##### 1.03 SUBMITTALS

- A. Waiver of Submittals: The “Waiver of Certain Submittal Requirements” in Section 013300 does not apply to this Section.
- B. Shop Drawings:
  - 1. Include complete wiring diagrams of all power connections (Standard diagrams will not be accepted). Deliver 2 copies of approved wiring diagrams to the Electrical Work Contractor for installation of wiring and connections required under the Electrical Work Contract.
- C. Product Data: Manufacturer’s catalog sheets, standard schematic drawings, specifications and installation instructions for each item specified shall be bound as follows for electronic filing as per Section 013300.
  - 1. Manufacturer’s Catalog information and related technical data: Information is to be bound in book form and shall contain a cover sheet

noting the name of the project, Foodservice Contractor, Project Manager, General Contractor and date submitted. Catalog sheets are to be in numeric order and contain a type written coversheet listing the Item Number, Item Description, Manufacturer's Name, Model Number Quantity, and Accessories required, Finished, Electrical and Mechanical connections information.

2. Floor Plan Drawings, relating equipment locations with Architectural details. Submit  $\frac{1}{4}'' = 1'-0''$  scale floor plan drawings locating all Foodservice Equipment within Architecturally defined space. Show all required room details insuring minimum clearance and proper operation of equipment in accordance with the project intent. Include Equipment Schedule listing items, Quantity and General Notes indicating relocated existing or equipment supplied by other disciplines.
3. Mechanical and Electrical service rough-in drawings. Submit separate  $\frac{1}{4}'' = 1'-0''$  scale connection drawings for each of the listed disciplines, Mechanical and Electrical. Drawings are to contain all required information for final connection of equipment in proper locations. Drawing is to include location dimensions from face of finished walls, ceiling and floors as well as interconnection requirements for complete installation.
4. Architectural detail floor plan drawings. Submit separate  $\frac{1}{2}'' = 1'-0''$  drawings indicating Architectural details required for complete installation for the Foodservice Equipment. Information to include but not limited to; floor recesses, equipment curbs, wall / floor and ceiling penetrations, wall blocking and floor trough locations.
5. Manufacturer's fabrication drawings. Submit Manufacturer's drawings where required to confirm design intent. Submissions are required for all custom fabricated stainless steel and mill work systems, including installation requirements and field connections. All drawings shall be completed in a scale larger than  $\frac{1}{2}'' = 1'-0''$ .
6. If a product other than that specified by brand name is submitted for approval, include electric power requirement data. Where proposed equipment exceeds power requirements of the specified equipment pay any additional cost due to necessary increase in branch circuit and feeder sizes, circuit breaker sizes, etc., provided under the Electrical Work Contract.

D. Quality Control Submittals:

1. List of Completed Installations: If brand names other than those specified are proposed for use, furnish the name, address and telephone number of at least 3 comparable installations which can prove the proposed products have operated satisfactorily for 5 years.

- E. Contract Closeout Submittals:
  - 1. Operation and Maintenance Data: Deliver two copies, covering the installed products, to the Director's Representative.
  - 2. Certificates: Affidavit required under QUALITY ASSURANCE Article.

#### **1.04 QUALITY ASSURANCE**

- A. Regulatory Requirements: The published standard of the National Sanitation Foundation International will be considered as the minimum requirements for fabrication of Food Service Equipment to meet Sanitation and Health Requirements. All equipment shall be manufactured in accordance with these Standards and Specifications and, in addition, shall comply with all New York State Safety and Health Laws and all local jurisdictional rules and regulations.
- B. Certification: Affidavit certifying that the Food Service Equipment meets the contract requirements and is operating properly.

### **PART 2 PRODUCTS**

#### **2.01 Item No. 1 Walk-in Cooler**

- A. See Section 114102 Prefabricated Walk-in Refrigerated Boxes

#### **2.04 Item No. 4. Walk-in Cooler**

- A. See Section 114102 Prefabricated Walk-in Refrigerated Boxes

#### **2.07 Item No. 7. Walk-in Freezer**

- A. See Section 114102 Prefabricated Walk-in Refrigerated Boxes

#### **2.10 Item No. 10. Walk-in Freezer**

- A. See Section 114102 Prefabricated Walk-in Refrigerated Boxes

#### **2.13 Item No. 13. Vegetable Preparation Sink**

- A. Manufacturer: Universal Stainless Inc. / Storage Products Group, 14002 E. 33<sup>rd</sup> Place, Aurora, CO 80011, Phone 800-223-8332
- B. Size: Configuration as per drawing Q-106 & Q-501.
- C. Features:
  - 1. Construction: 14 gauge 304 stainless steel top, 3" high x 1-1/2" raised roll edge front and sides, 8" high back splash with 2" turned back at 45° toward wall.
  - 2. Top: Supported 12" of depth with sound deadening stainless hat channel brace, closed at each end and secured to the underside of the table with studs located at a minimum of 6" on center, tamper resistant fasteners.

3. Sink bowl: 20" x 24" x 12" deep coved corner, 14 gauge 304 stainless steel, fully welded, pitched to bottom lever waste, with sound deadening. Support bracket for lever handle, welded to bottom of sink bowl.
4. Legs: 1-5/8" diameter 16 gauge stainless steel legs complete with 1" stainless steel cross bracing (full perimeter of table) and gussets. Legs secured to gussets with tamper resistant set screws.
5. Feet: NSF adjustable flanged feet, all welded construction and tamper proof screws required. Secure to floor with galvanized bolts and expansion shields.

D. Plumbing Trim:

1. One (1) splash mounted T & S Brass and Bronze Work, Inc. Model No. B-0231-CC, sink mixing faucet with 12" swing nozzle and ½" CC male inlets, complete assembly w/ B-0199-7 non-splash vandal resistant aerator with key and B-WH-4" wrist action blade handles, tamper proof screws-VP
2. Two (2) Components Hardware, Model No. D10-4590 Lever handle waste outlets with over flow assembly and non-removable flat strainer; tamper proof fasteners and strainer.

**2.14 Item No. 14. Potato Peeler**

- A. Manufacturer: Hobart, 701 S. Ridge Avenue, Troy, Ohio 45374, Phone 888-446-2278
- B. Model No.: 6460-2
- C. Features:
  1. Capacity: 50-60 lbs in 1-3 minutes.
  2. Construction: Cylindrical construction, heliarc-welded stainless steel with removable NSF approved lexan liner. One Piece, reinforced plastic molded, lightweight, removable, positive locking hopper cover. Quick-opening removable aluminum hopper door and positive, cam-type pressure lock. Discharge chute is ball burnished cast aluminum.
  3. Four (4) adjustable case aluminum legs, working height at 38 inches from floor to bottom of discharge chute. Supplied with stainless steel cabinet base with peel trap. Model No. 6464-CBTSSST.
  4. Security package, including lockable control on/off switch, to be located on the left side.

**2.15 Item No. 15. Work Table**

- A. Manufacturer: Universal Stainless Inc. / Storage Products Group, 14002 E. 33<sup>rd</sup> Place, Aurora, CO 80011 Phone. 800-223-8332
- B. Size: 7'-0" x 30" x 36" working height, Configuration per drawing Q-106 & Q-501
- C. Features:

1. Construction: Flat top stainless steel top, legs and cross rails, 14 gauge 304 stainless steel top, bullnose edge front and both ends, 6" high back splash with 2" return back at 45° toward wall, back splash to remain 3" from wall.
2. Top: Supported 12" of depth with sound deadening stainless hat channel brace, closed at each end and secured to the underside of the table with studs located at a minimum of 6" on center, tamper resistant fasteners.
3. Legs: 1-5/8" diameter 16 gauge stainless steel legs complete with 1" stainless steel cross bracing (full perimeter of table) and gussets. Legs secured to gussets with tamper resistant set screws.
4. Feet: NSF adjustable flanged feet, all welded construction and tamper proof screws required. Secure to floor with galvanized bolts and expansion shields.

