

Computerized Lockers

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.

1.2 SUMMARY

A. This Section includes the following: Smart package lockers in single and multi-tier configurations.

1.3 REFERENCES

- A. American National Standards Institute (ANSI) Standards: Applicable standards for fasteners used for assembly.
- B. American Society for Testing and Materials (ASTM) Standards: Applicable standards for steel sheet materials used for fabrication

Applicable standards for the testing of electrostatically applied Powder Coat Paint

C. American Institute of Steel Construction (AISC) Standards: Applicable standards for steel materials used for fabrication.

1.4 **DESCRIPTION**

- A. General: Metal Lockers with smart locks for assigned or unassigned use. Available in single door or multi-tier configurations.
- B. Finishes:

Fabricated Metal Components and Assemblies: All components to be painted with an electrostatically applied Powder Coat paint that can meet or exceed test requirements set out by ASTM standard D3451-06 Standard Guide for Testing Coating Powders and Powder Coatings.

1.5 PERFORMANCE REQUIREMENTS

A. Design Requirements:

Limit overall width not to exceed specified nominal width; locker width designed for zero growth.

B. Seismic Performance: Provide Metal Lockers capable of withstanding the effects of earthquake movement when required by applicable building codes.

1.6 SUBMITTALS

- A. Product Data: Submit manufacturer's product literature and installation instructions for each type of metal locker required. Include data substantiating that products to be furnished comply with requirements of the contract documents.
- B. Shop Drawings: Show fabrication, assembly, and installation details, including descriptions of procedures and diagrams. Show complete locker installation layout, including quantities, locations and types of accessory units required. Include notations and descriptions of all installation items and components.

Show installation details at non-standard conditions, if any.

Provide layout, dimensions, and identification of each unit, corresponding to sequence of installation procedures.

Provide installation schedule and procedures to ensure proper installation.

- C. Warranty: Submit draft copy of proposed warranty for review by the [Architect] [Architect/Engineer] [Engineer] [Designer].
- D. Maintenance Data: Provide written documentation of the manufacturer's statement, claiming the maintenance free nature of the product.
- E. Reference List: Provide a list of recently installed metal lockers to be visited by owner, architect, and contractor. Intent of list is to aid in verifying the suitability of manufacturer's products and comparison with materials and product specified in this section. Include contact name, address, and phone numbers.

1.7 QUALITY ASSURANCE

- A. Manufacturer Qualifications: Engage an experienced manufacturer who is ISO 9001:2008 certified for the design, production, installation and service of metal lockers. Furnish certification attesting ISO 9001:2008 quality system registration.
- B. Installer Qualifications: Engage an experienced installer who is the manufacturer's authorized representative for the specified products for installing metal lockers.

Minimum Qualifications: 1-year experience installing metal lockers of comparable size and complexity to specified project requirements.

1.8 DELIVERY, STORAGE AND HANDLING

- A. Follow manufacturer's instructions and recommendations for delivery, storage and handling requirements.
 - 1.9 **PROJECT CONDITIONS**
- A. Field Measurements: Verify quantities of metal locker units before fabrication. Indicate verified measurements on shop drawings. Coordinate fabrication and delivery to ensure no delay in progress of the work.
- B. Established Dimensions: Where field measurements cannot be made without delaying the Work, establish dimensions and proceed with fabricating metal lockers units without field measurements. Coordinate construction to ensure actual dimensions correspond to established dimensions.

1.10 SEQUENCING AND SCHEDULING

- A. Sequence metal lockers [with other work] to minimize possibility of damage and soiling, during remainder of construction period.
- B. Schedule installation of specified metal lockers after finishing operations, including painting, have been completed.
- C. Provide components, which must be built in at a time, which causes no delays in the general progress of the work.
- D. Pre-installation Conference: Schedule and conduct conference on project site to review

methods and procedures for installing Metal Lockers including, but not limited to, the following: Recommended attendees include:

- 1. Owner's Representative.
- 2. Prime Contractor or representative.
- 3. The [Architect] [Architect/Engineer] [Engineer/Architect] [Engineer] [Designer].
- 4. Manufacturer's representative.
- 5. Subcontractors or installers whose work may affect, or be affected by, the work of this section.

1.11 WARRANTY

- A. Provide a written warranty, executed by Contractor, Installer, and Manufacturer, agreeing to repair or replace units, which fail in materials or workmanship within the established warranty period. This warranty shall be in addition to, and not a limitation of, other rights the Owner may have under General Condition's provisions of the Contract Documents.
- B. Limited Lifetime Warranty: Subject to the terms in the written warranty, warrant the original purchaser exclusively that the locker frames manufactured by it will be free from defects in materials and workmanship for the lifetime of the locker.
- C. Support costs must include remote and on-site support and cover any electronic or hardware issues, including hardware replacement.

