SECTION 10 51 13 – METAL STUDENT LOCKERS

PART 1 GENERAL

1.1 SECTION INCLUDES

A. DESCRIPTION: Furnish and install factory-assembled Heavy-Duty MIG-Welded Metal Lockers, complete, as shown and specified per contract documents.

1.2 RELATED WORK SPECIFIED ELSEWHERE:

A. Concrete: Section 03 10 00

B. Rough Carpentry: Section 06 10 00

C. Finish Carpentry: Section 06 20 00

1.3 SUBMITTALS

A. GENERAL: Refer to Section 01 30 00 ADMINISTRATIVE REQUIREMENTS - SUBMITTALS

B. SHOP DRAWINGS: Submit drawings showing locker types, sizes, quantities, including all necessary details relating to anchoring, trim installation and relationship to adjacent surfaces.

C. COLOR CHARTS: Provide color charts showing manufacturer's available colors (minimum 24). Provide metal samples if requested.

D. NUMBERING: Locker numbering sequence will be provided by the approving authority and noted on approved shop drawings returned to the locker contractor.

1.4 QUALITY ASSURANCE

A. MANUFACTURING STANDARD: Provide metal lockers that are standard products of a single manufacturer, with interchangeable like parts. Include necessary mounting accessories, fittings, and fastenings.

B. FABRICATOR QUALIFICATIONS: Firm experience (minimum 5 years) in successfully producing the type of metal lockers indicated for this project, with sufficient production capacity to produce required units without causing delay in the work.

C. INSTALLER QUALIFICATIONS: Engage an experienced (minimum 2 years) installer who has successfully completed installation of the type of metal lockers and extent to that indicated for this project.

1.5 PRODUCT HANDLING

A. GENERAL: All work shall be fabricated in ample time so as to not delay construction process.

B. DELIVERY: All materials shall be delivered to the site at such a time as required for proper coordination of the work. Materials are to be received in the manufacturer's original, unopened packages and shall bear the manufacturer's label.

C. STORAGE: Store all materials in a dry and well ventilated place adequately protected from the elements.

1.6 WARRANTY

A. All-Welded Lockers are covered against all defects in materials and workmanship excluding finish, damage resulting from deliberate destruction and vandalism under this section for the lifetime of the facility.

PART 2 PRODUCTS

2.1 MANUFACTURERS

A. AVAILABLE MANUFACTURERS: Subject to compliance with the design, material, method of fabrication and installation as required in this specification section or modified as shown on drawings. Manufacturers offering products which may be incorporated in the work include the following: List Industries Inc. (Basis of Design)

2.2 LOCKER TYPES

A. General: Lockers shall be "SUPERIOR MARQUIS PROTECTOR LOCKERS" as manufactured by List industries Inc. or approved equal.

1. Type: _____ Tier

2. Size: ____" wide x ____" deep x ____" high

B. MARQUIS PROTECTOR LOCKERS":

1. Doors: 14 gauge solid sheet steel with recessed handle, and single-point latching

2. Sides: Fully-framed 18 gauge solid sheet steel.

3. Tops, Bottoms, Shelves: 16 gauge solid sheet steel

4. Backs: 18 gauge solid sheet steel

2.3 FABRICATION

A. MATERIALS:

1. Steel Sheet: All sheet steel used in fabrication shall be prime grade free from scale and imperfections and capable of taking a heavy coat of custom blend powder coat.

2. Fasteners: Cadmium, zinc or nickel plated steel; bolt heads, slotless type; self locking nuts or lock washers.

3. Hardware: Hooks and hang rods of cadmium plated or zinc plated steel or cast aluminum.

4. Handle: Seamless drawn 304 stainless steel recessed handle.

5. Number Plates: To be aluminum with not less that 3/8" high etched numbers attached to door with two aluminum rivets.

B. CONSTRUCTION: Lockers shall be "SUPERIOR MARQUIS PROTECTOR ALL-WELDED STUDENT LOCKERS" as manufactured by List Industries Inc. or approved equal. All lockers shall be factory-assembled, of all MIG welded construction, in multiple column units to meet job conditions. Assembly of locker bodies by means of bolts, screws, or rivets will not be permitted. Welding of knockdown locker construction is not acceptable. Grind exposed welds and metal edges flush and make safe to touch.

1. FRAME / VERTICAL SIDE PANELS: Shall be of 18 gauge solid sheet steel framed by 16 gauge Hollow "T" tubular sections and channel frame members designed to enclose all four edges of the

side panel with the entire assembly MIG welded to form a rigid frame for each locker. The channel frame members are welded to the front and rear vertical frame members to create and anchor bearing surface of 1-1/4 inches wide x the depth of the locker at each side panel.

2. INTEGRAL FRAME LOCKER BASE: 14 gauge galvanneal formed structural channels are MIG welded to the front and rear vertical side panel frame members to allow placement of locker bottom a minimum 2-3/4" above floor level. Locker bottom shelf located less than 2” above floor level will not be acceptable.

