

SECTION 10 51 13
METAL LOCKERS

PART 1 - GENERAL

1.1 SUMMARY

- A. Section Includes:
 - 1. Standard metal lockers.

1.2 RELATED WORK

- A. Color of Finish: Section 09 06 00 SCHEDULE FOR FINISHES

1.3 SUBMITTALS

- A. Product Data: For each type of product indicated.
- B. Shop Drawings: For metal lockers. Include plans, elevations, sections, details, and attachments to other work.
- C. Samples: For units with factory-applied color finishes provide manufacturer's standard-size samples of each product color, texture, and pattern required.
- D. Maintenance data.
- E. Warranty: Sample of special warranty.

1.4 QUALITY ASSURANCE

- A. Regulatory Requirements: Where metal lockers and benches are indicated to comply with accessibility requirements, comply with the U.S. Architectural & Transportation Barriers Compliance Board's "Americans with Disabilities Act (ADA) and Architectural Barriers Act (ABA) Accessibility Guidelines for Buildings and Facilities".

1.5 WARRANTY

- A. Warranty: Manufacturer's standard form in which manufacturer agrees to repair or replace components of metal lockers that fail in materials or workmanship, excluding finish, within a (1) year period from date of substantial completion.

PART 2 - PRODUCTS

2.1 MATERIALS

- A. Cold-Rolled Steel Sheet: ASTM A 1008/A 1008M, Commercial Steel (CS), Type B, suitable for exposed applications.

- B. Extruded Aluminum: ASTM B 221, alloy and temper recommended by aluminum producer and manufacturer for type of use and finish indicated.
- C. Steel Tube: ASTM A 500, cold rolled.
- D. Particleboard: ANSI A208.1, Grade M-2.

2.2 STANDARD METAL LOCKERS

- A. Locker Arrangement: Single or double tier as indicated on Drawings.
- B. Material: Cold-rolled steel sheet.
- C. Body and Shelves: Assembled by riveting or bolting body components together. Fabricate from unperforated .61 mm (0.024-inch) nominal-thickness steel sheet.
- D. Frames: Channel formed; fabricated from 1.52 mm (0.060-inch) nominal-thickness steel sheet; lapped and factory welded at corners; with top and bottom main frames factory welded into vertical main frames. Form continuous, integral door strike full height on vertical main frames.
- E. Doors: One piece; fabricated from 1.52 mm (0.060-inch) nominal-thickness steel sheet; formed into channel shape with double bend at vertical edges and with right-angle single bend at horizontal edges.
 - 1. Doors less than 304 mm (12 inches) wide may be fabricated from 1.21 mm (0.048-inch) nominal-thickness steel sheet.
 - 2. Reinforcement: Manufacturer's standard reinforcing angles, channels, or stiffeners for doors more than 381 mm (15 inches) wide; welded to inner face of doors.
 - 3. Stiffeners: Manufacturer's standard full-height stiffener fabricated from 1.21 mm (0.048-inch) nominal-thickness steel sheet; welded to inner face of doors.
 - 4. Sound-Dampening Panels: Manufacturer's standard, designed to stiffen doors and reduce sound levels when doors are closed, of die-formed metal with full perimeter flange and sound-dampening material; welded to inner face of doors.
 - 5. Door Style: Louvered vents at top and bottom.
- F. Hinges: Welded to door and attached to door frame with no fewer than two factory-installed rivets per hinge that are completely concealed and tamper resistant when door is closed; fabricated to swing 180 degrees.
 - 1. Knuckle Hinges: Steel, full loop, five or seven knuckles, tight pin; minimum 50 mm (2 inches) high. Provide no fewer than three hinges for each door more than 1066 mm (42 inches) high.

- G. Recessed Door Handle and Latch: Stainless-steel cup with integral door pull, recessed so locking device does not protrude beyond face of door; pry and vandal resistant.
 - 1. Multipoint Latching: Finger-lift latch control designed for use with built-in combination locks, built-in key locks, or padlocks; positive automatic latching and prelocking.
 - a. Latch Hooks: Equip doors 1219 mm (48 inches) and higher with three latch hooks and doors less than 1219 mm (48 inches) high with two latch hooks; fabricated from 2.66 mm (0.105-inch) nominal-thickness steel sheet; welded or riveted to full-height door strikes; with resilient silencer on each latch hook.
 - b. Latching Mechanism: Manufacturer's standard, rattle-free latching mechanism and moving components isolated with vinyl or nylon to prevent metal-to-metal contact, and incorporating a prelocking device that allows locker door to be locked while door is open and then closed without unlocking or damaging lock or latching mechanism.
- H. Built-in Combination Locks: Key-controlled, three number dialing combination locks; capable of at least five combination changes made automatically with a control key.
 - 1. Bolt operation automatically locking spring bolt.
- I. Equipment:
 - 1. Single-Tier Units:
 - a. 304 mm (12 inches) wide x 381 mm (15 inches) deep x 1524 mm (60 inches) high
 - b. Shelf, one double-prong ceiling hook, and two single-prong wall hooks.
 - 2. Double-Tier Units:
 - a. 304 mm (12 inches) wide x 381 mm (15 inches) deep x 1524 mm (60 inches) high
 - b. One double-prong ceiling hook, and two single-prong wall hooks.
- J. Accessories:
 - 1. Continuous Zee Base: Provide at accessible units only. Fabricated from manufacturer's standard thickness, but not less than 1.52 mm (0.060-inch) nominal-thickness steel sheet.
 - a. Height: 152 mm (6 inches).
 - 2. Recess Trim: Fabricated from 1.21 mm (0.048-inch) nominal-thickness steel sheet.

