

## SECTION 10505 – METAL LOCKERS

## PART 1 - GENERAL

## 1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specifications, apply to this Section.

## 1.2 SUMMARY

- A. This Section includes the following:
  - 1. Wardrobe lockers, including the following:
    - a. Double tier.
    - b. Multiple-tier box.
  - 2. Locker benches.

## 1.3 SUBMITTALS

- A. Product Data: Include construction details, material descriptions, dimensions of individual components and profiles, and finishes for each type of locker and bench.
- B. Shop Drawings: Include plans, elevations, sections, details, and attachments to other Work.
  - 1. Show locker fillers, trim, base, sloping tops, and accessories. Include locker-numbering sequence.
- C. Samples for Initial Selection: Manufacturer's color charts showing the full range of colors available for units with factory-applied color finishes.
- D. Maintenance Data: For adjusting, repairing, and replacing locker doors and latching mechanisms to include in maintenance manuals specified in Division 1.

## 1.4 QUALITY ASSURANCE

- A. Source Limitations: Obtain locker units and accessories through one source from a single manufacturer.

## 1.5 DELIVERY, STORAGE, AND HANDLING

- A. Do not deliver lockers until spaces to receive them are clean, dry, and ready for locker installation.

- B. Protect lockers from damage during delivery, handling, storage, and installation.

## PART 2 - PRODUCTS

### 2.1 MANUFACTURERS

- A. Available Manufacturers: Subject to compliance with requirements, manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following:

1. American Locker Security Systems, Inc.
2. Art Metal Products; Div. of Fort Knox Storage Co.
3. DeBourgh Manufacturing Co.
4. General Storage Systems; Div. of North American Steel.
5. Hadrian Manufacturing, Inc.
6. Interior/Medart.
7. List Industries, Inc.
8. Lyon Metal Products, Inc.
9. Penco Products, Inc.; Subsidiary of Vesper Corporation.
10. Republic Storage Systems Co., Inc.
11. Secura Coin Locker; Div. of Industrial Metal Specifications, Inc.
12. Steiner Company, Inc.
13. Tennsco Corporation.
14. Tiffin Metal Products.

### 2.2 MATERIALS

- A. Cold-Rolled Steel Sheet: ASTM A 366/A 366M, matte finish, suitable for exposed applications, and stretcher leveled or rolled leveled to stretcher-leveled flatness.
- B. Fasteners: Zinc- or nickel-plated steel, slotless-type exposed bolt heads, and self-locking nuts or lock washers for nuts on moving parts.

### 2.3 WARDROBE LOCKERS

- A. Body: Form backs, tops, bottoms, sides, and intermediate partitions from steel sheet; flanged for double thickness at back vertical corners. Comply with the following:
1. Back-Material Sheet Thickness: 0.0359 inch (0.90 mm).
  2. Side-Material Sheet Thickness: 0.0359 inch (0.9 mm).
  3. Exposed Ends: Form exposed ends of nonrecessed lockers from minimum 0.0598-inch- (1.50-mm-) thick steel sheet.
- B. Frames: Form channel frames from minimum 0.0598-inch- (1.50-mm-) thick steel sheets; lapped and welded at corners. Form continuous integral door strike on vertical frame members. Provide resilient bumpers to cushion door closing.
1. Latch Hooks: Form from minimum 0.1046-inch- (2.70-mm-) thick steel; welded or riveted to door frames.
  2. Cross Frames: Form intermediate channel cross frames between tiers from minimum 0.0598-inch- (1.50-mm-) thick steel sheet. Weld to vertical frame members.
  3. Frame Vents: Fabricate face frames with vents.
- C. Doors: One-piece steel sheet, formed into channel shape at vertical edges and flanged at right angles at top and bottom edges. Fabricate to prevent springing when opening or closing, and to swing 180 degrees. Comply with the following:
1. Sheet Thickness: 0.0598 inch (1.50 mm) minimum.
  2. Reinforcement: Brace or reinforce inner face of doors more than 15 inches (381 mm) wide.
  3. Louvered Vents: Stamped, louvered vents in door face, as follows:
    - a. Double-Tier Lockers: No fewer than three louver openings at top and bottom.
    - b. Multiple-Tier Lockers: No fewer than two louver openings at top and bottom, or three louver openings at top or bottom.
  4. Security Vents: Manufacturer's standard arrangement of stamped horizontal or vertical security vents on door face.
- D. Hinges: Steel, full loop, five or seven knuckle; tight pin; minimum 2 inches (51 mm) high. Weld to inside of door frame and attach to door with at least two factory-installed fasteners that are completely concealed and tamper resistant when door is closed.
1. Provide at least three hinges for each door more than 42 inches (1067 mm) high and at least two hinges for each door 42 inches (1067 mm) high or less.
- E. Projecting Handle and Latch: Manufacturer's standard, positive automatic, prelocking, pry-resistant latch and pull; chromium-plated, heavy-duty, vandal-resistant, lift-up handle, as follows:

