SECTION  – metal lockers

1. General
   1. SUMMARY
      1. This Section includes requirements for supply and installation of [commercial] [athletic] metal lockers and accessories required for a complete and functioning installation.
      2. Related Requirements:
         1. Section 03 30 00 – Cast-in Place Concrete.
         2. Section 06 20 00 – Finish Carpentry.
         3. Section 09 29 00 – Gypsum Board.
         4. Section 09 90 00 – Painting.
   2. REFERENCE STANDARDS
      1. American Society for Testing and Materials (ASTM):
         1. ASTM A 1008 - Standard Specification for Steel Sheet, Carbon, Cold-Rolled, Commercial Quality.
      2. ADAAG - American with Disabilities Act, Accessibility Guidelines.
      3. ANSI A117.1 - Accessible and Usable Buildings and Facilities.
   3. SUBMITTALS
      1. Provide required information in accordance with Section 01 33 00 – Submittal Procedures.
      2. Action Submittals: Provide the following submittals before starting Work of this Section:
         1. Product Data: Submit product data from manufacturer indicating proposed components and installation requirements.
         2. Shop Drawings: Show and describe in detail materials, finishes, dimensions, details of connections and fastenings elevations, plans, sections, metal thicknesses, hardware, and any other pertinent information.
         3. Samples:
            1. Submit duplicate 12" x 12" samples of panel showing finish on both sides, two finished edges and core construction.
            2. Submit duplicate representative samples of each hardware item, including brackets, fastenings, and trim.
         4. Submit necessary templates and instructions where supports or anchors have to be built-in by others.
      3. Provide maintenance data for maintenance of metal finishes work for incorporation into Maintenance Manual.
   4. ADMINISTRATION REQUIREMENTS
      1. Coordination: Coordinate site dimensions affecting Work of other Sections and provide data, dimensions and components, anchors and assemblies installed by other Sections in sufficient time for installation of products specified in this Section.
   5. DELIVERY, STORAGE AND HANDLING
      1. Delivery and Acceptance Requirements: Deliver, handle and store prefabricated units in accordance with manufacturer's directions.
      2. Store units at site on raised wood pallets protected from the elements and corrosive materials, and Do not remove from crates or other protective covering until ready for installation.
2. Products
   1. APPROVED PRODUCTS AND MANUFACTURERS
      1. METAL LOCKERS: Sheet steel - cold rolled carbon steel, stretcher levelled, or damper rolled to stretcher levelled standard of flatness, to CAN/CGSB-44.40.
         1. Single Tier (LK-1-1, LK-2-1): Heavy duty single-point latch, 16-gauge steel, full-height continuous door strike, 1830 mm high, 450 mm wide x 610 mm depth on metal base, assembled. Provide according to Drawings in the following rooms: Men’s Lockers 1124, Women’s WR/Locker WE1120, Women’s WR/Locker WR2105, Men’s WR/Locker WR2107.

Acceptable Product: Metal Lockers, Series 50 UHD c/w HD door, by Lincora.

Or Approved alternate.

* + - 1. Double Tier (LK-2-2): Heavy duty single-point latch, 16-gauge steel, full-height continuous door strike, 1830 mm high, 450 mm wide x 610 mm depth on metal base, assembled. Provide according to Drawings in the following rooms: Women’s WR/Locker WR2105, Men’s WR/Locker WR2107

Acceptable Product: Metal Lockers, Series 50 UHD c/w HD door, by Lincora.

Or Approved alternate.

* + - 1. Component Minimum Requirements:

Assembly: Unitized body, all welded construction.

Top: 1.60 mm / 16 ga. sloped.

Base: pre-manufactured 1.60 mm / 16 ga.

Inside Accessories (each compartment): Two (2) shelves and three (3) hooks. Place shelf to provide 25 mm / 1” air space between shelf and back of locker for ventilation. Place one shelf 305 mm / 12” from top and the second 370 mm / 14½” from bottom.

Doors: flush, one-piece double-wall envelope construction, steel thickness 0.81 mm / 20 ga. inner panel, 1.6 mm / 16 ga. outer panel, bonded to honeycomb core, enclosed on all edges.

Accessories:

1. Rubber bumpers riveted to door to act as door stop
2. Door equipped with steel lock keeper welded to door frame to accept padlock.
3. Clear anodized number plate on each locker, number as later directed by Consultant.

Doors with number plates incorporating non-removable numbers, one number designated for each locker.

3-point turn-handle latching engaging frame at top, bottom and centre side of door.

19 mm diameter lock rods,

11-gauge turn-handle welded to 11-gauge cam.

Padlock locking system; padlock by Owner.

Door Hinge: 16-gauge continuous piano hinge welded to frame and riveted to door.

