Please Note: These specifications may or may not include all available options including features, dimensions, etc. To customize and modify these specifications for your specific application, please contact Dave Bradford at 847-344-8989 or dave@bradfordsystems.com

This specification section uses numbered level paragraph styles, which were not included in versions of Word prior to Word 97. In the interests of clarity, all paragraph styles are formatted flush left.

Specification editor’s choice items are shown in [square brackets]. (Optional) paragraphs denote items available at additional cost.

Use TAB to go DOWN one paragraph number level; SHIFT+TAB to go one paragraph number level UP.

SECTION 105113 – welded METAL Lockers (Personal storage lockers, personal storage lockers with built-in EXTERNAL ACCESS Drawer, personal storage locker with built-in BEnch drawer, and Personal storage locker IN Multi-Tier CONFIGURATIONS)

1. GENERAL
	1. RELATED DOCUMENTS
		1. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.
	2. SUMMARY
		1. This Section includes the following:

Personal Storage Lockers, Personal Storage Lockers with built-in bench drawers, Personal Storage Lockers with built-in external access drawers and Personal Storage Lockers in Multi-tier Configuration

(Note: all lockers include electrical functionality as required)

(Note: all Personal Storage Lockers, Personal Storage with built-in bench drawers, and Personal Storage Lockers with built-in external access drawers must include environmental ventilation functionality as required)

* + 1. Related Work, Not Furnished:
			1. Finish floor covering material and installation.
			2. Attachment to building HVAC system and balancing air flow through locker system. Manufacturer will provide guidance only upon request.

Finish floor covering materials and installation.

* + 1. Related Sections:

[Sections in Division 9 – Finishes, relating to finish floor and base materials]

* + 1. Allowances:
		2. Alternates:
	1. REFERENCES
		1. American National Standards Institute (ANSI) Standards:

Applicable standards for fasteners used for assembly.

* + 1. 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

* + 1. American Institute Of Steel Construction (AISC) Standards:

Applicable standards for steel materials used for fabrication.

* 1. DESCRIPTION
		1. General: Welded Metal Lockers only with end-user reconfigurable interior. Specialized lances to provide the flexibility of on-site, end-user reconfiguration/addition of internal components anytime, anywhere, now or in the future.
		2. Finishes:

Fabricated Metal Components and Assemblies: All components to be painted with an electro-statically 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.

Sizes can be described in paragraph below or in a SCHEDULE attached as the last page of the section.

* + 1. Sizes:

Personal Storage Lockers: nominal height of [72] inches or [1828.8] millimeters, and nominal widths of [12] [18] [24] [30] [36] inches or [304.8] [457.2] [609.6] [762.0] [914.4] millimeters respectively.

Personal Storage Lockers with built-in bench drawers: nominal heights of [72] [84] [90] inches or [1828.8] [2133.6] [2286] millimeters respectively; Built-in bench drawer nominal height is [18] inches or [457.2] millimeters and nominal depth is [36] inches or [914.4] millimeters.

Personal Storage Lockers with built-in external access drawers: nominal heights of [72] [84] [90] inches or [1828.8] [2133.6] [2286] millimeters respectively; Drawer base nominal height is [18] inches or [457.2] millimeters and nominal depth is [24] inches or [609.6] millimeters.

Personal Storage Lockers with built-in bench drawers, and Personal Storage Lockers with built-in external access drawers: nominal widths of [18] [24] [30] [36] inches or [457.2] [609.6] [762.0] [914.4] millimeters respectively.

Personal Storage Lockers in Multi-Tier configurations: nominal height of [72] inches or [1828.8] millimeters, and in nominal widths of [12] [18] and [24] inches or [304.8] [457.2] and [609.6] millimeters respectively.

* 1. PERFORMANCE REQUIREMENTS
		1. Design Requirements:

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

* + 1. Seismic Performance: Provide Welded Metal Lockers capable of withstanding the effects of earthquake movement when required by applicable building codes.
		2. ADA Requirements: Personal Storage Lockers with nominal height of [72] inches or [1828.8] millimeters meet ADA requirements.
	1. SUBMITTALS
		1. Product Data: Submit manufacturer's product literature and installation instructions for each type of welded metal locker required. Include data substantiating that products to be furnished comply with requirements of the contract documents.
		2. 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.

