

PART 1 GENERAL**1.1 RELATED DOCUMENTS**

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

1.2 SUMMARY

- A. This Section includes the following:
1. Wardrobe lockers complete with hardware and accessories, including the following:
 - a. Double-tier.
- B. Related Requirements:
1. Division 1 Section "Sustainable Design Requirements".

1.3 QUALITY ASSURANCE

- A. The work of this section shall be performed by a company which specializes in the type of metal locker work required for this Project, with a minimum of 5 years of documented successful experience and shall be performed by skilled workmen thoroughly experienced in the necessary crafts.
1. Work shall be performed in compliance with Owner's insurance underwriters' requirements.
- B. Manufacturer shall specialize in manufacturing the type of metal lockers specified in this section, with a minimum of 5 years of documented successful experience, and have the facilities capable of meeting all requirements of Contract Documents as a single-source responsibility and warranty.
- C. Manufacturer's identification tags or marks are not acceptable on surfaces which will remain exposed to view after installation.
1. Evidence of "patching" after removal of tags or marks is not acceptable.

1.4 SUBMITTALS

- A. Submit the following according to Conditions of the Construction Contract and Division 1 Specification Sections.
- B. Shop Drawings: Shall clearly indicate but not be limited to:
1. Layout and dimensions of metal lockers indicating relationship to adjoining surfaces.
 2. Locker elevations and details, fillers, trim, base, sloping tops, and accessories.
 3. Locker numbering sequence.
 4. Lockers type, size, finish and color.
 5. Installation and anchorage requirements.
- C. Product Data: Shall be clearly marked to indicate all technical information which specifies full compliance with requirements of this section and Contract Documents, including manufacturer's published installation recommendations and the following:
1. Materials, accessories, construction, finishes, assembly, and installation instructions for lockers and benches.
- D. LEED Submittal:
1. MRc4 – List all materials with recycled content indicating material cost broken out by post-industrial (pre-consumer) and post-consumer content. Only include data for materials permanently installed on the project site.
- E. Color Chips: Submit manufacturer's "color chips" indicating full range of colors available for required types of coatings for Architect's selection.
1. Submit manufacturer's product data with "color chips" as specified.

- F. Samples:

Item No.	Quantity	Size	Description
S1	5	3"x3"	Selected color of actual coating coated on actual material.
S2	5	Actual	Number plates.

- G. Maintenance Instructions: Instructions for cleaning lockers and for adjusting, repairing, and replacing locker doors and latching mechanisms.
- H. Hazardous Materials Notification: In the event no product or material is available that does not contain asbestos, PCB or other hazardous materials as determined by the Owner, a "Material Safety Data Sheet" (MSDS) equivalent to OSHA Form 20 shall be submitted for that proposed product or material prior to installation.
- I. Asbestos and PCB Certification: After completion of installation, but prior to Substantial Completion, Contractor shall certify in writing that products and materials installed, and processes used, do not contain asbestos or polychlorinated biphenyls (PCB), using format in Article 3 of General Conditions.

1.5 DELIVERY, HANDLING, STORAGE

- A. Comply with General Conditions and Section 01600/Product Requirements, including the following:
 - 1. Do not deliver lockers until spaces to receive them are clean, dry, and ready for locker installation.
 - 2. Protect lockers from damage or marring during delivery, handling, storage, and installation.
 - 3. Deliver master keys, control keys, and combination control charts to Owner.

1.6 WARRANTY

- A. Comply with General Conditions and Section 01 60 00/Product Requirements, agreeing to repair or replace specified materials or Work that has failed within the warranty period. Failures include but are not limited to the following:
 - 1. Rough, difficult or noisy operation.
 - 2. Loose or missing parts.
 - 3. Noticeable deterioration of finish.
 - 4. Malfunctioning of any lock part.

PART 2 PRODUCTS

2.1 UNAUTHORIZED MATERIALS

- A. Materials and products required for work of this section shall not contain asbestos, polychlorinated biphenyls (PCB) or other hazardous materials identified by the Owner.

2.2 ACCEPTABLE MANUFACTURERS

- A. General: For the purpose of establishing the minimum functional, aesthetic and quality standards required for work of this section, products of the following manufacturer are specified:
 - 1. Republic Storage Systems Co., Inc/Canton, Ohio.
- A. Manufacturer: Subject to compliance with requirements, provide products by one of the following:
 - 1. Art Metal Products, Div. of Fort Knox Storage Co/Arlington Heights, Illinois.
 - 2. List Industries Inc/Deerfield Beach, Florida.
 - 3. Lyon Metal Products Inc/Aurora, Illinois.
 - 4. Medart, Inc/Greenwood, Mississippi.
 - 5. Penco Products/Oaks, Pennsylvania.
- B. Substitutions: Products of the following, and other manufacturers, are acceptable only after compliance with General Conditions using form in Division 1 Section "Substitution Request Form".

