## SECTION 105110 <br> ATHLETIC LOCKERS

## PART 1 GENERAL

### 1.1 RELATED DOCUM ENTS

A. The provisions of the General Conditions, Supplementary Conditions, and the Sections included under Division 1, General Requirements, are included as a part of this Section.
1.2 SUMM ARY
A. The Work required under this Section consists of new lockers and related items necessary to complete the Work, including:

1. Athletic lockers
B. Related Work Specified Elsewhere
2. Section 033000 - Cast-in-Place Concrete for concrete locker base
C. Refer to Section 016000 for Alternates that may affect the Work of this Section
1.3 REFERENCES
A. ASTM A653/A653M - Standard Specification for Steel Sheet, Zinc-Coated (Galvanized) or ZincIron Alloy coated (Galvannealed) by the Hot-Dip Process.
B. FBC - Florida Building Code
C. NAAM N - National Association Architectural M etal M anufacturers
1.4 SUBMITTALS
A. Submit product data indicating construction details, material descriptions, dimensions of individual components and profiles and finishes for each type of locker.
B. Submit shop drawings prior to fabrication: Shop drawings shall indicate type of material, gauges of metal, reinforcement, filler, finishing strips, and other details of construction.
3. Show methods and details of attachment, layout of the lockers, and devices furnished by others.
4. The shop drawings shall identify the locations of each numbering system series is installed.
C. Submit samples of manufacturer's full color line, including standard and optional colors (minimum of 18 colors).
1.5 DELIVERY, STORAGE, AND HANDLING
A. Do not deliver lockers until spaces to receive them are clean, dry, and ready for locker installation.
B. Protect lockers from damage during delivery, handling, storage, and installation.
C. Deliver master keys, control keys, and combination control charts to owner.
1.6 COORDINATION
A. Coordinate sizes, locations, and layout of concrete and metal bases.

## PART 2 PRODUCTS

2.1 M ANUFACTURERS
A. M ay use one of the following manufacturers, providing their product equals or exceeds the quality specified; and are products of the type, size, function, and arrangement required:

1. Superior, List Industries, Inc., Deerfield Beach, Florida
2. Lyon M etal Products, Aurora, Illinois
3. Republic Storage Systems Co., Canton, Ohio
4. Penco Products, Inc., Skippack, Pennsylvania
5. ASI Storage Solutions Inc., Eastanollee, Georgia
6. AM P, Storage Craft, Apopka, FL
7. Patterson Pope, West Palm Beach, FL
8. Or approved equal
B. Following is the procedure for obtaining approval of products from other manufacturers.
9. The "Substitution Request Form" and complete technical data for evaluation must accompany requests for Architect's approval.
10. All materials for evaluation must be received at least 10 -days prior to bid due date.
11. Architect shall issue addendum for additional approved manufacturers.

### 2.2 LOCKER TYPES

A. Refer to the Drawings for the various types, sizes, and layout of lockers required.
B. Provide at least $2 \%$ to complying with the Florida Accessibility Code.
2.3 MATERIALS
A. Cold Rolled Steel Sheet: Use A60 Galvannealed meeting ASTM A653/A653M, suitable for exposed applications, and stretcher leveled or roller leveled to stretcher leveled flatness.