**2.17 Item No. 17. Slicer**

- A. Manufacturer: Hobart, 701 Ridge Avenue, Troy, OH 45374, Phone 888-446-278
- B. Model No. HS7N-C
- C. Features:
  1. Correctional Slicer, semi-automatic all standard features
  2. 6'-0" cord and plug
  3. Tamper resistant
- D. Electrical Trim:
  1. Receptacle: NEMA 5-15P

**2.18 Item No. 18 Equipment Stand**

- A. Manufacturer: Piper Products, 300 S. 84<sup>th</sup> Avenue, Wausa, WI 54401, Phone 800-544-3057
- B. Model No. 331-3424
- C. Features:
  1. 14 gauge stainless steel top with marine edge
  2. Stainless steel legs and cross rails
  3. Pan slides, fully welded to stainless steel legs, spaced at 4-1/2" increments, not removable
  4. Welded bottom shelf
  5. Four 4" diameter heavy duty casters, NSF approved, non-removable
  6. All fasteners to be tamper proof – correctional package

**2.21 Item No. 21 Work Table**

- A. Manufacturer: Universal Stainless Inc. / Storage Products Group, 14002 E. 33<sup>rd</sup> Place, Aurora, CO 80011 Phone. 800-223-8332
- B. Size: 8'-0" x 30" x 36" working height

Configuration per drawing Q-106 & Q-501

- C. Features:
1. Construction: Flat top stainless steel top, legs and cross rails, 14 gauge 304 stainless steel top, bullnose edge front and both ends, 6" high back splash with 2" return back at 45° toward wall, back splash to remain 3" from wall.
  2. Top: Supported 12" of depth with sound deadening stainless hat channel brace, closed at each end and secured to the underside of the table with studs located at a minimum of 6" on center, temperature resistant fasteners.
  3. Legs: 1-5/8" diameter 16 gauge stainless steel legs complete with 1" stainless steel cross bracing (full perimeter of table) and gussets. Legs secured to gussets with tamper resistant set screws.
  4. Feet: NSF adjustable flanged feet, all welded construction and tamper proof screws required. Secure to floor with galvanized bolts and expansion shields.

**2.23 Item No. 23 Ice Machine**

- A. Manufacturer: Manitowoc Ice: 2110 South 26<sup>th</sup> Street, PO Box 1720, Manitowoc, WI 54221, Phone 920-682-0161
- B. Model No. IY-0606A / B-570 Bin
- C. Features:
1. Capacity: 640 to 650 lbs of ice per 24 hours, half dice size
  2. Stainless steel top, front, ends and back panel
  3. Tamper-proof screws for front and back cover
  4. Self-contained air cooled refrigeration package, R-404A refrigerant
  5. Bin: Stainless steel exterior, polyethylene liner, with 6" stainless steel legs
- D. Electrical Trim:
1. NEMA: 5-15 receptacle

**2.24 Item No. 24 Filter**

- A. Manufacturer: Everpure LLC, 1040 Muirfield Drive, Hanover Part, IL 60133, Phone 607-307-3000 / Cabinet: Custom Stainless Steel Fabrication
- B. Model No. I 2000 System: EV9324-02 / Cabinet as per detail drawing
- C. Features:
1. Rated capacity 18,000 gallon, for ice machine application
  2. Includes hanging bracket, manifold with water shutoff, flush valve and outlet pressure gauge
  3. Two 4000 system cartridges

**1.25 Item No. 25 Filter Cabinet**

- A. Custom Stainless Steel Fabrication
- B. Cabinet as per detail drawing, See detail Sheet Q-502
- C. Cabinet construction:
  1. 20 gauge 304 stainless steel skin with 1-1/2" x 1-1/2" x 1/4" stainless steel interior frame. Mount 1" x 3" x 1" hat channels on back wall to support water filter system
  2. Double pan, 16 gauge 304 stainless steel door, complete with s/s wire mesh , cross bracing as required to support door, continuous piano hinge
  3. Cabinet with 16 gauge stainless steel locking hasp to accept a 3/8" diameter by 4" long shackle padlock.
  4. All connections to be welded and / or tamper proof screws.

**1.26 Item No. 26 Work Table**

- A. Manufacturer: Universal Stainless Inc. / Storage Products Group, 14002 E. 33<sup>rd</sup> Place, Aurora, CO 80011 Phone. 800-223-8332
- B. Size: 8'-0" x 30" x 36" working height  
Configuration per drawing Q-103 & Q-501
- C. Features:
  1. Construction: Flat top stainless steel top, legs and cross rails, 14 gauge 304 stainless steel top, bullnose edge front and both ends, 6" high back splash with 2" return back at 45° toward wall, back splash to remain 3" from wall.
  2. Top: Supported 12" of depth with sound deadening stainless hat channel brace, closed at each end and secured to the underside of the table with studs located at a minimum of 6" on center, tamper resistant fasteners.
  3. Legs: 1-5/8" diameter 16 gauge stainless steel legs complete with 1" stainless steel cross bracing (full perimeter of table) and gussets. Legs secured to gussets with tamper resistant set screws.
  4. Feet: NSF adjustable flanged feet, all welded construction and tamper proof screws required. Secure to floor with galvanized bolts and expansion shields.

**2.27 Item No. 27 Toaster**

- A. Manufacturer: Hatco Corporation, PO Box 340500, Milwaukee, WI 53234, Phone: 800-558-0607
- B. Model No. TK-100
- C. Features:
  1. Capacity: 16 slices of bread in 1 minute
  2. Construction: stainless steel
  3. Front mounted control panel with a toast selector knob, variable speed control knob and a toast collector pan

4. Multiple metal sheathed heating elements and an impedance protected motor
5. TK-Security Package, consisting of: control cover, bracket, mounting hardware and fuse cover
6. Cord and Plug

D. Electrical Trim:

1. Receptacle: To match plug

**2.28 Item No. 28 Work Table**

- A. Manufacturer: Universal Stainless Inc. / Storage Products Group, 14002 E. 33<sup>rd</sup> Place, Aurora, CO 80011 Phone. 800-223-8332
- B. Size: 8-0" x 30" x 36" working height  
Configuration per drawing Q-106 & Q-501
- C. Features:
  1. Construction: Flat top stainless steel top, legs and cross rails, 14 gauge 304 stainless steel top, bullnose edge all sides.
  2. Top: Supported 12" of depth with sound deadening stainless hat channel brace, closed at each end and secured to the underside of the table with studs located at a minimum of 6" on center, tamper resistant fasteners.
  3. Legs: 1-5/8" diameter 16 gauge stainless steel legs complete with 1" stainless steel cross bracing (full perimeter of table) and gussets. Legs secured to gussets with tamper resistant set screws.
  4. Feet: NSF adjustable flanged feet, all welded construction and tamper proof screws required. Secure to floor with galvanized bolts and expansion shields.

**2.29 Item No. 29 Work Table**

- A. Manufacturer: Universal Stainless Inc. / Storage Products Group, 14002 E. 33<sup>rd</sup> Place, Aurora, CO 80011 Phone. 800-223-8332
- B. Size: 8' 0" x 30" x 36" working height  
Configuration per drawing Q-106 & Q-501
- C. Features:
  - D. Construction: Flat top stainless steel top, legs and cross rails, 14 gauge 304 stainless steel top, bullnose edge all sides.
  - E. Top: Supported 12" of depth with sound deadening stainless hat channel brace, closed at each end and secured to the underside of the table with studs located at a minimum of 6" on center, tamper resistant fasteners.
  - F. Legs: 1-5/8" diameter 16 gauge stainless steel legs complete with 1" stainless steel cross bracing (full perimeter of table) and gussets. Legs secured to gussets with tamper resistant set screws.
  - G. Feet: NSF adjustable flanged feet, all welded construction and tamper proof screws required. Secure to floor with galvanized bolts and expansion shields.

**2.30 Item No. 30 Work Table**

- A. Manufacturer: Universal Stainless Inc. / Storage Products Group, 14002 E. 33<sup>rd</sup> Place, Aurora, CO 80011 Phone. 800-223-8332
- B. Size: 8'-0" x 30" x 36" working height  
Configuration per drawing Q-106 & Q-501
- C. Features:
  - 1. Construction: Flat top stainless steel top, legs and cross rails, 14 gauge 304 stainless steel top, bullnose edges all sides.
  - 2. Top: Supported 12" of depth with sound deadening stainless hat channel brace, closed at each end and secured to the underside of the table with studs located at a minimum of 6" on center, tamper resistant fasteners.
  - 3. Legs: 1-5/8" diameter 16 gauge stainless steel legs complete with 1" stainless steel cross bracing (full perimeter of table) and gussets. Legs secured to gussets with tamper resistant set screws.
  - 4. Feet: NSF adjustable flanged feet, all welded construction and tamper proof screws required. Secure to floor with galvanized bolts and expansion shields.