1. Provide minimum three-point latching for each door more than 42 inches (1067 mm) high; minimum two-point latching for each door 42 inches (1067 mm) high or less.
2. Provide single-point gravity or spring-actuated latch with padlock lug.

## 2.4 LOCKER ACCESSORIES

- A. Interior Equipment: Furnish each locker with the following items, unless otherwise indicated:
  1. Hooks: Manufacturer's standard zinc-plated, ball-pointed steel. Provide one double-prong ceiling hook, and not fewer than two single-prong wall hooks for double units. Attach hooks with at least two fasteners.
- B. Number Plates: Manufacturer's standard etched, embossed, or stamped, aluminum number plates with numerals at least 3/8 inch (9 mm) high. Attach plates to each locker door, near top, centered, with at least two aluminum rivets. Locker numbering shall be provided at time of submittal.
- C. Continuous Metal Base: Minimum 0.0598-inch- (1.50-mm-) thick steel sheet, channel or zee profiled for stiffness, fabricated in lengths as long as practicable to enclose base and base ends of lockers, and finished to match lockers.
  1. Height: 5 inches (152 mm).
- D. Continuously Sloping Tops: Manufacturer's standard, fabricated from minimum 0.0359-inch- (0.90-mm-) thick steel sheet, for installation over lockers with separate flat tops. Fabricate tops in lengths as long as practicable, without visible fasteners at splice locations, finished to match lockers. Provide fasteners, filler plates, supports, and closures as follows:
  1. Closures: Vertical-end type.
- E. Finished End Panels: Manufacturer's standard fabricated from minimum 0.0239-inch- (0.60-mm-) thick steel sheet, finished to match lockers, and designed for concealing exposed ends of nonrecessed lockers.

## 2.5 LOCKER BENCHES

- A. Bench Tops: Provide manufacturer's standard one-piece units, of the following material, minimum 9-1/2 inches (240 mm) wide by 1-1/4 inches (32 mm) thick, with rounded corners and edges:
  1. Laminated maple with one coat of clear sealer on all surfaces, and one coat of clear lacquer on top and sides.
- B. Pedestals: Provide manufacturer's standard pedestal supports, with predrilled fastener holes, complete with fasteners and anchors, and as follows:

1. Type: Tubular steel, minimum 1-1/2-inch (38-mm) diameter, threaded on both ends, with standard pipe flange at top and bell-shaped cast base; baked-enamel finish; floor anchored with concealed fasteners.
2. Color: Match locker units.

