## SECTION 105113 - METAL LOCKERS

## PART 1 GENERAL

### 1.1 SECTION INCLUDES

A. SCOPE OF WORK

1. DESCRIPTION: Furnish and install 304 Stainless Steel Wardrobe and/or Box Lockers, complete, as shown and specified per contract documents.

### 1.2 RELATED WORK SPECIFIED ELSEWHERE:

A. Concrete: Section 031000
B. Rough Carpentry: Section 061000
C. Finish Carpentry: Section 062000

### 1.3 SUBMITTALS

A. GENERAL: Refer to Section 013000 ADMINISTRATIVE REQUIREMENTS - SUBMITTALS
B. SHOP DRAWINGS: Submit drawings showing locker types, sizes, quantities, including all necessary details relating to anchoring, trim installation and relationship to adjacent surfaces.
C. COLOR CHARTS: Provide color charts showing manufacturer's available colors (minimum 24). Provide metal samples if requested.
D. NUMBERING: Locker numbering sequence will be provided by the approving authority and noted on approved shop drawings returned to the locker contractor.
1.4 QUALITY ASSURANCE
A. MANUFACTURING STANDARD: Provide metal lockers that are standard products of a single manufacturer, with interchangeable like parts. Include necessary mounting accessories, fittings, and fastenings.
B. FABRICATOR QUALIFICATIONS: Firm experience (minimum 5 years) in successfully producing the type of metal lockers indicated for this project, with sufficient production capacity to produce required units without causing delay in the work.
C. INSTALLER QUALIFICATIONS: Engage an experienced (minimum 2 years) installer who has successfully completed installation of the type of metal lockers and extent to that indicated for this project.

### 1.5 PRODUCT HANDLING

A. GENERAL: All work shall be fabricated in ample time so as to not delay construction process.
B. DELIVERY: All materials shall be delivered to the site at such a time as required for proper coordination of the work. Materials are to be received in the manufacturer's original, unopened packages and shall bear the manufacturer's label.
C. STORAGE: Store all materials in a dry and well ventilated place adequately protected from the elements.

### 1.6 WARRANTY

A. 304 Stainless Steel Lockers are covered against all defects in materials and workmanship excluding finish, damage resulting from deliberate destruction and vandalism under this section $f$ 2 years.

PART 2 PRODUCTS

### 2.1 MANUFACTURERS

A. AVAILABLE MANUFACTURERS: Subject to compliance with the design, material, method of fabrication and installation as required in this specification section or modified as shown on drawings. Manufacturers offering products which may be incorporated in the work include the following: List Industries Inc. (Basis of Design)

### 2.2 LOCKER TYPES

A. General: Lockers shall be "SUPERIOR 304 STAINLESS STEEL LOCKERS" as manufactured by List Industries Inc. or approved equal.

1. Type: - Tier
2. Size: - wide $x$ - deep $x$ - high
B. SUPERIOR 304 STAINLESS STEEL LOCKERS:
3. Wardrobe Doors: 16 gauge 304 stainless steel single sheet louvered with recessed handle, and multi-point gravity lift-type latching.
4. Box Doors: 18 gauge 304 stainless steel single sheet louvered with recessed handle, and single-point, through-the-door, friction catch finger pull latching
5. Sides: 24 gauge solid 304 stainless sheet steel.
6. Tops, Bottoms, Shelves: 24 gauge solid 304 stainless sheet steel
7. Backs: 24 gauge solid 304 stainless sheet steel