**2.31 Item No. 31 Work Table**

- A. Manufacturer: Universal Stainless Inc. / Storage Products Group, 14002 E. 33<sup>rd</sup> Place, Aurora, CO 80011 Phone. 800-223-8332
- B. Size: 8'-0" x 30" x 36" working height  
Configuration per drawing Q-106 & Q-501
- C. Features:
  - 1. Construction: Flat top stainless steel top, legs and cross rails, 14 gauge 304 stainless steel top, bullnose edge all sides.
  - 2. Top: Supported 12" of depth with sound deadening stainless hat channel brace, closed at each end and secured to the underside of the table with studs located at a minimum of 6" on center, tamper resistant fasteners.
  - 3. Legs: 1-5/8" diameter 16 gauge stainless steel legs complete with 1" stainless steel cross bracing (full perimeter of table) and gussets. Legs secured to gussets with tamper resistant set screws.
  - 4. Feet: NSF adjustable flanged feet, all welded construction and tamper proof screws required. Secure to floor with galvanized bolts and expansion shields.

**2.32 Item No. 32 Skittle**

- A. Manufacturer: Legion Industries, Inc., PO Box F, Dallas, PA 18612, Phone No. 800-887-1988.
- B. Model No. SK-15-9

- C. Features:
1. Capacity – 40.1 gallons, fifteen (15) 2.5” deep, 12” x 20” pans
  2. Construction: 316 stainless steel food contact zone, 304 stainless steel welded pan body, component enclosure, capsule insulated lid and tubular frame. Insulated sides and bottoms. Four (4) adjustable flanged feet
  3. Adjustable high limit safety thermostat
  4. 208v/3ph electric operation
  5. Dual fill faucet bracket mounted to frame.
  6. Prison / Security options to include, fasteners, nut driver tool, draw-off nut driver tool, screw driver tool, lockable control cover, draw-off protection
  7. 1-1/2” compression type draw-off with one piece stainless steel handle, tack welded to valve stem. Draw-off valve protected by a step firmly mounted to the unit 2-3” above draw-off for operating clearance and capable of supporting 300 pounds. Draw off drain hose required, standard length 72”
  8. Dual faucet and bracket
- D. Plumbing Trim:
1. Dual base faucet with stainless steel 48” flexible hose assembly with spray valve, T&S brass and Bronze Work, Inc. Model No. B-0160. Spray valve assembly without hold down ring. Provide tamper proof screws.

**2.33 Item No. 33. 80 Gal. Kettle**

- A. Manufacturer: Cleveland, Manitowoc, 1333 East 179<sup>th</sup>, Street, Cleveland Ohio 44110, Phone 216-481-4900
- B. Model No. KEL-80-F
- C. Features:
1. Capacity: 80 gallons; full jacketed steam kettle, standard jacket rating at 50 psi
  2. Construction: 316 stainless steel liner, 304 stainless steel kettle jacket, 304 stainless steel outer casting, 304 stainless leg socket supports seams welded to jacket, heavy duty reinforced rim bar
  3. 304 stainless steel legs, adjustable flanged feet, anchored to floor
  4. 2” diameter tangent draw-off valve with drain strainer, tamper resistant tangent valve, handle fastened to stem w/ tamper proof screws
  5. Tangent draw-off valve protection, steel bar welded to kettle (not a step)
  6. Tamper proof spring hinged assembly, tamper resistant cover w/ welded brackets to prevent dome cover rotation and removal
  7. Electric operation, 208v/3ph
  8. Prison / Security options to include; tamper proof spring hinge cover, rim bar reinforced, tangent draw-off valve protection, tamper resistant tangent draw-off valve, cable attached to TD valve stem, reinforced faucet bracket bolted to console
  9. Double faucet bracket, hot & cold water
- D. Plumbing Trim:

1. Dual fill faucet with 12” swing spout, tamper proof assembly

**2.34 Item No. 34. Double Convection Ovens**

- A. Manufacturer: Garland Commercial Industries, 185 East South Street, Freeland, PA 18224, Phone No. 1-800-424-2411.
- B. Model No. MCO-ED-20-S
- C. Features:
  1. Oven interior: 29”wide x 24” high x 28” deep, capacity: six (6) racks per compartment, two (2) compartments, deep depth unit.
  2. Construction: Stainless steel front, sides, top and legs. 60/40 dependent solid stainless steel door. Porcelain enameled oven interior and coved corners. Adjustable flanged feet.
  3. Electric operation, variable speed ¾ hp fan with control. Master 200 solid state control electromechanical timer
  4. Prison package: Stainless steel lockable doors, tamper-proof screws and tool kit part 1951220, stainless steel lockable control panel, stainless steel perforated back and motor cover.

**2.37 Item No. 37. Mixer**

- A. Manufacturer: Hobart, 701 S. Ridge Avenue, Troy, OH 45374, Phone: 888-446-2278
- B. Model No.: HL-600-C
- C. Features:
  1. Basic mixer with one quart stainless steel bowl, “B” beater, “ED” dough hook, bowl truck, power bowl lift
  2. Correctional Planetary Mixer, 2.7 HP, 60 qt. capacity, four speed plus stir speed, gear transmission, 50 min. timer, power lift

**2.38 Item No. 38. Work Table**

- A. Manufacturer: Universal Stainless Inc. / Storage Products Group, 14002 E. 33<sup>rd</sup> Place, Aurora, CO 80011 Phone. 800-223-8332
- B. Size: 8’-0” x 30” x 36” working height  
Configuration per drawing Q-106 & Q-501
- C. Features:
  1. Construction: Flat top stainless steel top, legs and cross rails, 14 gauge 304 stainless steel top, bullnose edge all sides.
  2. Top: Supported 12” of depth with sound deadening stainless hat channel brace, closed at each end and secured to the underside of the table with studs located at a minimum of 6” on center, tamper resistant fasteners

3. Legs: 1-5/8" diameter 16 gauge stainless steel legs complete with 1" stainless steel cross bracing (full perimeter of table) and gussets. Legs secured to gussets with tamper resistant set screws.
4. Feet: NSF adjustable flanged feet, all welded construction and tamper proof screws required. Secure to floor with galvanized bolts and expansion shields.

**2.39 Item No. 39. Serving Counter**

- A. Manufacturer: Low Temp Industries Inc., 9192 Tara Blvd., Jonesboro, GA 30236, Phone: 770-478-8803.
- B. Size: Dimensions/Configuration as per drawing Q-104 & Q-503
- C. Features:
  1. Top: 14 gauge 304 stainless steel, reinforced with galvanized steel, front turned down square 1-1/2" and back 1/2" at 90°, ends turned down 2" tight, 6" high back riser returned to the wall 2" on 45°
  2. Frame: 1-1/2" x 1-1/2" x 1/8" galvanized angle all welded, channel frame as required to accommodate legs
  3. Body: 18 gauge 304 stainless steel construction over 1-1/2" x 1-1/2" x 1/4" stainless steel frame, supported every 30" with vertical and horizontal 1"x 3" x 1" channel
  4. Hinged door: 18 gauge stainless steel double pan construction, mounted on stainless steel continuous hinge peened on ends to prevent removal, door with hand pull and lockable
  5. Legs: 1-5/8" diameter 304 stainless steel legs w/ 1" diameter stainless steel cross bracing all welded at legs, secured to gussets with tamper resistant set screws, adjustable flanged feet, anchored to floor; legs to be spaced at a maximum of 4'-0" on center full length of unit
  6. Tray Slide: 14 gauge 304 stainless steel, inverted "V" type mounted on stainless steel brackets, fully welded to cabinet base
  7. Hot Food: 14 gauge 304 stainless steel, bottom to be sloped and creased for drainage, bottom mounted electric, tubular cal rods heating elements covered with perforated safety pan; counter top cut-out to accept 12" x 20" x 4" deep food pans
  8. Cooled pan: 18 gauge 304 stainless steel liner, all welded construction. Refrigeration coils bonded to underside in mastic and fully insulated with urethane foam, pitched to 1" drain
  9. Compressor: 1/4" hp, hermetically sealed, air cooled, condensing unit, connected to copper cooling coils, charged and ready for use.
  10. Overshelf: 16 gauge stainless steel all welded overshelf w/ lexan face panel, enclosed in stainless steel trim all welded, supported with 1" stainless steel square tubing all welded, anchored to counter with tamper proof screws
- D. Plumbing Trim:
  1. One (1) T & S Brass and Bronze Work, Inc. Model No. B-0207-CC, sink mixing faucet with 6" swing nozzle and 1/2" CC male inlet, complete