### 2.4 ATHLETIC LOCKERS

A. Body: Form tops and bottoms from minimum 16-gauge steel sheet.

1. Lockers that back to a wall: Form from minimum 18-gauge solid steel sheet, flanged for double thickness at back vertical corners.
2. Lockers back to back: Form from minimum 13-gauge thick $1 / 2{ }^{1 / 2}$ flattened expanded metal welded to minimum 12-gauge steel angle or minimum 16-gauge steel channel frame.
3. Locker exposed sides: Form from minimum 13-gauge thick $1 / 2^{\prime \prime}$ flattened expanded metal welded to minimum 12-gauge steel angle or minimum 16-gauge steel channel frame.
B. Frames: Form welded frames from minimum 16-gauge steel sheet channels or minimum 12gauge steel angles.
4. Latch Hooks: Form from minimum 12-gauge steel welded or riveted to doorframes.
5. Cross Frames: Form intermediate channel cross frames between tiers from minimum 16gauge steel sheet, and weld to vertical frame members.
C. Steel Doors: 14-gauge diamond perforated primed single sheet with single bends at the top and bottom, and double bends at the sides.
6. Provide manufacturer's standard steel sheet lock panel welded to each side of door.
D. Shelves: Provide hat shelf in single tier units, fabricated from minimum 16 -gauge formed steel sheet, flanged on all edges.
E. Hinges:
7. All doors to be side hinged.
8. Heavy duty, minimum 13 gauge steel, full loop, $3-1 / 3^{\prime \prime} 7$-knuckle weld to inside of doorframe and door and completely concealed and tamper resistant when door is closed. a. Alternate hinge; (2") 18 -gauge CRS 5 -knuckle full loop hinge.
9. Provide at least 3 -hinges for each door more than 42 " high and at least 2 -hinges for each door 42" high or less.
F. Recessed Handle and Latch: M anufacturer's standard housing, formed from 0.0359 " thick nickel plated steel or stainless steel, with integral door pull, recessed for latch lifter and locking devices; non-protruding latch lifter; and automatic, pre-locking, pry resistant latch, as follows:
10. Provide minimum 3-point latching for each door more than 48 " high, minimum 2-point latching for each door 48" - 20" high and 1 point for each door less than 20" high.
11. Provide a through the door finger pull padlock hasp.

### 2.5 LOCKER ACCESSORIES

A. Hooks:

1. Manufacturer's standard zinc plated, ball pointed steel.
2. Provide one double prong ceiling hook, and not fewer than 2 -single prong wall hooks for units with minimum 36 " tall door.
3. Attach hooks with at least 2 -fasteners.
4. Provide galvanized steel rod in lieu of ceiling hook for lockers 18" deep or greater.
B. Each locker opening shall have an aluminum number plate with $5 / 8^{\prime \prime}$ high embossed numerals, attached centered near top, or door with 2-aluminum rivets.
C. Continuously Sloping Tops:
5. Manufacturer's standard, fabricated from minimum 16-gauge steel sheet, for installation over lockers with separate flat tops.
6. Fabricate tops in lengths as long as practicable, without visible fasteners at splice locations, finished to match lockers.
7. Provide fasteners, filler plates, supports, and closures, as follows:
a. Provide vertical end type closures.
b. Sloped top corner fillers, mitered.
D. Recess Trim:
8. Provide manufacturer's standard; fabricated from minimum 18-gauge steel sheet, minimum 2-1/2" face width, and finished to match lockers.
9. Fabricate trim in lengths as long as practicable.
E. Filler Panels:
10. Manufacturer's standard fabricated from minimum 18-gauge steel sheet in an unequal leg angle shape, and finished to match lockers.
11. Provide slip joint filler angle formed to receive filler panel.
F. Boxed End Panels: M anufacturer's standard; fabricated from minimum 16-gauge steel sheet, with 1" wide edge dimension, finished to match lockers, and designed for concealing exposed ends of non-recessed lockers.
2.6 LOCKER BENCHES (PEDESTAL M OUNTED)
A. Bench Tops: Provide manufacturer's standard one piece units, of the following material, minimum $9-1 / 2^{\prime \prime}$ wide by $1-1 / 4^{\prime \prime}$ thick, with rounded corners and edges:
12. Provide laminated maple with one coat of clear sealer on all surfaces, and one coat of clear lacquer on top and sides.
B. Pedestals: Provide manufacturers standard pedestal supports, with predrilled fastener holes, complete with fasteners and anchors, and as follows:
13. Type: Tubular steel, minimum 1-1/4" diameter, with minimum $0.1345^{\prime \prime}$ thick steel flanges welded at top and base, floor anchored similar to:
a. 4820 Aluminum Pedestal by List Industries
b. 60827 H Stainless Steel pedestal by Penco
14. May provide and install a trapezoidal tuber pedestal similar to the 4850 Hi tec Stain Less steel pedestal by List Industries.
15. Color: As selected by Architect from manufacturer's full range.
C. Furnish a minimum of 2-pedestals for each bench, with pedestal spacing not more than 72" oc.
2.7 FINISHES, GENERAL
A. Finish all steel surfaces and accessories, except pre-finished stainless steel and chrome plated surfaces.
B. Comply with NAAM M "M etal Finishes M anual for Architectural and M etal Products" for recommendations for applying and designating finishes.
C. Protect mechanical finishes on exposed surfaces from damage by applying a strippable, temporary protective covering before shipping.
D. Appearance of Finished Work:
16. Variations in appearance of abutting or adjacent pieces are acceptable if they are within $1 / 2$ of the range of approved samples.
17. Noticeable variations in the same piece are not acceptable.
18. Variations in appearance of other components are acceptable if they are within the range of approved samples and are assembled or installed to minimize contrast.
2.8 STEEL SHEET FINISHES
A. Surface Preparation:
19. Clean surfaces of dirt, oil, grease, mill scale, rust, and other contaminants that could impair paint bond.
20. Use manufacturer's standard methods.
B. Baked Enamel Finish: Immediately after cleaning and pre-treating, apply manufacturer's standard baked enamel finish consisting of a thermosetting topcoat.
21. Comply with paint manufacturers written instructions for applying and baking to achieve a minimum dry film thickness of 1.4 mils on doors, frames, and legs, and 1.1 mils elsewhere.
22. Color and Gloss: As selected by Architect from manufacturer's full range.
a. Interior shall be same color as exterior.