3. FLAT TOPS: Shall be formed of one piece of 16 gauge cold rolled sheet steel and shall be an integral part MIG welded to each vertical side panel frame member and be continuous to cover the full width of a multiple framed locker unit.

4. HAT SHELVES, INTERMEDIATE SHELVES AND BOTTOMS: Shall be 16 gauge galvanneal sheet steel, have double bends at front and shall engage slots in the Hollow "T" vertical frame members at all four corners and be securely welded to the frame and side. Locker bottom shelf located less than 2” above floor level will not be acceptable.

5. BACKS: Shall be 18 gauge cold rolled sheet steel, be continuous to cover a multiple framed unit and be welded to each vertical side panel frame member.

6. DOORS: Outer door to be fabricated from single sheet prime 14 gauge with single bends at top and bottom and double bends at the sides with a 3” (1-1/2” for 9” wide doors) wide 18 gauge full height channel door stiffener MIG welded to the hinge side of the door as well as to the top and bottom door return bends and spot welded to the inside of door face to form a rigid torque-free box reinforcement for the door. Wardrobe doors to be plain (non-perforated).

7. LATCHING: The latching mechanism shall be single-point rigid non-moving positive latch by means of a heavy gauge (minimum 11 gauge) latch securely welded to the framed vertical divider. The latch assembly must be made of a single piece of steel and have a padlock loop that inserts through the recess pan. Locking device shall be designed for use with either built-in combination locks or padlocks. Latch hooks shall be 11 gauge (minimum) with riveted bumpers and shall be MIG welded to vertical frame member.

8. HANDLE: All locker doors shall have a seamless drawn 304 stainless steel recessed handle shaped to receive a padlock or built-in combination lock. The recess pan shall be deep enough to have the lock be completely flush with the outer door face.

9. DOOR HINGES: Hinges for wardrobe and side hinged gym doors shall not be less than 3-1/2" long 13 gauge seven knuckle pin type, securely riveted to frame and welded to the door. Doors are to be secured to frame with a minimum of two tamper resistant rivets per hinge. Provide 3 hinges for doors 48" and higher and 2 for doors shorter than 48". All doors shall be right hand side hinged.

2.4 LOCKER ACCESSORIES:

A. LOCKS (If required):

1. Built-In Combination Locks: Built-in combination automatic dead bolt locks with 5 control keys. Locks must be capable of a minimum of five combination changes.

2. Combination Padlocks: Combination padlock, key controlled.

B. EQUIPMENT: Furnish each locker with the following items, unless otherwise shown.

1. Single tier lockers: Openings 60” and 72” shall include one hat shelf, one double prong ceiling hook and a minimum of two single prong wall hooks.

2. Double tier lockers: Openings 30” thru 36” high shall include one double prong ceiling hook and a minimum of two single prong wall hooks.

3. Triple tier lockers: Openings 20” thru 24” high shall include one double prong ceiling hook.

4. Finished End Panels (If required): Shall be "Boxed" type formed from 16 gauge cold rolled steel with 1" O.D. double bends on sides and a single bend at top and bottom with no exposed holes or bolts. If lockers have slope tops, end panels must be formed with slope at top to cover the ends of the slope tops. Finished to match lockers. Provide at all exposed ends.

5. Continuous Slope Tops (If required): Not less than 18 gauge sheet steel approximately 18 degrees pitch, in lengths as long as practical but not less than four lockers. To be installed in addition to the locker flat top with end closures for support. Finished to match lockers.

6. Fillers (if required): Provide where indicated, of not less than 16 gauge sheet steel, factory fabricated and finished to match lockers.

C. FINISHING: All locker parts to be cleaned and coated after fabrication with a seven stage hot-spray washing process and coated with a zirconium-based nanotechnology providing a green alternative to traditional iron phosphate followed by a coat of high grade custom blend powder electrostatically sprayed and baked at 350 degrees Fahrenheit for a minimum of 20 minutes to provide a tough durable finish. Color to be selected from manufacturer's standard list of colors. Two-Tone Color Combination: Shall be at no additional cost with the locker body, frame and trim chosen from one color and the doors may be one of any other color chosen from manufacturers standard selection.

D. Lockers shall be GREENGUARD GOLD Certified.

PART 3 EXECUTION

3.1 INSTALLATION

A. GENERAL: Installation shall be in strict conformance with referenced standards, the manufacturer's written directions, as shown on the drawings and as herein specified.

B. PLACEMENT: Lockers shall be set in place, plumb, level, rigid, flush and securely attached to the wall (or bolted together if back-to-back) and anchored to the floor or base according to manufacturer's specifications.

C. ANCHORAGE: About 48" O.C., unless otherwise recommended by manufacturer, and apply where necessary to avoid metal distortion, using concealed fasteners. Friction cups are not acceptable.

D. TRIM: Sloping tops, metal fillers and end panels shall be installed using concealed fasteners. Provide flush, hairline joints against adjacent surfaces.

3.2 ADJUSTMENT

A. GENERAL: Upon completion of installation, inspect lockers and adjust as necessary for proper door operation. Touch-up scratches and abrasions to match original finish.

END OF SECTION