14 gauge diamond perforated sides integral with front vertical frame.

Continuous vertical door strike at both hinge sides.

16-gauge continuous top; 18-gauge solid back, solid sides.

16-gauge hat shelf located 300 mm down from top.

Stainless steel full-width coat rod located under hat shelf.

16-gauge lower shelf located 450 mm up from bottom.

Coat rod on both sides.

16-gauge continuous bottom with reinforcing channels welded to the underside at each side panel providing a rigid 38 mm high unit base.

Partition centred between upper and lower shelves.

Trim, Filler Panels: Minimum 22-gauge steel sheet.

Metal Base: Minimum 16-gauge steel sheet, 102 mm high.

Ventilation: Lockers shall be ventilated at top and bottom of face.

Finish: 2 coats of high-grade alkyd baked enamel in one colour. Finish paint shall have 60-65 percent minimum gloss and have successfully passed ASTM B117, 400 hours of salt spray resistance.

Selected Colour: Medium Grey (from manufacturer's standard colour chart).

Ensure finished units are free from sharp metal edges, with welds ground smooth. Minimum gloss and have successfully passed ASTM B117, 400 hours of salt spray resistance.

Filler Panels / False Fronts: 1.6 mm / 16 ga. thick, place where required, colour to match door

* + 1. SOLID PLASTIC GEAR LOCKERS (LK-1-2): Heavy-duty durable, vandal resistant all welded construction High Density Polyethylene (HDPE) lockers. Frame and Fixed Shelf: 1-inch (25 mm) thick HDPE plastic with homogeneous, matte texture finish with ventilation slots. Heavy-duty,1829 mm high, 610 mm wide x 610 mm depth on HPDE base, assembled. Locker top flat. Locker Shelf: 1-inch (25 mm) HDPE plastic, mortised into sides and back. Design according to Gear Locker Elevation drawing provided in this specification (below). Provide according to Drawings in the following room: Indoor Vehicle Storage 1140
       1. Acceptable product: Lenox Gear locker as distributed by Bradley Corporation, Menomonee Falls, WI 53051, (800)272-3539, fax (262) 251-5817; Email info@BradleyCorp.com; Website www.bradleycorp.com . Local distributor: Belroc (866) 805 6739 (Kingston).
       2. Approved alternate.
       3. Component Minimum Requirements:

Locker Configurations: Single, full height.

Material: HDPE plastic, 30% percent recycled material.

Upper Frame, Sides, Top, Bottom and Shelf: 1/2 inch (13mm) thick HDPE plastic with matte textured finish.

Locker Top: Flat top

Locker Shelf.

Fixed Locker Shelf at top of base.

Selected Color: 028 Grey (from manufacturer's standard colour chart).

Accessories:

1. Coat Hooks: Black powder coated, cast zinc hook three (3) per locker.
2. Number Plate: White acrylic with black film coating, laser etched with number specified. Provide one per locker.

A diagram of a shelf and a shelf

Description automatically generated

* + 1. Wood Benches:
       1. Bench Seats:

Construct of laminated hard maple or similar hardwood standard with the manufacturer, 33 mm thick, of widths and lengths shown, with rounded exposed corners and edges, and smoothly sanded surfaces. Finish wood tops with 2 coats of clear polyurethane varnish or other clear finish system standard with the manufacturer.

As an alternate, locker benches may be high-density polyethylene solid plastic. Colour as selected by Consultant.

* + - 1. Bench Supports:

Provide steel pedestals for locker room benches, of minimum 33 mm O.D. steel pipe or tubing, with top and bottom steel flanges welded thereto and pre-drilled for expansion bolting to floor. Provide stainless steel anchor bolts. Finish pedestals with baked enamel to match lockers.

* + - 1. Bench Types, Quantity and Locations:

Type 1 – Size: 380 mm W x 1525 mm L.

Type 2 – Size: 610 mm W x length as indicated on plans.