- assembly w/ B-199-1 non-splash vandal resistant aerator with key and lever handle, tamper proof screws-VP
  - 2. 1" ball valve at drain line
- E. Electrical Trim:
- 1. Refrigeration NEMA 5-15P, cord and plug

**2.40 Item No. 40. Work Table**

- A. Manufacturer: Low Temp Industries Inc., 9192 Tara Blvd., Jonesboro, GA 30236, Phone: 770-478-8803.
- B. Size: 8'-0" x 30" x 36" working height  
Configuration per drawing Q-106 & Q-501
- C. Features:
  - 1. Construction: Flat top stainless steel top, legs and cross rails, 14 gauge 304 stainless steel top, bullnose edge all sides.
  - 2. Top: Supported 12" of depth with sound deadening stainless hat channel brace, closed at each end and secured to the underside of the table with studs located at a minimum of 6" on center, tamper resistant fasteners
  - 3. Legs: 1-5/8" diameter 16 gauge stainless steel legs complete with 1" stainless steel cross bracing (full perimeter of table) and gussets. Legs secured to gussets with tamper resistant set screws.
  - 4. Feet: NSF adjustable flanged feet, all welded construction and tamper proof screws required. Secure to floor with galvanized bolts and expansion shields.

**2.41 Item No. 41. Serving Counter**

- A. Manufacturer: Low Temp Industries Inc., 9192 Tara Blvd., Jonesboro, GA 30236, Phone: 770-478-8803.
- B. Size: Dimensions/Configuration as per drawing Q-104 & Q-503
- C. Features:
  - 1. Top: 14 gauge 304 stainless steel, reinforced with galvanized steel, front turned down square 1-1/2" and back 1/2" at 90°, ends turned down 2" tight, 6" high back riser returned to the wall 2" on 45°
  - 2. Frame: 1-1/2" x 1-1/2" x 1/8" galvanized angle all welded, channel frame as required to accommodate legs
  - 3. Body: 18 gauge 304 stainless steel construction over 1-1/2" x 1-1/2" x 1/4" stainless steel frame, supported every 30" with vertical and horizontal 1"x 3" x 1" channel
  - 4. Hinged door: 18 gauge stainless steel double pan construction, mounted on stainless steel continuous hinge peened on ends to prevent removal, door with hand pull and lockable
  - 5. Legs: 1-5/8" diameter 304 stainless steel legs w/ 1" diameter stainless steel cross bracing all welded at legs, secured to gussets with tamper

- resistant set screws, adjustable flanged feet, anchored to floor; legs to be spaced at a maximum of 4'-0" on center full length of unit
6. Tray Slide: 14 gauge 304 stainless steel, inverted "V" type mounted on stainless steel brackets, fully welded to cabinet base
  7. Hot Food: 14 gauge 304 stainless steel, bottom to be sloped and creased for drainage, bottom mounted electric, tubular cal rods heating elements covered with perforated safety pan; counter top cut-out to accept 12" x 20" x 4" deep food pans
  8. Cooled pan: 18 gauge 304 stainless steel liner, all welded construction. Refrigeration coils bonded to underside in mastic and fully insulated with urethane foam, pitched to 1" drain
  9. Compressor: 1/4" hp, hermetically sealed, air cooled, condensing unit, connected to copper cooling coils, charged and ready for use.
  10. Overshelf: 16 gauge stainless steel all welded overshelf w/ lexan face panel, enclosed in stainless steel trim all welded, supported with 1" stainless steel square tubing all welded, anchored to counter with tamper proof screws

D. Plumbing Trim:

1. One (1) T & S Brass and Bronze Work, Inc. Model No. B-0207-CC, sink mixing faucet with 6" swing nozzle and 1/2" CC male inlet, complete assembly w/ B-199-1 non-splash vandal resistant aerator with key and lever handle, tamper proof screws-VP
2. 1" ball valve at drain line

E. Electrical Trim:

1. Refrigeration, NEMA 5-15P cord and plug

**2.42 Item No. 42. Soiled Dish Table**

- A. Manufacturer: Universal Stainless Inc. / Storage Products Group, Inc., 14002 E. 33<sup>rd</sup> Place, Aurora, CO 80011 Phone No. 800-223-8332
- B. Quantity and Size: One (1): 36" working height, Configuration as per drawing Q-502, field verify all dimensions
- C. Features:
  1. Construction: Sink and table top 14 gauge stainless steel, all 3/4" coved vertical and horizontal corner construction, 3" high x 1-1/2" raised roll edge on front and left end, right end lip into dish machine, 8" x 2" integral back riser returning to wall on 45° angle, ends fully enclosed and welded, back riser to remain 3" from wall.
  2. Legs: 1-5/8" diameter, 16 gauge 304 stainless steel, tubular construction complete with gusset and adjustable flange feet, anchored to floor. Legs: 4'-0" maximum on center.
  3. Top: to supported 12" of depth with sound deadening hat channel brace, closed at each end and secured to the underside of the table with studs located at a minimum of 6" on center

4. Crossbracing: 1" diameter, 16 gauge 304 stainless steel, tubular construction fully welded to legs at 10" center line off finished floor. No cross bracing at back of table under sink bowl.
5. Sink bowl size: 20" x 20"x 6" deep, bottom pitched to drain, reinforced and sound deadening in the underside, stainless steel drain handle support required at lever waste, welded to bottom of sink bowl. Removable perforated scrap pan in bottom of sink bowl with rack glides level with counter top, all welded construction, no sharp edges
6. All tamper proof fasteners

D. Plumbing Trim:

1. One (1) deck mount T&S Brass and Bronze Work, Inc. Model No. B-0133, pre-rinse spray faucet and B-0230-K installation kit, complete assembly w/ B-WH-4" wrist action blade handles, tamper proof screws-V9
2. One (1) Components Hardware, Model No. D10-4590 Lever handle waste outlets with over flow assembly and non-removable flat strainer; tamper proof fasteners and strainer

**2.43 Item No. 43. Dish Machine**

- A. Manufacturer: Hobart, 701 Ridge Avenue, Troy, OH 45374, Phone No. 888-446-2278
- B. Model No. CL-44e
- C. Features:
  1. Capacity: 202 racks per hour, Opti-RinSe System
  2. Construction: Stainless steel welded tank, frame, legs, chamber, control box, doors and front panels
  3. Fully automatic, high temperature single tank, rack type with flexible strip curtains
  4. Electric tank heater with positive low water protection and high temperature protection
  5. Top mounted controls, single point electrical connection
  6. Extended stainless steel hoods with vent stack and locking dampers, one each inlet and outlet
  7. Chamber height 6" higher than standard
  8. Common drain
  9. Right to left operation
  10. Security, prison package
- D. Plumbing:
  1. Drain water tempering kit

**2.44 Item No. 44. Booster Heater**

- A. Manufacturer: Hatco Corporation, 635 South 26<sup>th</sup> Street, Milwaukee WI, 53215, Phone No. 800-558-0607

- A. Model No. C-27
- B. Features:
  1. Capacity: 155 gph at 70°F water temperature rise
  2. All stainless steel front and silver-gray hammer-tone body and stainless steel legs
  3. Size based on 120°F minimum incoming water temperature raised to 180°F
  4. High-temperature limit switch and low water cut-off
  5. Security package: one way screws and control cover
- C. Plumbing trim:
  1. Temperature/pressure relief valve
  2. High Temperature pressure reducing valve with bypass
  3. Two indicating temperature/pressure gauges

