**SECTION 10 51 00**

**GENERAL/CORRIDOR LOCKERS**

# **PART 1 GENERAL**

1. RELATED DOCUMENTS
	1. 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.
2. SUMMARY
	1. The Work required under this Section consists of new lockers and related items necessary to complete the Work, including:
		1. Wardrobe locker units with hinged doors
		2. Metal tops and filler panels
		3. Locker accessories
		4. At least one of each type of locker unit shall be accessible to the physically disabled.
	2. Related Work Specified Elsewhere
		1. Section 03 30 00 - Cast-in-Place Concrete for concrete locker base
	3. Refer to Section 01 20 00 for Alternates that may affect the Work of this Section.
3. REFERENCES
	1. ASTM A653/A653M – Standard Specification for Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy coated (Galvannealed) by the Hot-Dip Process.
	2. FBC – Florida Building Code
	3. NAAMN – National Association Architectural Metal Manufacturers
4. SUBMITTALS
	1. Submittals for review see Section 01 33 00.
	2. Submit product data indicating construction details, material descriptions, dimensions of individual components and profiles and finishes for each type of locker.
	3. Submit shop drawings prior to fabrication.
		1. Shop drawings shall indicate locker plan layout, type of material, gauges of metal, reinforcement, filler, finishing strips, and other details of construction.
		2. They shall show methods and details of attachment, layout of the lockers, and devices furnished by others.
		3. Provide locker-numbering system unless otherwise indicated; shop drawings shall identify the locations where each series is to be installed.
	4. Submit samples of manufacturer's standard colors.
	5. Submittals for information see Section 01 33 00.
	6. Provide the manufacturer's installation instructions indicating component installation and assembly.
5. DELIVERY, STORAGE, HANDLING, AND PROTECTION
	1. Section 01 60 00 - Material Equipment and approved equals: Transport, handle, store and protect products.
	2. Do not deliver lockers until spaces to receive them are clean, dry, and ready for locker installation.
	3. Protect lockers from damage during delivery, handling, storage, and installation.
	4. Deliver master keys, control keys, and combination control charts to owner.
	5. Protect locker finishes and adjacent surfaces from damage after installation until final acceptance.
6. COORDINATION
	1. Coordinate sizes, locations, and layout of concrete and metal bases.