* + 1. Samples: Provide minimum [3] inches or [76] millimeters square example of each color and texture on actual substrate for each component to remain exposed after installation.
		2. Selection Samples: For initial selection of colors and textures, submit manufacturer's color charts, consisting of actual product pieces, showing full range of colors and textures available.
		3. Warranty: Submit draft copy of proposed warranty for review by the [Architect] [Architect/Engineer] [Engineer] [Designer].
		4. Maintenance Data: Provide written documentation of the manufacturer’s statement, claiming the maintenance free nature of the product.
		5. Reference List: Provide a list of recently installed welded 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. QUALITY ASSURANCE
		1. Manufacturer Qualifications: Engage an experienced manufacturer who is ISO 9001:2008 certified for the design, production, installation and service of welded metal lockers. Furnish certification attesting ISO 9001:2008 quality system registration.
		2. Installer Qualifications: Engage an experienced installer who is the manufacturer's authorized representative for the specified products for installing welded metal lockers.

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

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

Sequencing and Scheduling paragraph can be omitted unless project conditions dictate that and incremental installation sequence is warranted or necessary.

* 1. [SEQUENCING AND SCHEDULING]
		1. Sequence welded metal lockers [with other work] to minimize possibility of damage and soiling, during remainder of construction period.
		2. Schedule installation of specified welded metal lockers after finishing operations, including painting, have been completed.
		3. Provide components, which must be built in at a time, which causes no delays in the general progress of the work.
		4. Pre-installation Conference: Schedule and conduct conference on project site to review methods and procedures for installing welded 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. Warranty
		1. 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.
		2. 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.

A separate maintenance agreement paragraph may not be required since accessory items have few parts requiring long-term or continuing maintenance.

1. PRODUCTS
	1. MANUFACTURER:

Spacesaver Corporation, 1450 Janesville Avenue, Fort Atkinson, WI 53538. Spacesaver or equal as determined by owner/architect.