3. Filler Panels: Fabricated from manufacturer's standard thickness, but not less than 0.91 mm (0.036-inch) nominal-thickness steel sheet.

4. Slope Tops

K. Finish: powder coat.

1. Color(s): As selected by Architect from manufacturer's full range.

2.3 LOCKER BENCHES

A. Provide bench units with overall assembly height of 445 mm (17-1/2 inches).

B. Bench Tops: Manufacturer's standard one-piece units, with rounded corners and edges.

1. Size: Minimum 241 mm wide by 32 mm thick by 1524 mm long (9-1/2 inches wide by 1-1/4 inches thick 60 inches long).

2. Laminated clear hardwood with one coat of clear sealer on all surfaces and one coat of clear lacquer on top and sides.

C. Freestanding Pedestals: Manufacturer's standard supports, with predrilled fastener holes for attaching bench top, complete with fasteners, and as follows:

1. Aluminum: 3-mm-thick by 76-mm-wide (1/8-inch-thick by 3-inch-wide) channel or 16-mm-thick by 76-mm-wide (1/4-inch-thick by 3-inch-wide) bar stock, shaped into trapezoidal form; with nonskid pads at bottom.

a. Finish: Anodic finish.

2.4 FABRICATION

A. Fabricate metal lockers square, rigid, and without warp and with metal faces flat and free of dents or distortion. Make exposed metal edges safe to touch and free of sharp edges and burrs.

1. Form body panels, doors, shelves, and accessories from one-piece steel sheet unless otherwise indicated.

2. Provide fasteners, filler plates, supports, clips, and closures as required for complete installation.

B. Fabricate each metal locker with an individual door and frame; individual top, bottom, and back; and common intermediate uprights separating compartments. Factory weld frame members of each metal locker together to form a rigid, one-piece assembly.

C. All-Welded Construction: Factory preassemble metal lockers by welding all joints, seams, and connections; with no bolts, nuts, screws, or

rivets used in assembly of main locker groups. Factory weld main locker groups into one-piece structures. Grind exposed welds flush.

D. Accessible Lockers: Fabricate as follows:

1. Locate bottom shelf no lower than 228 mm (9 inches) above the floor.
2. Where hooks, coat rods, or additional shelves are provided, locate no higher than 48 inches above the floor.

E. Hooks: Manufacturer's standard ball-pointed type, aluminum or steel; zinc plated.

F. Identification Plates: Manufacturer's standard, etched, embossed, or stamped aluminum plates, with numbers and letters at least 9.52 mm (3/8 inch) high.

G. Continuous Base: 152 mm (6 inch) high formed into channel or zee profile for stiffness, and fabricated in lengths as long as practical to enclose base and base ends of metal lockers; finished to match lockers.

H. Center Dividers: Full-depth, vertical partitions between bottom and shelf; finished to match lockers.

2.5 STEEL SHEET FINISHES

A. Powder-Coat Finish: Immediately after cleaning and pretreating, electrostatically apply manufacturer's standard, baked-polymer, thermosetting powder finish. Comply with resin manufacturer's written instructions for application, baking, and minimum dry film thickness.

PART 3 - EXECUTION

3.1 INSTALLATION

A. General: Install level, plumb, and true; shim as required, using concealed shims.

1. Anchor locker runs at ends and at intervals recommended by manufacturer, but not more than 36 inches o.c. Using concealed fasteners, install anchors through backup reinforcing plates, channels, or blocking as required to prevent metal distortion.
2. Anchor single rows of metal lockers to walls near top and bottom of lockers.
3. Anchor back-to-back metal lockers to floor.

B. All-Welded Metal Lockers: Connect groups together with standard fasteners, with no exposed fasteners on face frames.

- C. Equipment and Accessories: Fit exposed connections of trim, fillers, and closures accurately together to form tight, hairline joints, with concealed fasteners and splice plates.
1. Attach hooks with at least two fasteners.
 2. Attach door locks on doors using security-type fasteners.
 3. Identification Plates: Identify metal lockers with identification indicated on Drawings.
 - a. Attach plates to each locker door, near top, centered, with at least two aluminum rivets.
 4. Attach recess trim to recessed metal lockers with concealed clips.
 5. Attach filler panels with concealed fasteners. Locate filler panels where indicated on Drawings or as needed to close space between lockers and adjacent partitions.

END OF SECTION 105113