**2.45 Item No. 45. Clean Dish Table**

- A. Manufacturer: Universal Stainless Inc. / Storage Products Group..., 14002 E. 33<sup>rd</sup> Place, Aurora, CO 80011 Phone No. 800-223-8332
- B. Quantity and Size: One (1): 36" working height Configuration as per Floor Plan drawing Q-5.2, field verify all dimensions
- C. Features:
  1. Construction: Table 14 gauge stainless steel, all ¾" coved vertical and horizontal corner construction, 3" high x 1-1/2" raised roll edge on front and right end, left end lip into dish machine, 8" x 2" integral back riser returning to wall on 45° angle, ends fully enclosed and welded, back riser to remain 3" from wall.
  2. Legs: 1-5/8" diameter, 16 gauge 304 stainless steel, tubular construction complete with gusset and adjustable flange feet, anchored to floor. Legs: 4'-0" maximum on center.
  3. Top: to supported 12" of depth with sound deadening hat channel brace, closed at each end and secured to the underside of the table with studs located at a minimum of 6" on center
  4. Crossbracing: 1" diameter, 16 gauge 304 stainless steel, tubular construction fully welded to legs at 10" center line off finished floor
  5. All tamper proof fasteners

**2.46 Item No. 46. Soiled Dish Table**

- A. Manufacturer: Universal Stainless Inc. / Storage Products Group, Inc., 14002 E. 33<sup>rd</sup> Place, Aurora, CO 80011 Phone No. 800-223-8332
- B. Quantity and Size: One (1): 36" working height, Configuration as per drawing Q-502, field verify all dimensions
- C. Features:

1. Construction: Sink and table top 14 gauge stainless steel, all 3/4" coved vertical and horizontal corner construction, 3" high x 1-1/2" raised roll edge on front and left end, right end lip into dish machine, 8" x 2" integral back riser returning to wall on 45° angle, ends fully enclosed and welded, back riser to remain 3" from wall.
2. Legs: 1-5/8" diameter, 16 gauge 304 stainless steel, tubular construction complete with gusset and adjustable flange feet, anchored to floor. Legs: 4'-0" maximum on center.
3. Top: to supported 12" of depth with sound deadening hat channel brace, closed at each end and secured to the underside of the table with studs located at a minimum of 6" on center
4. Crossbracing: 1" diameter, 16 gauge 304 stainless steel, tubular construction fully welded to legs at 10" center line off finished floor. No cross bracing at back of table under sink bowl.
5. Sink bowl size: 20" x 20" x 6" deep, bottom pitched to drain, reinforced and sound deadening in the underside, stainless steel drain handle support required at lever waste, welded to bottom of sink bowl. Removable perforated scrap pan in bottom of sink bowl with rack glides level with counter top, all welded construction, no sharp edges

B. Plumbing Trim:

1. One (1) deck mount T&S Brass and Bronze Work, Inc. Model No. B-0133, pre-rinse spray faucet and B-0230-K installation kit, complete assembly w/ B-WH-4" wrist action blade handles, tamper proof screws-V9
2. One (1) Components Hardware, Model No. D10-4590 Lever handle waste outlets with over flow assembly and non-removable flat strainer; tamper proof fasteners and strainer

**2.47 Item No. 47. Dish Machine**

- A. Manufacturer: Hobart, 701 Ridge Avenue, Troy, OH 45374, Phone No. 888-446-2278
- B. Model No. CL-44e
- C. Features:
  1. Capacity: 202 racks per hour, Opti-RinSe System
  2. Construction: Stainless steel welded tank, frame, legs, chamber, control box, doors and front panels
  3. Fully automatic, high temperature single tank, rack type with flexible strip curtains
  4. Electric tank heater with positive low water protection and high temperature protection
  5. Top mounted controls, single point electrical connection
  6. Extended stainless steel hoods with vent stack and locking dampers, one each inlet and outlet
  7. Chamber height 6" higher than standard
  8. Common drain
  9. Left to right operation

10. Security, prison package

D. Plumbing:

1. Drain water tempering kit

**2.48 Item No. 48. Booster Heater**

A. Manufacturer: Hatco Corporation, 635 South 26<sup>th</sup> Street, Milwaukee WI, 53215, Phone No. 800-558-0607

B. Model No. C-27

C. Features:

1. Capacity: 155 gph at 70°F water temperature rise
2. All stainless steel front and silver-gray hammer-tone body and stainless steel legs
3. Size based on 120°F minimum incoming water temperature raised to 180°F
4. High-temperature limit switch and low water cut-off
5. Security package: one way screws and control cover

D. Plumbing trim:

1. Temperature/pressure relief valve
2. High Temperature pressure reducing valve with bypass
3. Two indicating temperature/pressure gauges

**2.49 Item No. 49. Clean Dish Table**

A. Manufacturer: Universal Stainless Inc. / Storage Products Group..., 14002 E. 33<sup>rd</sup> Place, Aurora, CO 80011 Phone No. 800-223-8332

B. Quantity and Size: One (1): 36" working height Configuration as per Floor Plan drawing Q-502

C. Features:

1. Construction: Table 14 gauge stainless steel, all ¾" coved vertical and horizontal corner construction, 3" high x 1-1/2" raised roll edge on front and right end, left end lip into dish machine, 8" x 2" integral back riser returning to wall on 45° angle, ends fully enclosed and welded, back riser to remain 3" from wall.
2. Legs: 1-5/8" diameter, 16 gauge 304 stainless steel, tubular construction complete with gusset and adjustable flange feet, anchored to floor. Legs: 4'-0" maximum on center.
3. Top: to supported 12" of depth with sound deadening hat channel brace, closed at each end and secured to the underside of the table with studs located at a minimum of 6" on center
4. Crossbracing: 1" diameter, 16 gauge 304 stainless steel, tubular construction fully welded to legs at 10" center line off finished floor

**2.50 Item No. 50. Hand Sink**

A. "P" Plumbing Contract

**2.51 Item No. 51. Roll-in Hot Holding Cabinet**

A. Manufacturer: Victory Refrigeration, 110 Woodcrest Road, Cherry Hill, NJ 08003, Phone No. 856-428-4200

B. Model No. HIS-2D-1

C. Features:

1. Roll-in two section; stainless steel interior and exterior
3. Self-closing doors w/ heavy duty cylinder lock, hold open feature at 120°
4. Safety shield strip type heaters located at the bottom of the cabinet interior, electronic controls with temperature range from 80°F to 180°F, exterior mounted blower system, built-in adjustable humidity control vent
5. Prison package to contain: extra heavy duty hinges w/ one-way screws, die cast metal handle with on-way screws, stainless steel slotted panel top cover, stainless steel security cover and back panel, exterior dial thermometer w/ lexan cover, stainless steel door liner and perimeter door jamb, heavy gauge chrome plated steel padlock hasp & cylinder locks
6. Adjustable stainless steel legs
- 7. Provide four (4) pan racks to fit interior cabinet, all fasteners to be secured, prison package

**2.52 Item No 52. 2 Section Refrigerator**

A. Manufacturer: Victory Refrigeration, 110 Woodcrest Road, Cherry Hill, NJ 08003, Phone No. 856-428-4200

B. Model No. RS-2D-S1

C. Features:

1. Reach-in two section; stainless steel interior and exterior
3. Self-closing doors w/ heavy duty cylinder lock and self-adjusting magnetic gasket; humidity control wires around door jamb with non-conductive thermal breaker strip
4. Complete self-contained refrigeration system to maintain 34°F interior temperature under normal 85°F ambient temperature
5. Prison package to contain: extra heavy duty hinges w/ one-way screws, die cast metal handle with on-way screws, stainless steel slotted panel top cover, stainless steel security cover louvered grill and back panel, exterior dial thermometer w/ lexan cover, stainless steel door liner and perimeter door jamb, heavy gauge chrome plated steel padlock hasp & cylinder locks
6. Adjustable stainless steel legs

D. Electrical Trim:

1. NEMA 5-15 receptacle

**2.53 Item No. 53. Milk Dispenser**

- A. Manufacturer: Silver King, 1600 Xenium Lane North, Minneapolis, MN 55441, Phone 612-553-1881
- B. Model No. SKMAJ2/C4
- C. Features:
  - 1. Construction: Stainless steel exterior, galvanized back; Stainless steel interior, 18 gauge bottom, 12 gauge steel angle frame welded, 14 gauge steel welded base assembly; semi-rigid fiberglass and rigid poly-foam insulation
  - 2. Door construction stainless steel exterior and interior, heavy duty lift off hinges and stainless steel cover plates, door latch accommodates padlock, thermal plastic PVC, non-migrating gasket, temperature indicator
  - 3. Legs: 4" pedestal, NSF
  - 4. Refrigeration: Self-contained, hermetically sealed system, cold wall, copper tube evaporator, adjustable temperature control and built-in temperature indicator
  - 5. All tamper proof fasteners and screws.
- D. Electrical Trim
  - 1. Receptacle: To match plug