For pricing, contact David Bradford at 847-344-8989 or dave@bradfordsystems.com

* + 1. General: Free**Style**TM Personal Storage Lockers, Free**Style**TM Personal
		Storage with built-in bench drawers, Personal Storage with built-in external access drawers, Free**Style**TM Personal Storage Lockers in Multi-Tier configurations; based upon welded metal lockers manufactured by Spacesaver Corporation, 1450 Janesville Avenue, Fort Atkinson, Wisconsin 53538-2798. Telephone: 800-492-3434.
	1. BASIC MATERIALS
		1. General: Provide materials and quality of workmanship, which meets or exceeds established industry standards for products specified. Use furniture grade sheet metal, solid hardwood benches and fasteners for component fabrication unless indicated otherwise. Material thicknesses/gauges are manufacturer’s option unless indicated otherwise.
	2. Locker TYPES
		1. [Personal Storage Lockers. Flat top. Provide standard personal storage lockers by Spacesaver Corporation.]
		2. [Personal Storage Lockers. Provide personal storage lockers with built-in bench drawers by Spacesaver Corporation.]
		3. [Personal Storage Lockers. Provide personal storage lockers with built-in external access drawers by Spacesaver Corporation.]
		4. [Personal Storage Lockers. Provide personal storage lockers in Multi-Tier configurations by Spacesaver Corporation. Provide 2, 3, or 4-tier lockers equipped with accessories as requested]
		5. Note:
			1. All locker types (except Multi-Tier) to be equipped with environmental ventilation functionality for applications where Mechanical Air Extraction is desired to remove unpleasant odors from the locker.
			2. All locker types (except Multi-Tier) to be equipped with the functionality of attaching a modular electrical system as required.
			3. All locker types to be equipped with the functionality of attaching a continuous sloped top.
	3. MANUFACTURED COMPONENTS
		1. Welded Frame:
			1. The welded frame must consist of top, bottom, back, and sides constructed of a minimum of 18-gauge or [1.214] millimeters steel. All frame components shall be joined using resistance welding. Riveting of structural members will not be permitted.
			2. Horizontal front flanges will be a minimum of [2] inches or [50.8] millimeters. Vertical front flanges will be a minimum of [1] inch or [25.4] millimeters. Horizontal and vertical flanges will overlap and be secured with a minimum two (2) resistance welds per corner.
			3. Corner gussets shall be MIG and spot welded in each of the four front corners of the locker for increased stiffness and rigidity.
			4. Provide side panel lances evenly spaced on [3] inch or [76.2] millimeter centers. Lances to provide the flexibility of on-site, end-user reconfiguration/addition of internal components anytime, anywhere, now or in the future.
			5. Bench Housing for built-in bench drawer
				1. Welded frame construction shall consist of top, bottom, and side components joined by using resistance welding. Riveting of bench housing structural members will not be permitted.
				2. Corner gussets shall be welded in the two (2) front bottom corners of the bench housing for increased stiffness and rigidity.
				3. Horizontal front flanges will be a minimum of [1] inch or [25.4] millimeters
				4. Vertical front flanges will be a minimum of [1] inch or [25.4] millimeters
				5. Horizontal and Vertical front flanges will overlap and shall be secured with minimum of one (1) resistance weld per corner.
				6. Side panels – Lances symmetric and evenly spaced to provide optimum component locations (standard based on [3] inch or [76.2] millimeter on center vertical placement to match mating locker lance design).
				7. Return flanges on housing to securely fasten housing to welded frame of locker.
				8. Base of bench housing shall include four (4) 3/8”-16 UNC threaded weld-nuts and corresponding leveling feet.
				9. Top of bench housing shall include hole pattern for mating bench seat.
				10. Sides of bench housing shall include mounting holes in the event lockers are ganged together.
			6. Lockers with built-in bench drawer and built-in external access drawer shall have intermediate base shelf with interlocking mechanism for securing drawer when locker door is closed.
			7. Provide four (4) [0.875] inch or [22.23] millimeter diameter electrical knock-outs per locker, two (2) located on top of the locker in both right and left rear corners, and two (2) located in the back of locker centered at a distance no greater than [24] inches or [609.6] millimeters from the top and bottom. Knock-outs allow end-user flexibility of adding electrical capability to lockers.
			8. Provide a minimum of four (4) duplex receptacle electrical knock-outs per locker; to be used with a UL listed manufactured electrical wiring system as required. This manufactured electrical wiring system is a simple, unique, flexible, and cost effective method of providing electrical capability to the lockers. This electrical system can be added in the future.
				1. Top of the locker shall have four (4) duplex electrical knock-outs.
				2. Top of locker shall have electrical duplex receptacle knock-outs located on both right and left side of locker.
				3. Back panel of locker shall have a minimum of two (2) duplex electrical knock-outs.
				4. Back of locker shall have electrical duplex receptacle knock-outs located on both right and left side of locker and no farther than [24] inches or [609.6] millimeters from the top of the locker.
			9. Provide ventilation holes in top of locker to allow mechanically extracted air to be pulled up through the locker system as required. Ventilation shall be controlled by eight (8) evenly spaced [0.625] inch or [15.875] millimeter diameter holes. Proper ventilation system ensures unpleasant odors are removed from locker system.
			10. Lockers shall be prepared with mounting holes for use with the continuous sloped top system.
			11. Lockers shall be prepared with mounting holes for attaching necessary trim components
			12. Locker shall be prepared with mounting holes for ganging lockers back-to-back or side-by-side
			13. Base of lockers shall include four (4) 3/8”-16 UNC threaded weld-nuts and corresponding leveling feet.
			14. Base shelf for lockers with built-in external access drawers and bench drawers shall have holes to accommodate double-door lock rod and door stop bracket. (only on [24] inch or [609.6] millimeters wide and larger)
			15. End Panels: End Panels with no exposed fasteners shall be provided on the end of each locker run; thus providing a clean and aesthetically pleasing appearance.
			16. All locker sizes and types to be specified by architect.
				1. Width:

Personal Storage Locker: [12] [18] [24] [30] and [36] inches or [304.8] [457.2] [609.6] [762.0] and [914.4] millimeters

Personal Storage Locker with built-in bench drawer or external access drawer: [18] [24] [30] and [36] inches or [457.2] [609.6] [762.0] and [914.4] millimeters

Personal Storage Lockers in Multi-Tier configuration: [12] [18] and [24] inches or [304.8] [457.2] and [609.6] millimeters