### 2.9 FABRICATION

A. Fabricate each locker with an individual door and frame, individual top, bottom, back, and shelves, and common intermediate uprights separating compartments.

1. May fabricate using a common top, back, and bottom in units not to exceed 4 -lockers.
B. All Welded Construction:
2. Pre-assemble lockers by welding all joints, seams, and connections, with no bolts, screws, or rivets used in assembly.
3. Grind exposed welds flush.
C. Fabricate lockers square, rigid, and without warp with metal faces flat and free of dents or distortion.
4. Make exposed metal edges free of sharp edges and burrs, and safe to touch.
5. Weld frame members together to form a rigid, one-piece assembly.
6. Form locker body panels, doors, shelves, and accessories from one-piece steel sheet, unless otherwise indicated.

## PART 3 EXECUTION

### 3.1 INSTALLATION

A. Install Work level, plumb, true, and flush in strict accordance with the manufacturer's specifications, instructions, and recommendations.

1. Installation shall include the proper assembly of lockers and their installation in accurate position and alignment.
2. Properly install all screws and other assembly devices and draw tight.
3. Install end panels and filler plates to complete each section of the assembly.
4. Install finishing strips required to bring the completed assembly into proper finished condition.
B. Connect groups of all welded lockers together with standard fasteners, with no exposed fasteners on face frames.
C. Anchor lockers to concrete curbs and walls at intervals recommended by manufacturer, but not more than 36 " on center.
5. Install anchors through backup reinforcing plates where necessary to avoid metal distortion, using concealed fasteners.
6. Lockers shall be leveled with concealed cedar shims, where necessary, to provide for irregularities in the base.
7. Secure lockers with to substrate materials with minimum pullout force of 100 lb
8. Bolt adjoining locker units together to provide rigid installation.
D. Fit exposed connections of trim, fillers, and closures accurately together to form tight, hairline joints, with concealed fasteners and splice plates.
9. Attach recess trim to recessed lockers with concealed clips.
10. Attach sloping top units to lockers, with closures at exposed ends.
E. Attach boxed end panels with concealed fasteners of non-recessed lockers.
F. Installers shall layout and install benches, as shown on the drawings.
11. Comply with the requirements for "accessible route" as required by the Florida Accessibility Code within the locker room(s).

The School District of Palm Beach County
Project Name
SDPBC Project No.

### 3.2 FIELD QUALITY CONTROL

A. Protect all new (and existing, if adjacent) lockers installed from scratches or other imperfections or defects up until the time of final acceptance of the building.
B. Replace any defective work of material occurring prior to final acceptance of the building, when requested by the Architect, without additional cost to the Owner.

### 3.3 APPEARANCE

A. Variations in appearance of abutting or adjacent pieces are acceptable if they are within $1 / 2$ of the range of approved samples.
B. Noticeable variations in the same piece are not acceptable.
C. Variations in appearance of other components are acceptable if they are within the range of approved samples and are assembled or installed to minimize contrast.

### 3.4 CLEANING

A. Protect all new (and existing, if adjacent) lockers installed against scratches or other imperfections or defects up until the time of final acceptance of the building.
B. Replace any defective work of material occurring prior to final acceptance of the building without additional cost to the Owner.

END OF SECTION