**2.54 Item No. 54. Hand Sink**

- A. "P" Plumbing Contract

**2.55 Item No. 55 Serving Counter**

- B. Manufacturer: Low Temp Industries Inc., 9192 Tara Blvd., Jonesboro, GA 30236, Phone: 770-478-8803.
- B. Size: Dimensions/Configuration as per drawing Q-104 & Q-503
- C. Features:
  - 1. Top: 14 gauge 304 stainless steel, reinforced with galvanized steel, front turned down square 1-1/2" and back 1/2" at 90°, ends turned down 2" tight, 6" high back riser returned to the wall 2" on 45°
  - 2. Frame: 1-1/2" x 1-1/2" x 1/8" galvanized angle all welded, channel frame as required to accommodate legs
  - 3. Body: 18 gauge 304 stainless steel construction over 1-1/2" x 1-1/2" x 1/4" stainless steel frame, supported every 30" with vertical and horizontal 1"x 3" x 1" channel
  - 4. Hinged door: 18 gauge stainless steel double pan construction, mounted on stainless steel continuous hinge peened on ends to prevent removal, door with hand pull and lockable
  - 5. Legs: 1-5/8" diameter 304 stainless steel legs w/ 1" diameter stainless steel cross bracing all welded at legs, secured to gussets with tamper

- resistant set screws, adjustable flanged feet, anchored to floor; legs to be spaced at a maximum of 4'-0" on center full length of unit
6. Tray Slide: 14 gauge 304 stainless steel, inverted "V" type mounted on stainless steel brackets, fully welded to cabinet base
  7. Hot Food: 14 gauge 304 stainless steel, bottom to be sloped and creased for drainage, bottom mounted electric, tubular cal rods heating elements covered with perforated safety pan; counter top cut-out to accept 12" x 20" x 4" deep food pans
  8. Cooled pan: 18 gauge 304 stainless steel liner, all welded construction. Refrigeration coils bonded to underside in mastic and fully insulated with urethane foam, pitched to 1" drain
  9. Compressor: 1/4" hp, hermetically sealed, air cooled, condensing unit, connected to copper cooling coils, charged and ready for use.
  10. Overshelf: 16 gauge stainless steel all welded overshelf w/ lexen face panel, enclosed in stainless steel trim all welded, supported with 1" stainless steel square tubing all welded, anchored to counter with tamper proof screws

D. Plumbing Trim:

1. One (1) T & S Brass and Bronze Work, Inc. Model No. B-0207-CC, sink mixing faucet with 6" swing nozzle and 1/2" CC male inlet, complete assembly w/ B-199-1 non-splash vandal resistant aerator with key and lever handle, tamper proof screws-VP
2. 1" ball valve at drain line

E. Electrical Trim:

1. Refrigeration, NEMA 5-15P cord and plug

**2.56 Item No. 56. Soiled Dish Table**

- A. Manufacturer: Universal Stainless Inc. / Storage Products Group, Inc., 14002 E. 33<sup>rd</sup> Place, Aurora, CO 80011 Phone No. 800-223-8332
- B. Quantity and Size: One (1): 36" working height, Configuration as per drawing Q-502, field verify all dimensions
- C. Features:
  1. Construction: Sink and table top 14 gauge stainless steel, all 3/4" coved vertical and horizontal corner construction, 3" high x 1-1/2" raised roll edge on front and left end, right end lip into dish machine, 8" x 2" integral back riser returning to wall on 45° angle, ends fully enclosed and welded, back riser to remain 3" from wall.
  2. Legs: 1-5/8" diameter, 16 gauge 304 stainless steel, tubular construction complete with gusset and adjustable flange feet, anchored to floor. Legs: 4'-0" maximum on center.
  3. Top: to supported 12" of depth with sound deadening hat channel brace, closed at each end and secured to the underside of the table with studs located at a minimum of 6" on center

4. Crossbracing: 1" diameter, 16 gauge 304 stainless steel, tubular construction fully welded to legs at 10" center line off finished floor. No cross bracing at back of table under sink bowl.
5. Sink bowl size: 20" x 20" x 6" deep, bottom pitched to drain, reinforced and sound deadening in the underside, stainless steel drain handle support required at lever waste, welded to bottom of sink bowl. Removable perforated scrap pan in bottom of sink bowl with rack glides level with counter top, all welded construction, no sharp edges

D. Plumbing Trim:

1. One (1) deck mount T&S Brass and Bronze Work, Inc. Model No. B-0133, pre-rinse spray faucet and B-0230-K installation kit, complete assembly w/ B-WH-4" wrist action blade handles, tamper proof screws-V9
2. One (1) Components Hardware, Model No. D10-4590 Lever handle waste outlets with over flow assembly and non-removable flat strainer; tamper proof fasteners and strainer

**2.57 Item No. 57. Dish Machine**

A. Manufacturer: Hobart, 701 Ridge Avenue, Troy, OH 45374, Phone No. 888-446-2278

B. Model No. CL-44e

C. Features:

1. Capacity: 202 racks per hour, Opti-RinSe System
2. Construction: Stainless steel welded tank, frame, legs, chamber, control box, doors and front panels
3. Fully automatic, high temperature single tank, rack type with flexible strip curtains
4. Electric tank heater with positive low water protection and high temperature protection
5. Top mounted controls, single point electrical connection
6. Extended stainless steel hoods with vent stack and locking dampers, one each inlet and outlet
7. Chamber height 6" higher than standard
8. Common drain
9. Left to right operation
10. Security, prison package

D. Plumbing:

1. Drain water tempering kit

**2.58 Item No. 58. Booster Heater**

A. Manufacturer: Hatco Corporation, 635 South 26<sup>th</sup> Street, Milwaukee WI, 53215, Phone No. 800-558-0607

B. Model No. C-27

- E. Features:
  1. Capacity: 155 gph at 70°F water temperature rise
  2. All stainless steel front and silver-gray hammer-tone body and stainless steel legs
  3. Size based on 120°F minimum incoming water temperature raised to 180°F
  4. High-temperature limit switch and low water cut-off
  5. Security package: one way screws and control cover
  
- F. Plumbing trim:
  6. Temperature/pressure relief valve
  7. High Temperature pressure reducing valve with bypass
  8. Two indicating temperature/pressure gauges

**2.59 Item No. 59. Clean Dish Table**

- A. Manufacturer: Universal Stainless Inc. / Storage Products Group., 14002 E. 33<sup>rd</sup> Place, Aurora, CO 80011 Phone No. 800-223-8332
  
- B. Quantity and Size: One (1): 36” working height Configuration as per Floor Plan drawing Q-502, field verify all dimensions
  
- C. Features:
  1. Construction: Table 14 gauge stainless steel, all ¾” coved vertical and horizontal corner construction, 3” high x 1-1/2” raised roll edge on front and right end, left end lip into dish machine, 8” x 2” integral back riser returning to wall on 45° angle, ends fully enclosed and welded, back riser to remain 3” from wall.
  2. Legs: 1-5/8” diameter, 16 gauge 304 stainless steel, tubular construction complete with gusset and adjustable flange feet, anchored to floor. Legs: 4’-0” maximum on center.
  3. Top: to supported 12” of depth with sound deadening hat channel brace, closed at each end and secured to the underside of the table with studs located at a minimum of 6” on center
  4. Crossbracing: 1” diameter, 16 gauge 304 stainless steel, tubular construction fully welded to legs at 10” center line off finished floor
  5. All tamper proof fasteners

**1.60 Item No. 60. Scullery Sink**

- A. Manufacturer: Universal Stainless Inc. / Storage Products Group, 14002 E. 33<sup>rd</sup> Place, Aurora, CO 80011 Phone 800-233-8332
  
- B. Size: 14’-0”-0” x 36” x 36” working height
  
- C. Features:
  1. Sink and drain board 14 gauge stainless steel, all ¾” coved vertical and horizontal corner construction, 3” high x 1-1/2” raised roll edge on front and both ends, 8” high integral back splash returning to wall 2” on 45°

- angle, ends fully enclosed and welded, back splash to remain 3" from wall.
2. Legs: 1-5/8" diameter, 16 gauge 304 stainless steel, tubular construction complete with gusset and adjustable flange feet, anchored to floor
  3. Top: supported 12" of depth with sound deadening hat channel brace, closed at each end and secured to the underside of the table with studs located at a minimum of 6" on center
  4. Crossbracing: 1" diameter, 16 gauge 304 stainless steel tubular construction fully welded to legs at 1" center line off finished floor. No cross bracing at back of table under sink bowls; cross bracing required at all other legs.
  5. Sink bowl size: 24" x 30"x 14" deep, bottom pitched to drain, reinforced and sound deadening on the underside, double partitions continuously welded front, bottom and back, stainless steel drain handle support required at each lever waste, welded to bottom of sink bowl.