* + - * 1. Height:

Personal Storage Locker: [72] inches or [1828.8] millimeters

Personal Storage Locker with built in bench drawer or external access drawer: [72] [84] [90] inches or [1828.8] [2133.6] [2286] millimeters

Personal Storage Locker in Multi-Tier configuration: [72] inches or [1828.8] millimeters

* + - * 1. Depth:

All lockers [24] inches or [609.6] millimeters

Bench drawers: [36] inches or [914.4] millimeters

Bench seat depth [9.5] [13.0] inches or [241.3] [330.2] millimeters

Leading edge of bench seat to extend [1.125] inches or [28.6] millimeters from front of bench drawer

External access drawer: [24] inches or [609.6] millimeters

* + 1. Ventilation:
			1. Provide ventilation holes in top of locker to allow mechanically extracted air to be pulled up through the locker system as required. Ventilation shall be controlled by eight (8) evenly spaced [0.625] inch or [15.875] millimeter diameter holes. Proper ventilation system ensures odors are removed from locker system.
			2. Provide an adjustable air baffle for system balancing when mechanical air extraction is used. Upon balancing system, air baffle shall be secured with a fastener to maintain ventilation setting.
			3. Provide louvered air vents in bottom of the main locker door/s to allow mechanically extracted air to be pulled up through the locker system.
			4. Provide louvered air vents in drawer front when built-in bench drawer or built-in external access drawer models are required.
			5. Minimum [0.500] inch or [12.7] millimeter gap between back of shelving components and back of locker to provide uninterrupted air flow up the rear of the locker system.
			6. Minimum [2.00] inches or [558.8] millimeter gap between front of shelving and locker door to provide uninterrupted air flow up the front of the locker system.
			7. Multi-Tier ventilation is provided thru door panels
			8. Upon request manufacturer shall provide HVAC tech data to serve as a guideline for the General Contractor and HVAC Contactor. It is the General Contractor and/or HVAC contractors’ responsibility to establish/balance air flow through locker system according to building HVAC constraints.
		2. Electrical
			1. Shall provide four (4) electrical knock-outs per locker as described in section 2.4-A item 7. This feature provides the end-user the opportunity for hard wire electrical connection points for each locker. End-user or General Contractor is responsible for final electrical installation.
			2. Shall provide a minimum of four (4) duplex receptacle electrical knock-outs per locker as described in section 2.4-A item 8.
			3. Shall provide UL Listed manufactured electrical wiring system as required. This manufactured electrical wiring system provides connection for a maximum of 78 receptacles per hardwired power in-feed (Note: total number of receptacles is dependent on load requirements). This manufactured electrical wiring system is a modular, unique, flexible, and cost effective method of providing electrical capability to the lockers. This electrical system can be added in the future.
		3. Drawers (for bench drawer and external access drawer):
			1. Drawer body wrapper shall have welded frame construction. Riveting of structural members will not be permitted.
			2. Drawers for locker with built-in bench drawers and built-in external access drawers shall have box-formed drawer front.
			3. Provide interlock system for securing drawer when main locker doors are closed and provide access only when main locker door/s is opened.
			4. Built-in bench drawer shall have a nominal [36] inches or [914.4] millimeters depth.
			5. Provide a flush mounted pull handle.
			6. Drawer Slides: Provide [200] lbs or [90.72] kilograms maximum load capacity and pass 50,000 cycle performance testing (Max. load, uniform distribution) (Test data to be provided by manufacturer upon request)
			7. Drawer base minimum [21] inches [533.4] millimeter drawer extension
			8. Bench drawer minimum [26.5] inches [673.1] millimeter drawer extension
			9. Provide louvered air vents in drawer front when built-in bench drawer or built-in external access drawer models are required.
			10. Provide capability of attaching glides for Body Armored Drying Rack, as requested.
		4. Bench Seat:
			1. Provide [9.5] [13.0] inches or [241.3] [330.2] millimeter deep laminated kiln dried maple bench seat; material thickness [1.25] inches or [31.8] millimeters.
			2. Front (leading edge) of bench seat to have [.625] inch or [15.88] millimeter radius bull nose.
			3. Finish of bench seat shall be sanded smooth and have two (2) coats of catalyzed varnish applied.
		5. Single-Piece Welded Doors (Single and Double Door Models):
			1. Shall be formed from two (2) pieces of minimum 18-gauge [1.2] millimeter cold rolled steel box formed and welded together using modern GMAW techniques. Single-piece door with inner and outer door panels shall have a combined steel thickness of no less than [0.096] inches or [2.4] millimeters thick. Welded door design with inner panel optimizes structural integrity of locker door system over and above any single frame door design.
			2. Exterior door panel shall be constructed with formed flanges and return flanges to add stiffness.
			3. Internal door panel shall be constructed with formed flanges for added stiffness.
			4. All inner door panel (except Multi-Tier) heights shall be minimum 70% of external door height.
			5. Multi-Tier inner door panels shall be full height.
			6. Single-piece welded door frame shall consist of internal door panel nested inside exterior door panel and welded per the following requirements:
				1. Top / bottom. Exterior and Interior panels to be welded in a minimum of three (3) places with weld spacing not to exceed [6] inches or [152.4] millimeters between adjacent welds and [1] inch or [25.4] millimeters from any corner.
				2. Sides. Exterior and interior panels to be welded with spacing not to exceed [12] inches or [304.8] millimeters between adjacent welds and [1] inch or [25.4] millimeters from any corner.
			7. Inner door panel to have peg board style hole pattern, allowing the attachment of Document Holder and any standard peg board accessory.
			8. Inner door panel to have [4] inch or [101.6] millimeter rectangular slot centered towards the top of the locker.
			9. External door panel shall have louvers to provide adequate air circulation throughout locker system.
				1. Louvered air vents shall be located at the bottom of the locker door to enhance circulation of mechanically extracted air from the bottom of the locker out of the top.
				2. Louvered air vents shall be approximately [3] inches or [76.2] millimeters in width and [0.75] inches or [19.05] millimeters in height and spaced on [1] inch or [25.4] millimeter centers.
			10. Single door designs available in [12] [18] and [24] inch or [304.8] [457.2] and [609.6] millimeter locker widths
			11. Double door designs shall consist of the following:
				1. Design available in [24] [30] and [36] inch or [609.6] [762.0] and [914.4] millimeter locker widths
				2. Primary door located on the right and the secondary door located on the left-hand side of the locker.
				3. Secondary door locking mechanism shall consist of the following:

