## SECTION 1051 13-METAL LOCKERS

## PART 1 - GENERAL

### 1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

### 1.2 SUMMARY

A. Section includes welded corridor lockers for installation on new and existing 3-inch ( 75 mm ) wood base.

1. Single-Tier Wardrobe Lockers: 12 -inch-wide by 15 -inch-deep by 60 -inch-tall $(300 \mathrm{~mm}$ by 380 mm by 1524 mm ) units.
2. Accessible lockers.

### 1.3 PREINSTALLATION MEETINGS

A. Preinstallation Conference: Conduct conference at Project site.

### 1.4 ACTION SUBMITTALS

A. Product Data: For each type of product.

1. Include construction details, material descriptions, dimensions of individual components and profiles, locking devices, and finishes.
B. Shop Drawings: For metal lockers.
2. Include plans, elevations, sections, and attachment details.
3. Show locker trim and accessories.
4. Include locker identification system and numbering sequence.
C. Samples for verification: Submit one full-size locker sample in selected color. Adherence to the specification is required. Submit manufacturer's technical data andinstallation instructions for metal lockerunits.
D. Product Schedule: For lockers. Use same designations indicated on Drawings.

### 1.5 INFORMATIONAL SUBMITTALS

A. Qualification Data: For Installer.
B. Installation instructions.
C. Sample Warranty: For special warranty.

### 1.6 CLOSEOUT SUBMITTALS

A. Maintenance Data: For adjusting, repairing, and replacing locker doors and latching mechanisms to include in maintenance manuals.

### 1.7 DELIVERY, STORAGE, AND HANDLING

A. Storage and Protection: Protect materials from damage during delivery, handling, storage and installation.

### 1.8 FIELD CONDITIONS

A. Field Measurements: Verify actual dimensions of recessed openings by field measurements before fabrication.

### 1.9 COORDINATION

A. Verify sizes and locations of existing framing, blocking, furring, reinforcements, and other related units of work to ensure that metal lockers can be supported and installed as indicated.

### 1.10 WARRANTY

A. Special Warranty: Manufacturer agrees to repair or replace components of metal lockers that fail in materials or workmanship, excluding finish, within specified warranty period.

1. Failures include, but are not limited to, the following:
a. Structural failures.
b. Faulty operation of latches and other door hardware.
2. Damage from deliberate destruction and vandalism is excluded.
3. Warranty Period for Welded Metal Lockers: Lifetime from date of Substantial Completion.

## PART 2 - PRODUCTS

### 2.1 MANUFACTURERS

A. Source Limitations: Obtain metal lockers and accessories from single source from single locker manufacturer.

1. Obtain locks from single lock manufacturer.

### 2.2 PERFORMANCE REQUIREMENTS

A. Accessibility Standard: For lockers indicated to be accessible, comply with applicable provisions in the USDOJ's "2010 ADA Standards for Accessible Design" and ICC A117.1.

### 2.3 WELDED CORRIDOR LOCKERS

A. Basis-of-Design Product: Subject to compliance with requirements, provide DeBourgh Mfg. Co.; Corregidor or comparable product by one of the following:

1. ASI Storage Solutions; ASI Group.
2. List Industries Inc.
3. Lyon Workspace Products, LLC.
4. Penco Products, Inc.
5. Republic Storage Systems, LLC.
B. Doors: One piece; fabricated from 0.060 -inch $(1.52-\mathrm{mm})$ nominal-thickness steel sheet; formed outer panel with double bends on both sides and a single bend on top and bottom with 0.048 inch $(1.21-\mathrm{mm})$ nominal thickness steel formed stiffener panel.
6. Run stiffener top to bottom on hinge side of door and securely weld to outer door to form a reinforced channel.
7. Door Style: Unperforated panel.
C. Body: Assembled by welding body components together. Fabricate from unperforated steel sheet with thicknesses as follows:
8. Exterior Sides, Tops, Bottoms, Tier Dividers, and Fascia: 0.060 -inch ( $1.52-\mathrm{mm}$ ) nominal thickness.
9. Backs: 0.052 -inch $(1.32-\mathrm{mm})$ nominal thickness.
10. Shelves and Intermediate Partitions: 0.052 -inch ( $1.32-\mathrm{mm}$ ) nominal thickness, with double bend at front and single bend at sides and back.
D. Continuous Door Strike: Tier dividers, tops and bottoms constructed of 0.052 -inch (1.32mm ) nominal thickness to provide four-sided, continuous door strike for a secure, sanitary and intrusion-free locker while door is in closed position.
E. Frames: Channel formed; fabricated from 0.060 -inch ( $1.52-\mathrm{mm}$ ) 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, full-height door strikes on vertical main frames.
11. Cross Frames between Tiers: Channel formed and fabricated from same material as main frames; welded to vertical main frames.
F. Hinges: Welded to door and attached to right side of door opening 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; self-closing.
12. Continuous Hinges: Full height 0.060 -inch $(1.52-\mathrm{mm})$ nominal-thickness piano hinge.
13. Hinges shall be welded to door and riveted to locker frame
G. Recessed Door Handle and Latch: Stainless-steel cup with integral door pull, recessed so locking device does not protrude beyond door face; pry and vandal resistant.
14. Single-Point Latching: Nonmoving latch hook designed to engage bolt of built-in combination or cylinder lock.
a. Latch Hook: Equip each door with one latch hook, fabricated from 0.105 -inch ( $2.66-\mathrm{mm}$ ) nominal-thickness steel sheet; welded midway up full-height door strike; with resilient silencer.
H. Projecting Door Handle and Latch for Accessible Lockers: Finger-lift latch control designed for use with cylinder locks; positive automatic latching, chromium plated; pry and vandal resistant.
I. Locks: Built-in combination locks.
J. Identification Plates: Manufacturer's standard, etched, embossed, or stamped aluminum plates, with numbers and letters at least $3 / 8$ inch ( 9 mm ) high.
K. Hooks: Manufacturer's standard ball-pointed, aluminum or steel; zinc plated.
L. Continuous Sloping Tops: Fabricated from 0.048 -inch ( $1.21-\mathrm{mm}$ ) nominal-thickness steel sheet, with a pitch of approximately 20 degrees.
15. Closures: Vertical-end type, if required.
M. Recess Trim: Fabricated from 0.052 -inch $(1.32-\mathrm{mm})$ nominal thickness steel sheet.
N. Filler Panels: Fabricated from 0.052 -inch ( $1.32-\mathrm{mm}$ ) nominal thickness steel sheet.
O. Finished End Panels: Fabricated from 0.024 -inch ( $0.61-\mathrm{mm}$ ) nominal-thickness steel sheet to cover unused penetrations and fasteners, except for perimeter fasteners, at exposed ends of nonrecessed metal lockers; finished to match lockers.
P. Materials:
16. Cold-Rolled Steel Sheet: ASTM A 1008/A 1008M, Commercial Steel (CS), Type B, suitable for exposed applications.
Q. Finish: Baked enamel or powder coat.
17. Color: As selected by Architect from manufacturer's full range of "Vibrant Colors."