D. Plumbing Trim:

2. Two (2) splash mounted T&S Brass and Bronze Work, Inc. Model No. B-0231-CC, sink mixing faucet with 12" swing nozzle and 1/2" CC male inlets, complete assembly w/ B-0199-7 non-splash vandal resistant aerator with key and B0WH-4" wrist action blade handles, tamper proof screws-V9
3. Three (3) Components Hardware, Model No. D10-4590 Lever handle waste outlets with over flow assembly and non-removable flat strainer; tamper proof fasteners and strainer

**3.60 Item No. 61. Milk Dispenser**

- A. Manufacturer: Silver King, 1600 Xenium Lane North, Minneapolis, MN 55441, Phone 612-553-1881
- B. Model No. SKMAJ2/C4
- C. Features:
  1. Construction: Stainless steel exterior, galvanized back; Stainless steel interior, 18 gauge bottom, 12 gauge steel angle frame welded, 14 gauge steel welded base assembly; semi-rigid fiberglass and rigid poly-foam insulation
  2. Door construction stainless steel exterior and interior, heavy duty lift off hinges and stainless steel cover plates, door latch accommodates padlock, thermal plastic PVC, non-migrating gasket, temperature indicator
  3. Legs: 4" pedestal, NSF
  4. Refrigeration: Self-contained, hermetically sealed system, cold wall, copper tube evaporator, adjustable temperature control and built-in temperature indicator
  5. All tamper proof fasteners and screws.
- E. Electrical Trim
  2. Receptacle: To match plug

**2.62 Item No. 62. Toaster Cabinet**

- A. Custom Stainless Steel Fabrication
- B. Cabinet as per detail drawing, See detail Sheet Q-503
- C. Cabinet construction:
  - 1. 1-1/2" x 1-1/2" x 1/4" stainless steel frame w/ stainless steel wire mesh sides, top and bottom construction
  - 2. Double pan, 16 gauge 304 stainless steel door, complete with s/s wire mesh , cross bracing as required to support door, continuous piano hinge
  - 3. Cabinet with 16 gauge stainless steel locking hasp to accept a 3/8" diameter by 4" long shackle padlock.
  - 4. All connections to be welded and / or tamper proof screws.

**2.63 Item No. 63. Refrigerated Preparation Room**

- A. See Section 114102 Prefabricated Walk-in Refrigerated Boxes

**2.66 Item No. 66 Bakery Cooler**

- A. See Section 114102 Prefabricated Walk-in Refrigerated Boxes

**2.69 Item No. 69 Cooler**

- A. See Section 114102 Prefabricated Walk-in Refrigerated Boxes

**2.72 Item No. 72 Daily Use Cooler**

- A. See Section 114102 Prefabricated Walk-in Refrigerated Boxes

**2.75 Item No. 75 Cook / Chill Cooler**

- A. See Section 114102 Prefabricated Walk-in Refrigerated Boxes

**2.79 Item No. 79 Temporary Exhaust Hood**

- A. Manufacture: Captive Aire/AquaMatic, 3100 Smoketree Court, Suite 809, Raleigh, NC 27604, Phone No. 1-877-414-9255.
- B. Model No. 6030 AM-ND-2.
- C. Features:
  - 1. Exhaust wall hood with supply air consisting of one (1) 14'-0" section, one (1) 13'-0" section, w/ fire cabinet on end, configuration and overall dimensions as shown on drawings Q-401.
  - 2. Exhaust hood system with matching supply-air plenum, individual hood construction as wall canopy with factory standard built-in 3" back standoff. Exhaust duct collar 5" high with 1" flange factory installed.

3. Hood constructed of 18 gauge type 304 stainless steel with #4 polish. All seams continuously welded and liquid tight. Exposed welds to be ground smooth. Front of each hood constructed as double wall with insulation for rigidity and eliminate condensation.
4. Supply-air plenum, integral with canopy, perforated low velocity downward discharge, full length, with stainless steel perforated diffusers, supply collar connections and volume dampers, stainless steel construction to match exhaust hood.
5. Stainless steel enclosure panels to enclose from top of hoods to ceiling, field verify dimensions.
6. Filter housing full length of hood, with Kleen-Gard stainless steel high efficiency baffle filters with handles and bottom hanging hood, UL classified
7. Fluorescent light fixtures full length of hood, complete with bulbs, factory pre-wired to junction box.
8. Integral grease drain system for filters, sloped to exposed ½ pint removable grease cup.
9. Security features to include:
  - a. Exhaust riser with welded stainless steel security grating at connection point to ducts per drawing Q-403.
  - b. Fluorescent lights behind ¼” high impact resistant polycarbonate.
  - c. Tack weld perforated diffusers on supply air plenum.

D. Electrical Features

1. Room temperature sensor
2. LED Screen

**2.80 Item No. 80 Wet Chemical System**

- A. See Section 212300 Wet Chemical Extinguishing System

**2.81 Item No. 81 Temporary Exhaust Hood**

- A. Manufacture: Captive Aire/AquaMatic, 3100 Smoketree Court, Suite 809, Raleigh, NC 27604, Phone No. 1-877-414-9255.
- B. Model No. 6030 AM-ND-2.
- C. Features:
1. Exhaust wall hood with supply air consisting of two (2) 10’-6” section, two (2) 8’-6” sections, w/ fire cabinet on end (, configuration and overall dimensions as shown on drawings Q-401.
  2. Exhaust hood system with matching supply-air plenum, individual hood construction as wall canopy with factory standard built-in 3” back standoff. Exhaust duct collar 5” high with 1” flange factory installed.
  3. Hood constructed of 18 gauge type 304 stainless steel with #4 polish. All seams continuously welded and liquid tight. Exposed welds to be ground smooth. Front of each hood constructed as double wall with insulation for rigidity and eliminate condensation.
  4. Supply-air plenum, integral with canopy, perforated low velocity downward discharge, full length, with stainless steel perforated diffusers, supply collar

connections and volume dampers, stainless steel construction to match exhaust hood.

5. Stainless steel enclosure panels to enclose from top of hoods to ceiling, field verify dimensions.
6. Filter housing full length of hood, with Kleen-Gard stainless steel high efficiency baffle filters with handles and bottom hanging hood, UL classified
7. Fluorescent light fixtures full length of hood, complete with bulbs, factory pre-wired to junction box.
8. Integral grease drain system for filters, sloped to exposed ½ pint removable grease cup.
9. Security features to include:
  - a. Exhaust riser with welded stainless steel security grating at connection point to ducts per drawing Q-403.
  - b. Fluorescent lights behind ¼” high impact resistant polycarbonate.
  - c. Tack weld perforated diffusers on supply air plenum.

