



SECTION 10 51 13 - METAL EQUIPMENT LOCKERS

PART 1 GENERAL

1.1 SECTION INCLUDES

- A. DESCRIPTION: Furnish and install factory-assembled Heavy-Duty MIG-Welded Metal Lockers, complete, as shown and specified per contract documents.

1.2 RELATED WORK SPECIFIED ELSEWHERE:

- A. Concrete: Section 03 10 00
- B. Rough Carpentry: Section 06 10 00
- C. Finish Carpentry: Section 06 20 00

1.3 SUBMITTALS

- A. GENERAL: Refer to Section 01 30 00 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. All-Welded Lockers are covered against all defects in materials and workmanship excluding finish, damage resulting from deliberate destruction and vandalism under this section for the lifetime of the facility.

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: Art Metal Products (Basis of Design)

2.2 LOCKER TYPES

- 1. General: Lockers shall be "AMP DOUBLE DOOR ALL-WELDED EQUIPMENT STORAGE LOCKERS WITH TURN-HANDLE LATCHING" as manufactured by Art Metal Products or approved equal.
- 2. Type: Single Tier (double door)
- 3. Size: ____" wide x ____" deep x ____" high
- B. DOUBLE DOOR ALL-WELDED EQUIPMENT STORAGE LOCKERS:
 - 1. Doors: 14 gauge formed diamond perforated sheet steel
 - 2. Sides: 13 gauge 3/4" flattened expanded metal framed by 16 gauge tubular sections and channel frame members.
 - 3. Tops, Bottoms, Shelves: 16 gauge solid sheet steel
 - 4. Backs: 18 gauge solid sheet steel

2.3 FABRICATION

- A. MATERIALS:
 - 1. Steel Sheet: All sheet steel used in fabrication shall be prime grade free from scale and imperfections and capable of taking a heavy coat of custom blend powder coat.
 - 2. Fasteners: Cadmium, zinc or nickel plated steel; bolt heads, slotless 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: Steel.
 - 5. Number Plates: To be aluminum with not less that 3/8" high etched numbers attached to door with two aluminum rivets.
- B. CONSTRUCTION: Lockers shall be "AMP DOUBLE DOOR ALL-WELDED EQUIPMENT STORAGE LOCKERS WITH TURN-HANDLE LATCHING" as manufactured by Art Metal Products or approved equal. All lockers shall be factory-assembled, of all MIG welded

construction, in multiple column units to meet job conditions. Assembly of locker bodies by means of bolts, screws, or rivets will not be permitted. Welding of knockdown locker construction is not acceptable. Grind exposed welds and metal edges flush and make safe to touch.

1. Frame / Vertical Side panels: Shall be of 13 gauge 3/4" flattened expanded metal framed by 16 gauge tubular sections and channel frame members designed to enclose all four edges of the side panel with the entire assembly MIG welded to form a rigid frame for each locker. The channel frame members are welded to the front and rear vertical frame members to create and anchor bearing surface of 1-1/4 inches wide x the depth of the locker at each side panel.
2. Integral Frame Locker base: 16 gauge formed sheet steel with double return flanges at the front and rear. A full depth horizontal channel shall be MIG welded under the locker bottom front-to-back at the left and right side of each welded locker unit as well as beneath each vertical side panel for maximum rigidity.
3. Flat Tops: Shall be formed of one piece of 16 gauge cold rolled sheet steel and shall be an integral part MIG welded to each vertical side panel frame member and be continuous to cover the full width of a multiple framed locker unit.
4. Hat Shelf and Bottoms: Shall be 16 gauge sheet steel, have double bends at front and shall be MIG welded to the sides. Provide (1) full width shelf at top and (1) full-width shelf at bottom.
5. Backs: Shall be 18 gauge cold rolled sheet steel, be continuous to cover a multiple framed unit and be welded to each vertical side panel frame member.
6. Doors: Left and right doors shall be fabricated from single sheet prime 14 gauge with single bends at top and bottom and double bends at the sides. Doors shall include a 3" wide 18 gauge full height channel door stiffener MIG welded to the hinge side of the door as well as to the top and bottom door return bends and spot welded to the inside of door face to form a rigid torque-free box reinforcement for the door. Doors are to be perforated with 5/8" x 1-1/2" diamonds.
7. Latching/Handle: Located in the right hand door shall be a 3-point projecting turn-handle latching mechanism designed to positively engage frame at the top and bottom as well as to the center of the left hand door. The vertical lock rods shall be fabricated from 3/8" diameter round rod. Steel pry-resistant retainers are to be securely welded to inner door face midway above and below the handle. Lock rod guides shall be welded to the inner top and bottom door flanges of the right hand door insuring proper engagement between the lock rods and locker frame when the door is in the locked position. Locking device shall be designed for use with either built-in combination locks or padlocks. Padlock Strike Plates are optional.
8. Door Hinges: Hinges shall not be less than 3-1/2" long 13 gauge seven knuckle pin type, securely riveted to frame and welded to the door. All doors shall 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: Provide Provide (1) full-width 1/2" diameter conduit coat rod per locker.
- C. Finished End Panels (If required): Shall be "Boxed" type formed from 16 gauge cold rolled 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.

- D. Continuous Slope Tops (If required): Not less than 18 gauge sheet steel 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.
- E. Fillers (if required): Provide where indicated, of not less than 16 gauge sheet steel, factory fabricated and finished to match lockers.
- F. FINISHING: All locker parts to be cleaned and coated after fabrication with a seven stage hot-spray washing process and coated with a zirconium-based nanotechnology providing a green alternative to traditional iron phosphate followed by a coat of high grade custom blend powder electrostatically sprayed and baked at 350 degrees Fahrenheit for a minimum of 20 minutes to provide a tough durable finish. Color to be selected from manufacturer's standard list of colors.
- G. 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.

END OF SECTION