### 2.4 LOCKS

A. Built-in Combination Lock: Key-controlled, three-number dialing combination locks; capable of at least five combination changes made automatically with a control key.

1. Bolt Operation: Manually locking deadbolt or automatically locking spring bolt.
B. Cylinder Lock for Accessible Lockers: Built-in, flush, cam lock with five-pin tumbler keyway, keyed separately and master keyed. Furnish two change keys for each lock and two master keys.
2. Key Type: Flat, with minimum 2- by 2.68 -inch (51- by $68.3-\mathrm{mm}$ ) key head for accessible lockers.
3. Bolt Operation: Manually locking deadbolt or automatically locking spring bolt.

### 2.5 FABRICATION

A. Fabricate metal lockers square, rigid, 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.
C. Equipment: Provide each locker with an identification plate and the following equipment:
3. Single-Tier Units: Shelf, one double-prong ceiling hook, and two single-prong wall hooks.
D. 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 smooth and flush.
E. Accessible Lockers: Fabricate as follows:
4. Locate bottom shelf no lower than 15 inches ( 381 mm ) above the floor.
5. Where hooks or additional shelves are provided, locate no higher than 48 inches (1219 mm ) above the floor.
6. Locks: Keyed cylinder locks.
7. Single-Point Latching: Nonmoving latch hook designed to engage bolt of cylinder lock
F. Continuous Sloping Tops: Fabricated in lengths as long as practical, without visible fasteners at splice locations; finished to match lockers.
8. Sloping-top corner fillers, mitered.
G. Recess Trim: Fabricated with minimum 2-1/2-inch (64-mm) face width and in lengths as long as practical; finished to match lockers.
H. Filler Panels: Fabricated in an unequal leg angle shape; finished to match lockers. Provide slipjoint filler angle formed to receive filler panel.
I. Finished End Panels: Fabricated to conceal unused penetrations and fasteners, except for perimeter fasteners, at exposed ends of nonrecessed metal lockers; finished to match lockers.

### 2.6 ACCESSORIES

A. Fasteners: Zinc- or nickel-plated steel, slotless-type, exposed bolt heads; with self-locking nuts or lock washers for nuts on moving parts.
B. Anchors: Material, type, and size required for secure anchorage to each substrate.

1. Provide nonferrous-metal or hot-dip galvanized anchors and inserts on inside face of exterior walls for corrosion resistance.
2. Provide toothed-steel or lead expansion sleeves for drilled-in-place anchors.

## PART 3 - EXECUTION

### 3.1 EXAMINATION

A. Examine walls and wood support bases, with Installer present, for compliance with requirements for installation tolerances and other conditions affecting performance of the Work.
B. Prepare written report, endorsed by Installer, listing conditions detrimental to performance of the Work.
C. Proceed with installation only after unsatisfactory conditions have been corrected.

### 3.2 INSTALLATION

A. Install lockers 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 ( 910 mm ) 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. Welded Lockers: Connect groups together with manufacturer's standard fasteners, with no exposed fasteners on face frames.
C. Equipment:
4. Attach hooks with at least two fasteners.
5. Attach door locks on doors using security-type fasteners.
6. 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.
D. Trim: Fit exposed connections of trim, fillers, and closures accurately together to form tight, hairline joints, with concealed fasteners and splice plates.
7. Attach recess trim to recessed metal lockers with concealed clips.
8. Attach filler panels with concealed fasteners. Locate filler panels where indicated on Drawings.
9. Attach sloping-top units to metal lockers, with closures at exposed ends.
10. Attach finished end panels using fasteners only at perimeter to conceal exposed ends of nonrecessed metal lockers.

### 3.3 ADJUSTING

A. Clean, lubricate, and adjust hardware. Adjust doors and latches to operate easily without binding. Verify that integral locking devices operate properly.

### 3.4 PROTECTION

A. Protect metal lockers from damage, abuse, dust, dirt, stain, or paint. Do not permit use during construction.
B. Touch up marred finishes, or replace metal lockers that cannot be restored to factory-finished appearance. Use only materials and procedures recommended or furnished by locker manufacturer.

END OF SECTION 105113