D. Electrical Features

1. Room temperature sensor
2. LED Screen

**2.82 Item No. 82 Wet Chemical System**

- A. See Section 212300 Wet Chemical Extinguishing System

**2.83 Item No. 83 Temporary Floor Trough**

- A. Manufacturer: IMC/Teddy, P.O.Box 206, Copiague, NY 11726-0206, Phone No. 1-800-221-5644.
- B. Model No. FMT-2424-FMG
- C. Features:
1. Size 24” x 24”, overall height 1-1/4”, flush floor trough
  2. 16 gauge, 18-8 / #304 stainless steel construction, fully welded
  3. Integrated safety ramp and mounting flange
  4. 4” O.D. drain tail piece
  5. 18-8 / #304 stainless steel bars with stainless steel rods welded 1-1/2” on center
  6. Correctional package with tamper-proof screws
  7. Waste cup strainer

**2.84 Item No. 84 Exhaust Hood**

- A. Manufacture: Captive Aire/AquaMatic, 3100 Smoketree Court, Suite 809, Raleigh, NC 27604, Phone No. 1-877-414-9255.
- B. Model No. 6030 AM-ND-2.
- C. Features:

1. Back to back, exhaust wall hood consisting of four (4) 14'-9" sections, and fire system housing, configuration and overall dimensions as shown on drawings Q-402.
2. Exhaust hood system, individual hood construction as wall canopy with factory standard built-in 3" back standoff. Exhaust duct collar 5" high with 1" flange factory installed.
3. Hood constructed of 18 gauge type 304 stainless steel with #4 polish. All seams continuously welded and liquid tight. Exposed welds to be ground smooth. Front of each hood constructed as double wall with insulation for rigidity and eliminate condensation.
4. Supply-air plenum, integral with canopy, perforated low velocity downward discharge, full length, with stainless steel perforated diffusers, supply collar connections and volume dampers, stainless steel construction to match exhaust hood.
5. Stainless steel enclosure panels to enclose from top of hoods to ceiling, field verify dimensions.
6. Filter housing full length of hood, with Kleen-Gard stainless steel high efficiency baffle filters with handles and bottom hanging hood, UL classified
7. Fluorescent light fixtures full length of hood, complete with bulbs, factory pre-wired to junction box.
8. Integral grease drain system for filters, sloped to exposed ½ pint removable grease cup.
9. Security features to include:
  - a. Exhaust riser with welded stainless steel security grating at connection point to ducts per drawing Q-403.
  - b. Fluorescent lights behind ¼" high impact resistant polycarbonate.
  - c. Tack weld perforated diffusers on supply air plenum.

D. Electrical Features

1. Room temperature sensor
2. LED Screen

**2.85 Item No. 85 Wet Chemical System**

- A. See Section 212300 Wet Chemical Extinguishing System

**2.86 Item No. 86 Exhaust Hood**

- A. Manufacture: Captive Aire/AquaMatic, 3100 Smoketree Court, Suite 809, Raleigh, NC 27604, Phone No. 1-877-414-9255.
- B. Model No. 6030 AM-ND-2.
- C. Features:
1. Exhaust wall hood consisting of one (1) 12'-0" sections, and one (1) 11'-0" section, configuration and overall dimensions as shown on drawings Q-402.
  2. Exhaust hood system, individual hood construction as wall canopy with factory standard built-in 3" back standoff. Exhaust duct collar 5" high with 1" flange factory installed.

3. Hood constructed of 18 gauge type 304 stainless steel with #4 polish. All seams continuously welded and liquid tight. Exposed welds to be ground smooth. Front of each hood constructed as double wall with insulation for rigidity and eliminate condensation.
4. Supply-air plenum, integral with canopy, perforated low velocity downward discharge, full length, with stainless steel perforated diffusers, supply collar connections and volume dampers, stainless steel construction to match exhaust hood.
5. Stainless steel enclosure panels to enclose from top of hoods to ceiling, field verify dimensions.
6. Filter housing full length of hood, with Kleen-Gard stainless steel high efficiency baffle filters with handles and bottom hanging hood, UL classified
7. Fluorescent light fixtures full length of hood, complete with bulbs, factory pre-wired to junction box.
8. Integral grease drain system for filters, sloped to exposed ½ pint removable grease cup.
9. Security features to include:
  - a. Exhaust riser with welded stainless steel security grating at connection point to ducts per drawing Q-403.
  - b. Fluorescent lights behind ¼” high impact resistant polycarbonate.
  - c. Tack weld perforated diffusers on supply air plenum.

D. Electrical Features

1. Room temperature sensor
2. LED Screen

**2.86 Item No. 87 Wet Chemical System**

- A. See Section 212300 Wet Chemical Extinguishing System

**2.92 Item No. 92 Clean Dish Table**

- A. Manufacturer: Universal Stainless Inc. / Storage Products Group., 14002 E. 33<sup>rd</sup> Place, Aurora, CO 80011 Phone No. 800-223-8332
- B. Quantity and Size: One (1): 36” working height Configuration as per Floor Plan drawing Q-502, field verify all dimensions
- C. Features:
1. Construction: Table 14 gauge stainless steel, all ¾” coved vertical and horizontal corner construction, 3” high x 1-1/2” raised roll edge on front and right end, left end lip into dish machine, 8” x 2” integral back riser returning to wall on 45° angle, ends fully enclosed and welded, back riser to remain 3” from wall.
  2. Legs: 1-5/8” diameter, 16 gauge 304 stainless steel, tubular construction complete with gusset and adjustable flange feet, anchored to floor. Legs: 4’-0” maximum on center.
  3. Top: to supported 12” of depth with sound deadening hat channel brace, closed at each end and secured to the underside of the table with studs located at a minimum of 6” on center

4. Cross bracing: 1" diameter, 16 gauge 304 stainless steel, tubular construction fully welded to legs at 10" center line off finished floor
5. All tamper proof fasteners

**2.93 Item No. 93 Utility Distribution System**

- A. Manufacture: Captive Aire/AquaMatic, 3100 Smoketree Court, Suite 809, Raleigh, NC 27604, Phone No. 1-877-414-9255.
- B. Model No. UDI-32
- C. Features:
  1. Utility Distribution System, w/ two vertical risers (one each end) dedicated to electrical and plumbing.
  2. Horizontal distribution raceway between the risers, separated into electrical and plumbing compartments, enclosed and water tight
  3. 16 gauge, 304 stainless steel, #4 finish
  4. Circuit protected dual convenience outlets provided on each riser
  5. Service connections located behind removable access panels
  6. Bus bar system; power fed through the main circuit breaker to the bus bar system, each appliance fed from the bus bar through individually sized circuit breakers located along the raceway
  7. Main disconnect, one point disconnect through main circuit breaker equipped with a 120v rated shunt trip provider
  8. Plumbing riser house manual shut-off valves for water and gas main supply lines, plumbing manifolds shall be provided with stub-out along the raceway for individual plumbing connections, each stub-out shall be equipped with manual shut-off valve.
  9. Gas solenoid valve provided with a manual reset button and time delay relay
  10. Correctional package including: tamper proof fasteners, screws and connectors
- D. Plumbing Features:
  1. Connections to incoming water services
  2. Interconnections between unit sections
- E. Electrical Features:
  1. Connections to incoming electrical bus bar
  2. Interconnections between unit sections

**2.94 Item No. 94 Temporary Utility Chase**

- A. Custom Stainless Steel Fabrication
- B. Size; 1'-9" overall height x length as shown on drawing Q-503  
One (1) at 18'-0" long; One (1) at 20'-6" long, field verify
- C. Features:
  1. 1" x 3" x 1", 20 gauge, 304 stainless steel frame
  2. 20 gauge, 304 stainless steel body with fully welded and enclosed ends

3. 20 gauge, 304 stainless steel access panels, hemmed edges all sides. Anchor to body of cabinet, locations as per Q-503.
4. Punch and coordinate locations of openings in access panels for plumbing to equipment
5. Anchor to wall with tamper proof expandable anchors

## **PART 3 EXECUTION**

### **3.01 INSTALLATION**

- A. Install the Work of this Section in accordance with the manufacturer's printed installation instructions, unless otherwise noted.
- B. Installation of the exhaust hoods
  1. Contractor to install hood hangers @ 24" max. o.c. along all hood / end edges which are perpendicular to existing wood roof trusses.
  2. Design and install framing system to distribute hood loads evenly to all existing roof trusses in a manner that the hood loads are evenly transferred to panel points of all truss top cords (minimum of 5 trusses.) The total number of trusses to support the hood shall be number of hangers plus 2. (For example, if the number of hangers on one hood edge is four (4), the hood load from these four hangers shall be evenly distributed to at least 6 trusses above.)

### **3.02 FIELD QUALITY CONTROL**

- A. Set all food service equipment at locations indicated and leveled before and after final connections by others. Cut all openings in equipment, where required to make mechanical connections.
- B. Electrical receptacles and plumbing trim furnished under this contract shall be turned over to the Electrical and Plumbing Work Contractors for installation by them. All final heating, plumbing, and electrical connections by others.
- C. System Acceptance Test:
  1. Preparation: Notify the Director's Representative at least 3 working days prior to the testing, so arrangements can be made to have a Facility Representative witness the testing.
  2. Test the following:
    - a. Each item provided in this Section.
  3. Submit a typewritten report of the test results, signed by the Contractor and the Director's Representative.
- D. Training: Train facility personnel on the operation and maintenance of the Food Service Equipment for a minimum of two 8 hour sessions

**END OF SECTION**