

Part 1 General

1.1 SUBMITTALS

- .1 Shop Drawings: Indicate the materials being supplied and all connections, attachments, reinforcing, anchorage and location of exposed fastenings.

Part 2 Products

2.1 LOCKERS

- .1 Fabricate work true to dimensions, square, plumb, level and free from distortion and defects detrimental to appearance and performance. Accurately fit members with hairline joints. Secure intersecting members with adequate fastenings.
- .2 Weld connections where possible; where not possible bolt connections or secure in an approved manner. Countersink exposed fastenings and cut off bolts flush with nuts, and make as inconspicuous as possible.
- .3 Locker Type: Pre-finished Steel, 375 mm x 450 mm x 1800 mm overall size, single tier.
- .4 Bodies: 0.6 mm (26 gauge) stretcher levelled cold rolled stainless steel sheets, carefully formed and factory punched to provide necessary assembly holes. Bolts and nuts shall be complete with lock washers and nut cover, and cadmium plated. Welded construction will be accepted provided surfaces welded together are prime coated before assembly.
- .5 Panels, Trims and Sloping Tops: Same material, construction and finish as locker bodies.
- .6 Locker Frames: Formed channel section of 16 mm (16 gauge) thick stretcher levelled cold rolled stainless steel, corners notched and neatly welded. Provide two rubber door silencers per door on lock side of frame, 40 mm (1e") from top and bottom of door. Incorporate ventilation slots at top and bottom.
- .7 Doors and Frames:
 - .1 Doors: Minimum 1.0 mm (20 gauge) thick stretcher levelled cold rolled stainless steel, fully enclosed panel and reinforced with internal 0.6 mm (26 gauge) thick stiffeners, running full length and width of door. Secure components by spot welding and/or special type fasteners to provide a rigid and whip free door.
 - .2 Door Frames: 1.6 mm (16 gauge) thick cold rolled stainless steel of box channel shape.
 - .3 Hinges: Hang doors on two heavy duty tamperproof hinges welded to door and designed to allow full 180 deg. swing.
- .8 Latching: Heavy duty hasp and plunger arrangement, minimum 3.5 mm thick for padlocking and friction catch.
- .9 Handles: Fully recessed, chrome plated and fitted for padlock use. Padlocks will be supplied by the City. Provide stainless steel or chrome plated inserts for the recessed handle area. Door shall be held closed with friction catch.

- .10 Number plates: Semi-recessed plates of anodized aluminium, numbered and lettered with die embossed numerals painted black as directed by the Contract Administrator.
- .11 Hooks: Equip each locker with three die-cast zinc wall hooks.

Part 3 Execution

3.1 INSTALLATION

- .1 Examine surfaces to receive the Work of this Section and proceed only if conditions are satisfactory.
- .2 Install work true to dimensions, square, plumb and level. Accurately secure joints and intersecting members with adequate fastening.
- .3 Provide maximum number of lockers to fill completely the spaces indicated or as called for on the Drawings.
- .4 Panel and Trims: Cover strips, trim, base, false fronts, sloping tops and panels to complete banks of lockers.

END OF SECTION

Part 1 - General

1.2 RELATED SECTIONS

- .1 Section 05500 Metal Fabrications.

1.3 MEASUREMENT AND PAYMENT

- .1 No measurement will be made under this Section. Include cost in work for each building for which metal storage shelving is required.
- .2 No payment will be made under this Section. This work is considered part of the Lump Sum for each building for which metal storage shelving is required.

1.4 REFERENCES

- .1 ASTM A 490M-92a, Specification for High-Strength Steel Bolts, Classes 10.9 and 10.9.3, for Structural Steel Joints Metric.
- .2 ASTM A 526M-90, Specification for Steel Sheet, Zinc-Coated (Galvanized) by the Hot-Dip Process, Commercial Quality.
- .3 CAN/CGSB-1.81-M90, Air Drying and Baking Alkyd Primer for Vehicles and Equipment.
- .4 CAN/CGSB-1.88-92, Gloss Alkyd Enamel, Air Drying and Baking.
- .5 CGSB 31-GP-107Ma-90, Non-inhibited Phosphoric Acid Base Metal Conditioner and Rust Remover.
- .6 CGSB 44-GP-7-70, Shelving, Steel, Modular.
- .7 CAN/CSA-G40.21-M92, Structural Quality Steels.
- .8 CSA W59-M1989, Welded Steel Construction (Metal Arc Welding).

1.5 DESIGN REQUIREMENTS

- .1 Design and construct metal storage shelving to support uniform load of 300 kg per m of 1000mm span.
- .2 Design shelving to accommodate vertical adjustment of shelves in 50mm increments and to permit easy assembly, expansion, dismantling and re-use of shelving component parts.

1.6 SHOP DRAWINGS

- .1 Submit shop drawings in accordance with Manitoba Section 01330 - Submittal Procedures.
- .2 Indicate shelving layouts, number of bays, number of shelves, number and size of drawers, bins, number of dividers, system of bracing and anchoring devices.

1.7 SAMPLES

- .2 Submit samples in accordance with Section 01330 - Submittal Procedures.

1.8 EXTRA MATERIALS

- .1 Provide maintenance materials special tools and spare parts in accordance Contract Administrator requirements.
- .2 Provide 2 spare shelves components for maintenance use. Store where directed. Identify each box.
- .3 Provide tools for assembly and disassembly, standard with metal storage shelving manufacturer.

Part 2 - Products

2.1 SHELVING

- .1 Storage shelving: CGSB 44-GP-7, Type 2.

2.2 COMPONENTS

- .1 Uprights: roll formed steel angles or tees with perforations to accommodate shelves and other components. Size and thickness of angles or tees shall support specified total load.
- .2 Shelves: brake formed sheet metal, reinforced to carry specified loads. Punch holes in shelves to accommodate dividers and other components.
- .3 Kickplates: formed sheet metal to close opening between bottom shelf and floor on front and on sides of shelving bay.

- .4 Back: 0.6mm core thickness steel sheet to enclose shelving bay extending from bottom shelf to top shelf.
- .5 Side panels: 0.6mm core thickness steel sheet panels to close ends of shelving bays or sections and as partitions between adjacent bays.
- .6 Dividers: reinforced sheet metal plates for subdividing shelves into bins. Provide for attachment of dividers to shelves immediately above and below dividers.
- .7 Gusset plates: heavy gauge metal plates to reinforce corner connections of shelving components.
- .8 Braces: provide sway braces for open type shelving. Use side sway braces on two exposed sides of each rack and at alternate bays. Use back sway braces on two end sections of each bank and on alternate bays.

2.3 FINISH

- .1 Finish shelving system in colour selected by the Engineer.
- .2 Condition metal by applying one coat of metal conditioner to CGSB 31-GP-107Ma.
- .3 Apply one coat type2 primer to CAN/CGSB-1.81 and bake.
- .4 Apply two coats of type2 enamel to CAB/CGSB-1.88 and bake to hard durable finish.

Part 3 - Execution

3.1 INSTALLATION

- .1 Do metal storage shelving work in accordance with CGSB 44-GP-7 except where specified otherwise.
- .2 Install metal storage shelving in accordance with reviewed layout.
- .3 Brace, secure and anchor shelving units in place.
- .4 Make good baked enamel surfaces damaged during shipment or installation.

END OF SECTION