Return flange for supporting primary door

Catch bracket

One lower lock rod

* + - 1. All doors shall have neoprene silencers on each door for noise reduction
			2. Diamond Perforated Pattern:
				1. Single and Double door designs shall be available in diamond perforated pattern
				2. Pattern is defined as [0.875] by [0.875] inch or [22.2] by [22.2] millimeter diamond perforations on [1.768] inch or [44.9] millimeter centers
			3. Door torsional deflection shall not exceed [0.1875] inch or [4.76] millimeter with a [20] lb or [9.071] kilogram point load. (Test data to be provided by manufacturer upon request)
			4. Hinge:
				1. Provide 16-gauge full length hinge for increased strength and security of locker system.
				2. Hinges to be welded to door frame with spot welds not to exceed [6] inch or [152.4] millimeter separation.
			5. Door assembly to be riveted to door frame on factory pre-established hole pattern.
			6. Locking Mechanism.
				1. Provide three locking options (all locking options have protective stainless steel cover plate for durability and scratch resistance):

Padlock hasp only.

Keyed lock with master and padlock hasp.

Combination lock with master and padlock hasp.

* + - * 1. Keyed and combination locking mechanisms shall have the capability of locking automatically.
				2. Keyed and Combination locking mechanisms shall have master key override.
				3. Combination locking mechanism shall have user changeable preset combinations.
				4. Single door models: Provide three locking options as listed above.
				5. Double door models: Provide three locking options on the primary door and simple secure lift latch mechanism with [0.3125] inch or [7.94] millimeter lock rod for secondary door.
		1. Interior/Accessory components (Architect/Owner to specify):
			1. All interior components must be constructed of minimum 18-gauge or [1.214] millimeter steel (unless otherwise clarified in specification).
			2. For added security, internal component can be secured utilizing blind rivets, threaded fasteners, or bending specially designed tab.
			3. All interior components available at time of order and as post-installation upgrades in the future.
			4. Shelves (available all locker models)
				1. Shelf with integral hanger bracket