## 2.6 FABRICATION

- A. Unit Principle: Fabricate each locker with an individual door and frame, individual top, bottom, back, and shelves, and common intermediate uprights separating compartments.
- B. Knocked-Down Construction: Fabricate lockers for nominal assembly at Project site.
- C. Fabricate lockers square, rigid, and without warp, with metal faces flat and free of dents or distortion. Make exposed metal edges free of sharp edges and butts, and safe to touch. Weld frame members together to form a rigid, one-piece assembly.
  1. Form locker-body panels, doors, shelves and accessories from one-piece steel sheet, unless otherwise indicated.

## 2.7 FINISHES, GENERAL

- A. Finish all steel surfaces and accessories, except prefinished stainless-steel and chrome-plated surfaces.
- B. Comply with NAAMM's "Metal Finishes manual for Architectural and Metal Products" for recommendations for applying and designating finishes.
- C. Protect mechanical finishes on exposed surfaces from damage by applying a strippable, temporary protective covering before shipping.
- D. Appearance of Finished Work: Variations in appearance of abutting or adjacent pieces are acceptable if they are within one-half of the range of approved samples. Noticeable variations in the same piece are not acceptable. Variations in appearance of other components are acceptable if they are within the range of approved Samples and are assembled or installed to minimize contrast.

## 2.8 STEEL SHEET FINISHES

- A. Surface Preparation: Clean surfaces of dirt, oil, grease, mill scale, rust, and other contaminants that could impair paint bond. Use manufacturer's standard methods.
- B. Baked-Enamel Finish: Immediately after cleaning and pretreating, apply manufacturer's standard baked-enamel finish consisting of a thermal topcoat. Comply with paint manufacturer's written instructions for applying and baking to achieve a minimum dry film thickness of 1.4 mils (0.036 mm) on doors, frames, and legs, and 1.1 mils (0.28 mm) elsewhere.
  1. Color and Gloss: As selected by Architect from manufacturer's full range.

## PART 3 - EXECUTION

## 3.1 INSTALLATION

- A. Install metal lockers and accessories level, plumb, rigid, and flush according to manufacturer's written instructions.
- B. Assemble knocked-down lockers with standard fasteners, with no exposed fasteners on door faces and face frames.
- C. Connect groups of all-welded lockers together with standard fasteners, with no exposed fasteners on faces frames.
- D. Anchor lockers to floors and walls at intervals recommended by manufacturer, but not more than 36 inches (910 mm) o.c. Install anchors through backup reinforcing plates where necessary to avoid metal distortion, using concealed fasteners.
- E. Fit exposed connections of trim, fillers, and closures accurately together to form tight, hairline joints, with concealed fasteners and splice plates.
  - 1. Attach recess trim to recessed lockers with concealed clips.
  - 2. Attach sloping top units to lockers, with closures at exposed ends.
- F. Attach finished end panels with fasteners only at perimeter to conceal exposed ends or nonrecessed lockers.
- G. Anchor locker benches to floors. Uniformly space pedestals not more than 72 inches (1830 mm) apart, and securely fasten to bench top and anchor to floor.

## 3.2 ADJUSTING, CLEANING, AND PROTECTION

- A. Adjust doors and latches to operate easily without binding. Verify that integral locking devices operate properly.
- B. Clean interior and exposed exterior surfaces and polish stainless-steel and nonferrous metal surfaces.
- C. Protect lockers from damage, abuse, dust, dirt, stain, or paint. Do not permit locker use during construction.
- D. Touch up marred finishes, or replace locker units that cannot be restored to factory-finished appearance. Use only materials and procedures recommended or furnished by locker manufacturer.

## 3.3 METAL LOCKER SCHEDULE

- A. Metal Wardrobe Locker Type A: Where metal lockers of this designation are indicated, provide products complying with the following:

1. 15" deep x 12" wide x 72" high double tier lockers. Each compartment 15"Dx12"Wx36"H.
- B. Metal wardrobe locker Type B: Where metal lockers of this designation lockers of this designation are indicated, provide products complying with the following:
  1. 15" deep x 12" wide x 72" high six tier lockers. Each compartment 15"Dx12"Wx12"H.