* 1. materials
     1. Sheet Steel: Cold rolled carbon steel, commercial quality stretcher levelled, or temper rolled to stretcher levelled standard of flatness free from surface imperfections and conforming to ASTM A 366/A 336M-91.
     2. Locker Paint: Electrostatically applied, thermo-setting, high performance primer and powder coating.
     3. Welding Materials: Conforming to CSA W59.
     4. Fasteners: Non-corrosive type.
     5. Hardwood: AWMAC premium grade, Maple species.
     6. Hardwood Laminating Adhesive: Water resistant urea-formaldehyde resin type conforming to CSA 0112 Series-M, Type 1.
     7. Steel Tube: Conforming to ASTM A 53-906.
     8. Steel Plate: Conforming to CAN/CSA-G40.20/G40.21, Grade 44W.
     9. Chromeplating: Chrome plating on steel by "electroplating" method, with plating sequence as follows; 0.00035" thickness of Copper, followed by 0.00039" thickness of nickel, followed by 0.00064" thickness of chromium.
     10. Polyurethane Coating: Oil-modified, clear gloss or stain interior type conforming to CAN/CGSB-1.175-M.
  2. FINISHES
     1. Lockers:
        1. Specially treat metal locker surfaces by phosphate conversion process conforming to CGSB 31-GP-105a, ready to receive locker paint finish.
        2. Electrostatically apply locker paint to all metal locker surfaces. Colours as selected by Consultant from manufacturer's standard product range.
     2. Bench Tops:
        1. Two coats of clear polyurethane coating. Lightly sand surfaces and wipe with tack rag before applying second coat.
     3. Bench Frames:
        1. Chrome-plated after fabrication.
  3. FABRICATION
     1. General: Make work square, plumb, straight and true. Make joints and intersections tightly fitted and securely fastened.
     2. Finish: All parts to be thoroughly degreased, cleaned and given a bonding, rust-retarding phosphate coat and two finish coats of powder coating. Material then to be baked to produce a hard durable finish.
     3. Body: End sides to have double bend at front edge to add stiffness. Front edge of shelf to be bent to prevent small items from rolling off.
     4. Sloping Tops: Constructed in long lengths, not less than 12'-0". Provide all angle and channel framing required. All fastenings to be concealed. Panels shall be accurately formed free of waves and buckles and set true to line horizontally and vertically.
     5. Filler Panels: Minimum 20-gauge sheet steel, powder coated to match locker colour. Extend filler panels from finished floor to top of sloping top. Top of panel to be same slope as sloping top. Secure panels from inside of lockers.
     6. Door Frames: Vertical members to have three right angle bends to reduce the danger of exposed edges and add strength. Horizontal members to be bent to channel shape of 3/4" x 2-1/2" x 3/4". Weld parts together to form a strong, rigid unit. Provide two rubber bumpers on lock side of frame approximately 1-1/2" from top and bottom of door.
     7. Doors: Fully enclosed at rear with a flush minimum 27-gauge thick reinforcing sheet to form a closed box and make a rigid, whip-free unit. Face of door to be free from protruding handles, locks, louvers, etc.
     8. Bases (where concrete bases are not indicated): 18-gage sheet steel, powder coated to match locker colour, 4" high, complete with top and bottom legs and intermediate vertical steel reinforcement at back.
     9. Commercial Locker Ventilation: Cut slots at top and bottom of each locker to allow air to flow freely in and out of entire locker from bottom to top.
     10. Locking and Latching: Make provision for locking with a standard combination padlock arrangement with no moving parts. Entire lock pocket recess shall be nickel plated with durable black nylon-coated pull and nylon type No. 6 friction catch permanently fixed in door with hidden fastener and aligned to accept plunger and hold door in closed position. Padlock: Supplied by Owner.
     11. Number Plates: Black with bright contrasting block numerals on polished aluminum plate, riveted to door face, recessed into door. Numerals shall not less than 3/4" high and non-erasable. Lockers shall be numbered as indicated later by the Consultant.
     12. Interior Equipment: One hat shelf, two wall hooks, 3 wall mounted die cast zinc plated finish ceiling hook attached to centre of locker shelf.
     13. Hardware: Vandal resistant cadmium plated nuts, bolts, lock washers, nut covers, angle clips and fastenings.

1. Execution
   1. examination
      1. Do not begin installation until substrates and bases have been properly prepared.
      2. Notify Consultant if substrate and bases are of unsatisfactory preparation before proceeding.
   2. INSTALLATION
      1. Install metal lockers and accessories at locations shown in accordance with manufacturer's instructions.
      2. Install lockers level and plumb with flush surfaces and rigid attachment to anchoring surfaces.
      3. Anchor lockers to floor and wall at 48" or less, as recommended by the manufacturer.
      4. Bolt adjoining locker units together to provide rigid installation.
      5. Install sloping tops and metal fillers using concealed fasteners. Provide flush hairline joints against adjacent surfaces.
      6. Install front bases between legs without overlap or exposed fasteners. Provide end bases on exposed ends.
      7. Install benches by fastening bench tops to pedestals and securely anchoring to the floor using appropriate anchors for the floor material. Install free standing benches to locations indicated on Drawings.
   3. ADJUSTING AND CLEANING
      1. Adjust doors and latches to operate without binding. Verify that latches are operating satisfactorily.
      2. Touch-up with factory-supplied paint and repair or replace damaged products before Substantial Completion.
   4. PROTECTION
      1. Protect installed products until completion of Project.

END OF SECTION