Size specified by locker width

Hanger bracket designed with perforations on approximately [3] inch or [76.2] millimeter centers to insure clothing separation for optimum ventilation

Performance: Uniform load rating [300] lbs or [136.08] kilograms

* + - * 1. Plain

Size specified by locker width

Performance: Uniform load rating [100] lbs or [45.36] kilograms

* + - * 1. Heavy Duty

Size specified by locker width

Performance: Uniform load rating [300] lbs or [136.08] kilograms

* + - * 1. Perforated (use as drying rack)

Size specified by locker width

Tested performance: Uniform load rating [100] lbs or [45.36] kilograms

* + - * 1. Shelf rear return flange stops minimum [0.50] inch or [12.7] millimeters short of locker back panel on order to allow air circulation throughout entire locker assembly
				2. All performance test data shall be provided by manufacturer upon request.
			1. Modular Shelf (available in all models except Multi-Tier)
				1. Provides storage compartment for smaller items
				2. Approximate compartment size: [9] inches or [228.6] millimeters wide and [12] inches or [304.8] millimeters high
				3. Optional extended height of [24] inches or [609.6] millimeters available
				4. Modular shelves to have tabs to interlock with frame side panel lances
				5. Modular shelves vertical sides to have lances that match with opposing side panel lances.
				6. Modular shelves shall have two (2) locations on vertical side panel for attaching hooks, and one (1) location on bottom for attaching double hook accessories.
				7. Shelf rear return flange stops approximately [1] inch or [25.4] millimeters short of locker back panel on order to allow air circulation throughout modular shelf.
				8. Provide modular shelf with slots for connection with file dividers and shelf back stop. File dividers will aid in maintaining a neat and orderly locker system.
			2. Provide lockable compartment for small valuables (available in all models except Multi-Tier)
				1. Lockable compartment shall be integral to modular shelf accessory
				2. Provide a 14-gauge [1.897] millimeter padlock-able compartment door.
				3. Provide [0.188] inch or [4.77] millimeter diameter zinc plated steel hinge rod.
				4. Door to be mounted with zinc plated steel hinge rod and two shoulder washers for smooth, quiet operation.
				5. Provide an 18-gauge or [1.214] millimeter hasp bracket for securing lockable compartment door.
			3. Adjustable Shelf (available in all models except Multi-Tier)
				1. Integral with modular shelf
				2. Shelf to have tabs to interlock with frame side panel and modular shelf lances.
				3. Shelf shall contain slots for file divider accessories as previously defined
			4. Vinyl Mat (modular shelf) (available in all models except Multi-Tier)
				1. Material – Vinyl
				2. Color – Black
				3. Type – longitudinal round corrugated ribs
			5. Document Holder (available in all models except Multi-Tier)
				1. Width – [10.5] inches or [266.7] millimeters
				2. Height – [6] inches or [152.4] millimeters
				3. Depth – [1.5] inches or [38.1] millimeters
				4. Design to include matching hole pattern to allow various attachment locations on inner door panel
			6. Mirror
				1. Material – [0.0625] inch or [1.59] millimeter thick plastic with mirror surface on one side
				2. [0.0625] inch or [1.59] millimeter thick flexible magnet attached to non-mirrored side
				3. Size – [3.875] inches or [98.43] millimeters height and [5.875] inches or [149.23] millimeter width
			7. Boot Tray
				1. Material – Rubber
				2. Dimensions:

Width – [12.90] inches or [327.7] millimeters

Depth – [19.90] inches or [505.5] millimeters

Height – [1.25] inches or [34.75] millimeters

* + - * 1. Manufactured from Natural rubber compounds, environmentally friendly, durable, water repellant easily cleaned with soap and water, resistant to alkalis and weak acids, mold, mildew, and dust mites.
			1. Body Armor Drying Rack
				1. Shall be available in bench drawer model widths of [18] [24] [30] [36] inch or [457.2] [609.6] [762.0] and [914.4] millimeters
				2. Size of tray is controlled by locker width
				3. Bottom of drying tray shall have louvered pattern to provide air circulation throughout
				4. Shall have the ability to adjust/glide frontward and backward, while mounted in the bench drawer.
			2. Internal Drawers
				1. Shall be available in all [18] [24] [30] [36] inch or [457.2] [609.6] [762.0] and [914.4] millimeters wide locker models
				2. Drawer shall have a depth of approximately [19] inches or [482.6] millimeters
				3. Shall be available in [6] [9] inch or [152.4] [381] millimeters height, respectively.
				4. Drawer shall have locking option when specified by customer/architect
				5. Drawer shall have a tested weight capacity rating of [50] lbs or [22.7] kilograms
			3. File Dividers (modular shelf) (available in all models except Multi-Tier)
			4. EZ RailTM
				1. Available in two versions – Level and Sloped – attaches to the inside of the locker and can support various storage accessories

EZ RailTM Level version stores industry standard hanging bins, slat wall accessories, and Spacesacer UWRTM weapon storage accessories

EZ RailTM Sloped version stores industry standard hanging bins.

* + - * 1. Shall be available in all [12] [18] [24] [30] [36] inch or [304.8] [457.2] [609.6] [762.0] and [914.4] millimeters wide locker models
			1. UWRTM Universal Base and Support Rail
				1. Shall be available in all [12] [18] [24] [30] [36] inch or [304.8] [457.2] [609.6] [762.0] and [914.4] millimeters wide locker models
				2. Shall be capable of using standard Spacesaver stock cups and barrel supports for weapons storage within the locker
			2. Hooks
				1. Single Hooks – shall have the ability to attach single hooks on the side of the Modular Shelf and on the side panel lances
				2. Double Hook – shall have the ability to attach a double hook to the underside of the Modular Shelf
				3. Hook Bracket Hanger Assembly – shall have the ability to attach a three-hook bracket assembly to any lanced location on the side panels of the locker.
		1. Electrical system
			1. UL listed manufactured electrical wiring system with plug-in-play component design
			2. Receptacles – standard 20 amp duplex receptacles and 20 amp GFCI duplex receptacles
		2. HVAC
			1. All lockers (except Multi-Tier) shall be equipped with mechanical air extraction capabilities and adjustable air balancing capabilities
			2. When mechanical air extraction is required, manufacturer shall provide locker system HVAC guidelines and recommendations to aid in overall locker and building system integration. It is the General Contractor and HVAC Contractors’ responsibility to establish/balance air flow through locker system according to building HVAC constraints.
		3. Locker Tag Numbers
			1. Shall provide locker numbers on each locker per customer requirement
		4. ACCESSORIES:
			1. [(Optional) ZeeBase System: Provide manufacturer’s standard.]
			2. [(Optional) Individual Welded Base: Provide manufacturer’s standard.]
			3. [(Optional) Trim and Fillers: Provide manufacturer’s standard.]
			4. [(Optional) Continuous Sloped Top. Provide manufacturers standard.]
	1. FABRICATION
		1. General: Coordinate fabrication and delivery to ensure no delay in progress of the work.
	2. FINISHES
		1. Colors: [Selected from manufacturer’s standard available colors.] [Provide in custom colors as selected by [Architect] [Architect/Engineer] [Engineer.]
		2. Paint Finish: Textured (Standard) – Provide factory applied electrostatic powder coat paint. Meet or exceed specifications of the American Society for Testing and Materials (ASTM) Standards:
1. EXECUTION
	1. EXAMINATION
		1. 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.
		2. Proceed with accessory installation only after unsatisfactory conditions have been corrected.
	2. INSTALLATION
		1. General: Follow manufacturer’s written instructions for installation of each type of accessory item specified.
	3. FIELD QUALITY CONTROL
		1. Verify accessory unit alignment and plumb after installation. Correct if required, following manufacturer’s instructions.
		2. 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.
	4. ADJUSTING
		1. Adjust all accessories to provide smoothly operating, visually acceptable installation.
	5. CLEANING
		1. 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.
	6. DEMONSTRATION/TRAINING
		1. Schedule and conduct demonstration of installed accessory items and features with Owner's personnel.
		2. 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.
	7. PROTECTION
		1. 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.

You could use pre-printed schedules and simply add them as last page. Add paragraph 3.8 SCHEDULES and add subparagraph: “A. Equipment Schedules, See next page.” or similar wording.

END OF SECTION