### 2.3 FABRICATION

A. MATERIALS:

1. Steel Sheet: All 304 stainless sheet steel used in fabrication shall be prime grade free from scale and imperfections.
2. Fasteners: Cadmium, zinc or nickel plated steel; bolt heads, slot less type; self-locking nuts or lock washers.
3. Hardware: Hooks and hang rods of cadmium plated or zinc plated steel or cast aluminum.
4. Handle: Seamless drawn 304 stainless steel recessed handle.
5. Number Plates: To be polished aluminum with not less than $3 / 8$ " high etched numbers attached to door with two aluminum rivets.
B. CONSTRUCTION: Lockers shall be "AMP 304 STAINLESS STEEL LOCKERS" as manufactured by Art Metal Products or approved equal. Fabricate lockers square, rigid and without warp, with metal faces flat and free from dents or distortion. Make all exposed metal edges safe to touch. Weld frame members together to form a rigid, one-piece structure. Weld, bolt or rivet other joints and connections as is standard with manufacturer. Grind exposed welds flush. Do not expose bolts or rivet heads on front of locker doors or frames except for fastening of number plates and recessed handle.
6. FRAME: Fabricate of 304 stainless steel, 16 gauge (minimum) channels, with integral continuous door stop/strike formed on both latch and hinge side vertical members. Cross frame members of 16 gauge channel shapes, including intermediate cross frame members on double tier lockers shall be securely welded to the vertical framing members to ensure rigidity. Rubber bumpers shall be provided to cushion door closing.
7. HAT SHELVES, INTERMEDIATE SHELVES AND BOTTOMS: Shall be formed with 24 gauge (minimum) 304 stainless solid sheet steel with single return bends at all sides. Bolt top and bottom as well as horizontal tier dividers of wardrobe openings to front horizontal frame members at not less than one place in addition to side panels. Form hat shelves at 60 " and $72^{\prime \prime}$ high single tier lockers of 16 gauge (minimum) sheet steel with single bends at sides and back and a double bend at front.
8. BACKS: Shall be of 24 gauge (minimum) 304 stainless sheet steel, with double flanged connections extending full height.
9. DOORS: Wardrobe Doors: Doors 20 " high and over to be fabricated from 304 stainless steel single sheet prime 16 gauge with single bends at top and bottom and double bends at the sides. The channel formed by the double bend at the latch side is designed to fully conceal the lock bar. Doors shall be louvered. Box Doors: Doors 18" high and under to be fabricated from 304 stainless steel single sheet prime 18 gauge with single bends at top, bottom and sides. Doors shall be louvered.
10. LATCHING: Wardrobe Door Latching: The latching mechanism for wardrobe doors shall be finger lift control type constructed of 14 gauge (minimum) steel with a nylon cover that has a generous finger pull. Lock bar shall be hot dip galvanized. Spring activated nylon slide latches shall be completely enclosed in the lock channel allowing doors to close with the lock in the locked position. Latch hooks shall be securely welded to the vertical frame channel on the strike side to engage the nylon slide latches. Three latch hooks for doors $48^{\prime \prime}$ and higher, two latch hooks for doors under 48" high, one through the door latch hook for box doors. Box Door Latching; Shall be single point rigid non-moving positive latch by means of a heavy 12 gauge (minimum) latch securely welded to the vertical. The latch assembly must have a padlock loop that inserts through the recess pan.
11. HANDLE: doors shall have a seamless drawn 304 stainless steel recessed handle shaped to receive a padlock or built-in combination lock. The recess pan shall be deep enough to have the lock be completely flush with the outer door face. A finger lift/padlock hasp shall protrude through the top of the handle for easy opening of the locker door.
12. DOOR HINGES: All doors hinges shall not be less than 2 " long 16 gauge 5 -knuckle stainless steel hinges securely welded to frame and riveted to the door. Provide 3 hinges for doors 48 " and higher and 2 for doors under 48" high. All doors to be right hand, side hinged.

### 2.4 LOCKER ACCESSORIES:

A. Locks (If required):

1. Built-In Combination Locks: Built-in combination automatic dead bolt locks with 5 control keys. Locks must be capable of a minimum of five combination changes.
2. Combination Padlocks: Combination padlock, key controlled.
B. Equipment: Furnish each locker with the following items, unless otherwise shown.
3. Single tier lockers: Openings 60 " and 72 " shall include one hat shelf, one double prong ceiling hook and a minimum of two single prong wall hooks.
4. Double tier lockers: Openings 30 " thru $36^{\prime \prime}$ high shall include one double prong ceiling hook and a minimum of two single prong wall hooks.
5. Triple tier lockers: Openings 20 " thru 24 " high shall include one double prong ceiling hook.
6. Finished End Panels (If required): Shall be "Boxed" type formed from 16 gauge 304 stainless steel with 1" O.D. double bends on sides and a single bend at top and bottom with no exposed holes or bolts. If lockers have slope tops, end panels must be formed with slope at top to cover the ends of the slope tops. Finished to match lockers. Provide at all exposed ends.
7. Continuous Slope Tops (If required): Not less than 18 gauge 304 stainless steel sheet approximately 18 degrees pitch, in lengths as long as practical but not less than four lockers. To be installed in addition to the locker flat top with end closures for support. Finished to match lockers.
8. Fillers (if required): Provide where indicated, of not less than 16 gauge 304 stainless steel sheet, factory fabricated and finished to match lockers.
C. FINISHING: All locker parts to be cleaned after fabrication
9. Lockers shall be GREENGUARD GOLD Certified.

PART 3 EXECUTION

### 3.1 INSTALLATION

A. GENERAL: Installation shall be in strict conformance with referenced standards, the manufacturer's written directions, as shown on the drawings and as herein specified.
B. PLACEMENT: Lockers shall be set in place, plumb, level, rigid, flush and securely attached to the wall (or bolted together if back-to-back) and anchored to the floor or base according to manufacturer's specifications.
C. ANCHORAGE: About 48" O.C., unless otherwise recommended by manufacturer, and apply where necessary to avoid metal distortion, using concealed fasteners. Friction cups are not acceptable.
D. TRIM: Sloping tops, metal fillers and end panels shall be installed using concealed fasteners. Provide flush, hairline joints against adjacent surfaces.

### 3.2 ADJUSTMENT

A. GENERAL: Upon completion of installation, inspect lockers and adjust as necessary for proper door operation. Touch-up scratches and abrasions to match original finish.