2.3 MATERIALS

- A. Recycled Content: For materials containing post-industrial (pre-consumer) and/or post-consumer recycled content, contractor shall document the cost and percentage (by weight) of each material broken out by post-industrial (pre-consumer) and post-consumer content.
- B. Steel Sheet: ASTM A366, commercial-quality, stretcher-leveled, cold-rolled carbon steel sheet, stretcher leveled, free of buckling, scale, and surface imperfections.
- C. Hot-Dip Zinc-Coated Steel Sheet: ASTM A653, commercial-quality, zinc-coated, carbon-steel sheet, hot-dip galvanized according to ASTM A653 with A 60 or G 60 coating designation.

- D. Electrolytic Zinc-Coated Steel Sheet: ASTM A591, with Class C zinc coating, mill phosphatized.
- E. Stainless-Steel Sheet: ASTM A67, Type 302 or 304, stretcher-leveled stainless-steel sheet.
 - 1. Roller-apply texture to doors in manufacturer's standard pattern.
- F. Fasteners: Zinc- or nickel-plated steel; slotless-type exposed bolt heads; self-locking nuts or lock washers for nuts on moving parts.
- G. Equipment: Manufacturer's standard plated steel hooks or coat rods.

2.4 LOCKERS

- A. Lockers:
 - 1. Type: Republic's Standard double-tier and single tier lockers of painted cold-rolled steel construction of quality specified in this section.
 - 2. Size: 12 inches W, 21 inches D, 36 inches H and 12 inches W, 21 inches D, 36 inches H for an overall height of 72 inches.
- B. ADA Lockers:
 - 1. Type: Republic's ADA standard double-tier and single tier lockers of painted cold-rolled steel construction of quality specified in this section.
 - 2. Size: 12 inches W, 21 inches D, 36 inches H and 12 inches W, 21 inches D, 72 inches H with shelf located 15 inches above the bottom of the locker and zinc die-cast chrome plated handle.
- C. Body: Form backs, tops, bottoms, sides, and intermediate partitions of flanged 0.0239" minimum steel sheet.

2.5 MATERIALS AND FABRICATION

- A. Lockers:
 - 1. Base: Standard 4" high 14 gauge continuous metal "Z" base in lengths as long as practicable.
 - 2. Locker Tops: Manufacturer's standard 16 gauge flat type with closure at exposed ends.
 - 3. Number Plates: Polished aluminum with black numerals not less than 3/8" high.
 - a. Numbering System: Will be furnished by Owner.
 - b. Plates shall be inserted into the recessed handle on each door.
 - c. One number plate required for each locker.
 - 4. Hooks: Each locker shall be furnished with five single-prong wall hooks of cadmium-plated steel.
 - 5. Sheet Steel: Mild cold-rolled and leveled steel, free from buckle, scale and surface imperfections, and capable of taking a high grade enamel finish.
 - 6. Bodies: 24 gauge upright steel sheets, backs, tops, bottoms and shelves.
 - a. Tops, bottoms and shelves shall be flanged on all four sides.
 - b. Backs shall be flanged on two sides.
 - c. Side sheets shall be offset at the front and flanged at the rear to provide a double lapped rear corner.
 - d. End and Filler Panels: Material, gauge and finish shall match body construction.
 - e. Exposed End Panels: Minimum 16 gauge steel, finish shall match body construction.
 - 7. Fasteners: Zinc plated steel, low round head slotless machine screws with hex nuts or 3/16" steel rivets.
 - 8. Door Frame:
 - a. Uprights shall be minimum 14 gauge steel.
 - b. Cross members shall be minimum 16 gauge steel.
 - c. Exposed front frame edge shall be 1" wide, 1-1/2" side frame and a 3/8" vertical door strike width on the hinge and latch side.
 - 9. Doors: 16 gauge formed with a full channel shape on the lock side to fully conceal right angle formations across the top and bottom, with welded corners.
 - a. Recessed Ventilation Louvers: Required at top and bottom of each door.
 - 10. Hinges: Minimum 2" wide of the 5-knuckle, full loop, tight pin style securely welded to frame and riveted to the inside of the door flange.
 - a. Minimum 2 per door at doors under 48" high [and minimum 3 per door at doors over 48" high].
 - 11. Handles: Recessed stainless steel handles, 20 gauge brushed stainless steel pocket securely attached to door.
 - a. Pocket shall provide a recessed area for accommodating various lock types and number plate, as well as provide a recessed finger insert area with a flame retardant plastic lift jacket for opening locker.

