Section 10 51 13
Metal Lockers

PART 1 - General

1.1 Section Includes
- A. Standard Duty Knocked Down Lockers

1.2 References
- A. ADAAG - Americans with Disabilities Act, Accessibility Guidelines.
- B. ASTM A879 – Standard Specification for Steel Sheet, Zinc Coated by the Electrolytic Process for Applications Requiring Designation of the Coating Mass on Each Surface.
- C. ASTM A1008 – Standard Specification for Steel, Sheet, Cold-Rolled, Carbon, Structural, High-Strength Low-Alloy, High-Strength Low-Alloy with Improved Formability, Solution Hardened, and Bake Hardenable.

1.3 Submittals
- A. Manufacturer's data sheets on each product to be used, including:
  1. Preparation instructions and recommendations.
  2. Storage and handling requirements and recommendations.
  3. Installation methods.
- B. Shop Drawings: Show the following:
  1. Dimensioned drawings including plans, elevations, and sections to show locker locations and interfaces with adjacent substrates.
  2. Details of assembly, erection, anchorage and clearance requirements.
- C. Selection Samples: For each finish product specified, two complete sets of color chips representing manufacturer's full range of available colors and finishes.

1.4 Delivery, Storage, and Handling
- A. Store products in manufacturer's unopened packaging until ready for installation.
- B. Protect locker finish and adjacent surfaces from damage.

PART 2 - Products

2.1 Materials
- A. Steel: Prime grade mild cold-rolled sheet steel free from surface imperfection, capable of taking a high-grade enamel finish and in compliance with ASTM A1008.
- B. Steel: Sheet steel components shall be fabricated using zinc-coated steel free from surface imperfection, capable of taking a high-grade enamel finish and in compliance with ASTM A879.
- C. Hooks: Zinc plated forged steel, ball ends.
- D. Bolts and Nuts: Zinc plated truss fin head bolts and hex nuts.

2.2 Standard Duty Lockers
- A. Tops, Bottoms, Backs, Sides, and Shelves: 24 gauge sheet steel.
- B. Doors over 12 inches (305 mm) wide or 20 inches (760 mm) high: 16 gauge sheet steel.
- C. No legs.
- D. Locker Body: Steel specially formed for added strength and rigidity and to ensure tight joints at fastening points.
  1. Tops and bottoms with three sides formed 90 degrees, the front offset formed to be flush with horizontal frame member.

2. Shelves with four sides formed to 90 degrees, front edge having a second bend.
3. Hole spacing in locker body construction: Not exceeding 9 inches (225 mm).
4. Form door frame members to a channel shape, not less than 16 gauge steel.
5. Provide vertical door frame members with additional 3/8 inch (9.5 mm) flange as a continuous door strike.
6. Mortise and tenon intermembering parts; electrically weld together in a rigid assembly capable of resisting strains.
7. Securely weld cross frame members of channel shapes to vertical framing members to ensure rigidity, including intermediate cross frame on double and triple tier lockers.
8. Optional factory assembly of locker bodies using rivets.

E. Locker Doors: One piece sheet steel.
1. Multi-Point Latch Doors: Full channel formation of adequate depth to fully conceal lock bar on lock side, channel formation on hinge side, right angle across top and bottom, with holes for attaching number plates.
2. Provide holes for attaching number plates.
3. Ventilation: Provide louvered doors in manufacturer's standard louver pattern.
a. 30 inch (0.762 m) High Doors: Minimum one group of 6 louvers.

F. Hinges:
1. Two inch high, 0.074 inch (1.88 mm) thick sheet steel, double spun, full loop, tight pin, projection welded to door frame and securely fastened to the door with two steel rivets.
a. Two 2 inch (51 mm) high five-knuckle hinges.

2.3 Door Handles and Latching
A. 2 Tier: Multi-point latching:
1. Chrome-plated zinc alloy die-cast case and handle, 40,000 psi (276 MPa) maximum tensile strength.
2. Attachment to latch bar concealed inside door and tamperproof; pulling handle out shall move latch bar up and open door in one motion.
3. Padlock Eye: For use with 9/32 inch (7.1 mm) diameter padlock, integral handle and located so that extension of handle forms padlock strike.
4. Case: Kick-proof type shielding movable part and providing padlock strike to prevent scratching and marring the door.
5. Provide lock hole cover plate for use with padlocks.
6. Latch Clip: Glass-filled nylon engaging the door frame and holding the door shut.
a. Two points.
7. Locking Device: Positive, automatic type, whereby locker may be locked when open, then closed without unlocking.
8. Firmly secure one rubber silencer in frame at each latch hook.

2.4 Accessories
A. Number Plates: Provide each locker with a polished aluminum number plate, 2-1/4 inches (57 mm) wide by 1 inch (25 mm) high, with black numerals not less than 3/8 inch (9.5 mm) high; attach to face of door with two aluminum rivets.
B. Finished End Panels: Minimum 16 gauge steel formed to match locker depth and height, 1 inch (25 mm) edge dimension; finish to match lockers; install with concealed fasteners.

2.5 Fabrication

A. Fabricate lockers square, rigid, without warp, with metal faces flat and free of distortion.

B. Knock-Down Lockers: Fabricate lockers on the unit principle, each locker with individual door and frame, individual top, bottom, back, and shelves, with common intermediate divisions separating compartments. Verify dimensions and arrangement before fabrication.

C. Finish: Enamel powder coat paint finish electrostatically applied and properly cured to manufacturer’s specifications for optimum performance. Finishes containing volatile organic compounds and subject to out-gassing are not acceptable. Locker exterior and interior shall be painted the same color.

1. Powder Coat - Dry Thickness: 1 to 1.2 mils (0.025 to 0.03 mm).

2. Color: As selected from manufacturer's standard colors.

PART 3 - Execution

3.1 Examination

A. Do not begin installation until substrates and bases have been properly prepared.

B. If substrate and bases are the responsibility of another installer, notify Architect of unsatisfactory preparation before proceeding.

3.2 Installation

A. Install metal lockers and accessories at locations shown in accordance with manufacturer's instructions.

B. Install lockers plumb, level, and square.

C. Anchor lockers to base and wall at 48 inches (1.219 m) or less, as recommended by the manufacturer.

D. Bolt adjoining locker units together to provide rigid installation.

3.3 Adjusting And Cleaning

A. Adjust doors and latches to operate without binding. Verify that latches are operating satisfactorily.

B. Touch-up with factory-supplied paint and repair or replace damaged products before Substantial Completion.

3.4 Protection

A. Protect installed products until completion of project.

End of Section