**PART 2 PRODUCTS**

1. MANUFACTURERS
	1. The following manufacturers shall be considered, as equals or exceeds the quality specified; and they can provide products of the type, size, function, and arrangement required:
		1. Superior, List Industries, Inc., Deerfield Beach, Florida
		2. Lyon Metal Products, Aurora, Illinois
		3. Republic Storage Systems Co., Canton, Ohio
		4. Penco Products, Inc., Skippack, Pennsylvania
		5. ASI Storage Solutions Inc., Eastanollee, Georgia
		6. AMP, Storage Craft, Apopka, FL
		7. Patterson Pope, West Palm Beach, FL
		8. Or approved equal
	2. Following is the procedure for obtaining approval of products other.
		1. The “Substitution Request Form” and complete technical data for evaluation must accompany requests for Architect’s approval.
		2. All materials for evaluation must be received at least 10 days prior to bid due date.
		3. Architect shall issue addendum for additional approved manufacturers.
2. LOCKER TYPES
	1. Refer to the Drawings for the various types, sizes, and locations of lockers required.
	2. Provide at least 2% of each type to comply with the Florida Accessibility Code.
3. MATERIALS
	1. Sheet Steel: ASTM A653/653M, galvanized G90, stretcher leveled; to the following minimum thicknesses:
		1. Body, backs and sides: 16-gauge
		2. Shelf: 16 gauge
		3. Door with louvers: 14-gauge
		4. Door Frame: 16-gauge
		5. Hinges: 13-gauge seven knuckle
		6. Alternate hinge: (2") 18-gauge CRS 5-knuckle full loop
		7. Sloping Top: 16-gauge
		8. Trim: 16-gauge
		9. Back: 18-gauge
		10. Boxed End Panels 16-gauge
4. ACCESSORIES
	1. Hooks:
		1. Manufacturer's standard zinc plated ball pointed steel.
		2. Provide one double prong ceiling hook
		3. Attach hooks with at least 2 fasteners.
		4. Provide galvanized steel rod in lieu of ceiling hook for lockers 18" deep or greater.
	2. Each locker opening shall have an ADA compliant aluminum number plate with 5/8" high-embossed numerals, attached in the center near top of door with 2 aluminum rivets.
	3. Continuously Sloping Tops:
		1. Manufacturer's standard, fabricated from minimum 16-gauge steel sheet for installation over lockers with separate flat tops.
		2. Fabricate tops in lengths as long as practicable, without visible fasteners at splice locations finished matching lockers.
		3. Provide fasteners, filler plates, supports, and closures as follows:
			1. Closures: Vertical end type
			2. Sloped top corner fillers, mitered.
	4. Recess Trim:
		1. Manufacturer's standard fabricated from minimum 18-gaue steel sheet minimum 2½" face width and finished to match lockers.
		2. Fabricate trim in lengths as long as practicable.
	5. Filler Panels:
		1. Manufacturer's standard fabricated from minimum 18-gauge steel sheet in an unequal leg angle shape and finished to match lockers.
		2. Provide slip joint filler angle to receive filler panel.
	6. Boxed End Panels: Manufacturer'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.
5. FABRICATION
	1. Locker Units:
		1. Width: Sizes as shown on the drawings
		2. Depth: Sizes as shown on the drawings
		3. Height: Sizes as shown on the drawings
		4. Configuration: Configuration as shown on the drawings
		5. Mounting: Surface (curb) mounted
		6. Base: A 4" high 16-gauge sheet steel to match lockers in areas of no concrete curb
		7. Locking: Provide for owner supplied padlock system. Locking mechanism shall engage frame at least one point for four or more tier units, two points for two or three tier units and three points for single tier units. 2% of lockers shall have ADA acceptable locking device.
		8. Ventilation Standard top and bottom door louvers, required by locker height or the drawings.
	2. Form and flange the locker body with steel stiffener ribs that are electrically spot-welded or riveted.
	3. Frames formed channel shape, welded and ground flush, welded, or riveted to body, resilient gaskets and latching for quiet operation.
	4. Doors: One-piece steel with vertical edges formed to channel shape and horizontal edges formed to angle shape; welded construction, grind, and finish edges smooth.
	5. Hinges: Two for doors under 42" high; three for doors over 42" high; weld or riveted securely to locker frame and door.
	6. 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, one-piece assembly.
		3. Form locker body panels, doors, shelves, and accessories from one-piece steel sheet, unless otherwise indicated.
	7. Form recess of operating handle and locking device. Provide operating mechanisms for the physically disabled as required herein.
	8. Shop fabricated sloped metal tops, ends, and closure pieces.
6. FINISHES
	1. Finish all steel surfaces and accessories, except pre-finished stainless steel and chrome plated surfaces.
	2. Comply with NAAMM "Metal Finishes Manual for Architectural and Metal Products" for recommendations for applying and designating finishes.
	3. Clean, degrease, and neutralize metal; prime and finish with one coat of baked enamel.
	4. Baked Enamel Finish:
		1. Immediately after cleaning and pre-treating the unit, apply manufacturer's standard baked enamel finish consisting of a thermosetting topcoat.
		2. Comply with paint manufacturers written instructions for applying and baking to achieve a minimum dry film thickness of 1.4 mils on doors, frames, bases, and legs, and 1.1 mils elsewhere.
	5. Color: As selected by Architect from manufacturer's standard range.

# **PART 3 EXECUTION**

1. EXAMINATION
	1. Verify that bases are in correct position, configuration, and level.
	2. Verify the bases and embedded anchors are proper per the manufacturer’s shop drawings.
2. INSTALLATION
	1. Install the Work level, plumb, true, and flush in strict accordance with the manufacturer's specifications, instructions, and recommendations.
		1. This shall include the proper assembly of lockers and their installation in accurate position and alignment.
		2. Properly install and draw tight screws and other assembly devices.
		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.
	2. Connect groups of all welded lockers together with standard fasteners, with no exposed fasteners on face frames.
	3. Securely anchor lockers to curbs, floors, and walls at intervals recommended by manufacturer, but not more than 36" oc.
		1. Install anchors through backup reinforcing plates where necessary to avoid metal distortion, using concealed fasteners.
		2. Lockers shall be leveled with concealed cedar shims, where necessary, to provide for irregularities in the base.
		3. Secure lockers with anchor devices to suit substrate materials, minimum pullout force 100-lb
		4. Bolt adjoining locker units together to provide rigid installation.
	4. Fit exposed connections of trim, fillers, and closures accurately together to form tight, hairline joints, with concealed fasteners and splice plates.
		1. Attach recess trim to recessed lockers with concealed clips.
		2. Attach sloping top units to lockers, with closures at exposed ends.
	5. Attach boxed end panels with concealed fasteners to conceal exposed ends of non-recessed lockers.
	6. Install accessories to provide a neat, finished, functional installation.
	7. Replace components that do not operate smoothly or properly.
3. FIELD QUALITY CONTROL
	1. 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.
	2. 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.
4. APPEARANCE
	1. Variations in appearance of abutting or adjacent pieces are acceptable if they are within 1/2 of the range of approved samples.
	2. Noticeable variations in the same piece are not acceptable.
	3. 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.
5. CLEANING
	1. 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.
	2. Replace any defective work occurring prior to final acceptance of the building, when requested by the Architect, without additional cost to the Owner.

## END OF SECTION