12. Latching Device: One-piece, pre-lubricated injection molded celcon spring latch completely contained within the lock bar, under tension, to provide a rattle-free operation.
 - a. Lock Bar:
 - 1) Galvanized channel steel construction, securely contained in the door channel.
 - 2) Self-lubricating high density polyethylene guides that isolate the lock bar from metal-to-metal contact with the door.
 - 3) Travel is to be limited by contacting the high density polyethylene guides located inside the lock bar.
 - 4) Three latching points shall be provided on single-tier lockers [and two latching points for each door in double-tier lockers].

2.6 FABRICATION

- A. Fabricate lockers square, rigid, and without warp, with metal faces flat and free of dents or distortion.
 1. Make exposed metal edges free of sharp edges and burrs, and safe to touch.
 2. Weld frame members together to form a rigid, 1-piece structure.
 3. Form locker body panels, doors, shelves and accessories from 1-piece steel sheet unless otherwise indicated.
 4. Preassemble lockers by welding all joints, seams, and connections.
 - a. Grind exposed welds flush.

2.7 FINISHES, GENERAL

- A. Comply with NAAMM "Metal Finishes Manual" for recommendations relative to applying and designating finishes.
- B. Finish all steel surfaces and accessories, except prefinished stainless-steel and chrome-plated surfaces.
- C. Protect mechanical finishes on exposed surfaces from damage by applying strippable, temporary protective covering prior to shipment.
- D. Appearance of Finished Work: Variations in appearance of abutting or adjacent pieces are acceptable if they are within 1/2 of the range of approved samples.
 1. Noticeable variations in the same piece are not acceptable.
 2. Variations in appearance of other components are acceptable if they are within the range of approved samples and they are assembled or installed to minimize contrast.

2.8 STEEL SHEET FINISHES

- A. Surface Preparation: Solvent-clean surfaces complying with SSPC-SP 1 to remove dirt, oil, grease, and other contaminants that could impair paint bond.
 1. Remove mill scale and rust, if present, from uncoated steel complying with SSPC-SP 5 (White Metal Blast Cleaning) or SSPC-SP 8 (Pickling), and phosphatize surfaces.
- B. Baked-Enamel Finish: Immediately after cleaning and pretreating, apply manufacturer's standard baked-enamel finish consisting of a thermosetting topcoat.
 1. Comply with paint manufacturer's instructions for application and baking to achieve a minimum dry film thickness of 1.1 mils on doors, frames, and legs, and 0.7 mil elsewhere.
 2. Apply to all surfaces, exposed and concealed, except plates and nonferrous metal.
 3. Color and Gloss: As selected by Architect from manufacturer's full range of choices for color and gloss.

PART 3 EXECUTION

3.1 INSTALLATION

- A. Preparation:
 1. Take site dimensions affecting this work.
 2. Ensure areas to receive lockers are properly sized and prepared.
- B. Install metal lockers complete with accessories according to manufacturer's recommendations, approved shop drawings and Contract Documents.
 1. Install plumb, level, rigid, and flush.
- C. Assemble knock-down lockers with standard fasteners according to manufacturer's recommendations with no exposed fasteners on door faces and face frames.

- D. Connect together welded locker groups with standard fasteners according to manufacturer's recommendations, with no exposed fasteners on face frames.
- E. Anchor lockers to floors and walls at intervals recommended by manufacturer but no greater than 36" with appropriate anchor devices to suit materials encountered.
 - 1. Install anchors through back-up reinforcing plates where necessary to avoid metal distortion, using concealed fasteners.
- F. Install finished end panels to conceal exposed ends of nonrecessed lockers as shown or required.

3.2 ADJUSTING, CLEANING, AND PROTECTION

- A. Adjust doors and latches to operate easily without binding.
 - 1. Verify that integral locking devices are operating 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.
 - 1. Do not permit locker use during construction.
- D. Touch up marred finishes, or replace locker units that cannot be restored to factory-finished appearance.
 - 1. Use only materials and procedures recommended or furnished by locker manufacturer.

END OF SECTION