MANUFACTURERS

- A. General: Smart Package Lockers available in single door or multi-tier configurations. Based upon metal lockers manufactured by Southwest Solutions Group, Inc. at southwestsolutions.com or toll free 1-800-803-1083.
 - 1. The materials, products and equipment described in the Bidding Documents establish a standard of required function, dimension, appearance and quality to be met by any proposed substitution.
 - 2. No substitution will be considered prior to receipt of Bids unless written request for approval has been received by the Architect at least ten days prior to the date for receipt of Bids. Such requests shall include the name of the material or equipment for which it is to be substituted and a complete description of the proposed substitution including drawings, performance and test data, and other information necessary for an evaluation. A statement setting forth changes in other materials, equipment or other portions of the Work, including changes in the work of other contracts that incorporation of the proposed substitution would require, shall be included. The burden of proof of the merit of the proposed substitution is upon the proposer. The Architect's decision of approval or disapproval of a proposed substitution shall be final.
 - 3. If the Architect approves a proposed substitution prior to receipt of Bids, such approval will be set forth in an Addendum. Bidders shall not rely upon approvals made in any other manner.
 - 4. Acceptable alternatives include Store More Store, Systec Group, NB Shelving.

2.1 BASIC MATERIALS

A. General: Provide materials and quality of workmanship, which meets or exceeds established industry standards for products specified. Use furniture grade sheet metal and fasteners for component fabrication unless indicated otherwise. Material thicknesses/gauges are manufacturer's option unless indicated otherwise.

2.2 LOCKER TYPES

- A. Smart Package Lockers. Provide metal storage lockers in single door and multi-tier configurations by Southwest Solutions Corporation.
- B. Lockers may be requested for indoor or outdoor installation.
- C. Lockers may be non-temperature controlled, ambient control, frozen, refrigerated or heated as required.
- D. All consoles will have barcode readers to recognize 2D and 3D barcodes.
- E. System must be "contactless" to allow users to access lockers without physical contact with the console.
- F. All consoles will have Bluetooth beacons to recognize registered mobile phones as they approach the console.
- G. Manufacturer will provide mobile app for touchless access to their package lockers.
- H. Mobile app should be available for Android and iOS phones.
- I. Mobile app should allow users to see all available packages and release locker doors without touching the console

2.3 SOFTWARE

- A. Software will be hosted by supplier in off client site in USA based private servers.
- B. Supplier will receive employee and student data through secure FTP transmission and update the locker consoles automatically.
- C. Supplier will provide web-based access to transaction data to authenticated client users.
- D. Management console must provide real time reporting on transaction volume and locker status system wide
- E. Software, hardware and transmission protocols should be Penetration Tested by a 3rd party and report made available to client IT staff for review and approval.

2.4 MANUFACTURED COMPONENTS

- A. Welded Frame:
 - 1. The welded frame must consist of top, bottom, back, and sides constructed of a minimum of 14-gauge or [1.5] millimeters steel. All frame components shall be joined using resistance welding.
 - 2. Multi-tier lockers shall include a fixed position shelf or shelves to separate the tiers. Shelf shall be constructed of a minimum of 14-gauge or 1.5 millimeters steel. Shelf shall be mechanically fastened to interior locker sides.
 - a. Width:
 - 1) Frame: 39.37"
 - 2) Individual Openings 14" wide

- b. Height:
 - 1) Frame: 78.35"
 - 2) (Varies based upon design) Individual Openings: 4.33", 9.45", 20.28", 35.33" and 71.46"
- c. Depth:
 - 1) 25"
- B. Metal Doors
 - 1. Shall be formed from single piece of minimum 14-gauge [1.5] millimeter cold rolled steel box formed and welded together.
 - 2. Hinge:
 - a. Full overlay [1] inch hinge
 - b. Doors shall open automatically after user authentication is accepted
- C. Package Sensors
 - 1. Each locker must contain a sensing device to confirm the presence or absence of a deposited or removed item.
 - 2. This can be a light beam, weight sensor or any device that validates the movement of an item beyond the opening or closing of the locker door.

2.5 FABRICATION

A. General: Coordinate fabrication and delivery to ensure no delay in progress of the work.

2.6 FINISHES

- A. Colors: Standard available colors are RAL7040 (Window Grey),
- B. Paint Finish: Matte (Standard) Provide factory applied electrostatic powder coat paint. Meet or exceed specifications of the American Society for Testing and Materials (ASTM) Standards:

3.1 EXAMINATION

- A. Examine Lockers scheduled to receive accessories [with Installer present] for compliance with requirements for installation tolerances and other conditions affecting performance of specified accessory items.
- B. Proceed with accessory installation only after unsatisfactory conditions have been corrected.

3.2 INSTALLATION

A. General: Follow manufacturer's written instructions for installation of each type of accessory item specified.

3.3 FIELD QUALITY CONTROL

- A. Verify accessory unit alignment and plumb after installation. Correct if required, following manufacturer's instructions.
- B. Remove components that are chipped, scratched, or otherwise damaged and which do not match adjoining work. Replace with new matching units, installed as specified and in manner to

eliminate evidence of replacement.

3.4 ADJUSTING

A. Adjust all accessories to provide smoothly operating, visually acceptable installation.

3.5 CLEANING

A. Immediately upon completion of installation, clean components and surfaces. Remove surplus materials, rubbish and debris, resulting from installation, upon completion of work and leave areas of installation in neat, clean condition.

3.6 DEMONSTRATION/TRAINING

- A. Schedule and conduct demonstration of installed accessory items and features with Owner's personnel.
- B. Schedule and conduct maintenance training with Owner's maintenance personnel. Training session should include lecture and demonstration of all maintenance and repair procedures that end-user personnel would normally perform.

3.7 **PROTECTION**

A. Protect system against damage during remainder of construction period. Advise owner of additional protection needed to ensure that system will be without damage or deterioration at time of substantial completion.

END OF SECTION

