
SECTION 10 55 00
POLICE SPECIALTY EQUIPMENT

PART 1 GENERAL

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:
 - 1. Secured Weapons Storage Cabinets (Lockers for long-gun, hand-gun and weapon accessory storage [Spacesaver® Universal Weapons Rack]).

1.3 RELATED SECTIONS:

- A. [Section 1056XX – Storage Assemblies.]

1.4 REFERENCES

- A. ARMY Regulation AR190-11
 - 1. Applicable military requirements for the physical security of conventional arms, ammunition, and explosives.
- B. Department of the NAVY OPNAV Instruction 5530.13C:
 - 1. Applicable military requirements for the physical security instruction for conventional arms, ammunition and explosives.
- C. Department of Defense DOD5100.76-M
 - 1. Applicable military requirement for the physical security of sensitive conventional arms, ammunition, and explosives.
- D. American National Standards Institute (ANSI) Standards:
 - 1. Applicable standards for fasteners used for assembly.
- E. American Society for Testing and Materials (ASTM) Standards:
 - 1. Applicable standards for steel sheet materials used for fabrication.
- F. American Institute of Steel Construction (AISC) Standards:
 - 1. Applicable standards for steel materials used for fabrication.

1.5 DESCRIPTION

- A. General: Secured weapons storage cabinets can be installed free-standing. Weapons storage cabinets can also be installed concurrently with installation of Spacesaver® high-density mobile storage systems or can be retrofitted in existing mobile storage systems.
- B. Secured Weapons Storage Cabinets: Assemblies consist of fully-welded, heavy-gauge steel cabinets available in six heights to accommodate weapons of varying lengths. All five cabinets are either [22.38] inches [56.8] millimeters or [42.38] inches [1076] millimeters wide and [16.25] inches [412] millimeters deep. Cabinets must have built-in, folding, retractable cabinet doors that retract completely inside the cabinet when fully open so there are no swinging doors to obstruct the aisle way. The doors have heavy-gauge steel, rotating locking bars to provide maximum security according to military requirements for the physical security of conventional arms, ammunition, and explosives (OPNAVINST 5530.13C). Cabinet doors at minimum shall have nine (9) interlocking contact points. Manufacturer

must provide supporting documentation that a DoD authority has approved the rack for use in a small arms vault and that they have the ability to have NSN's assigned to their rack if not completed already. This documentation must come on official letterhead or racks must come with NSN (National Stock Number) on the rack. Locking bars shall lock at a single common point and be able to accept a DoD issued and approved padlock. (Lock not included.) Locking bars shall require no effort to open so that when the padlock is removed, the locking bars drop due to gravity and arms room personnel have immediate access to weapons. Key locks are not acceptable, Sliding lock bars are not acceptable as they are prone to sticking and can slow down the ability to issue weapons in a timely manner. Handles that impede aisle or create catch points are not acceptable. Handles require extra motion and slow accessibility to weapons while cumbersome to operate.

- C. Durability of Weapons Storage Cabinets: Cabinets must be fully welded with heavy-gauge steel built around a 4-Post structure to ensure durability and strength of cabinet. Cabinet walls must be a minimum of 18-gauge steel. Top and bottom of cabinet must be a minimum 16-gauge steel. Cabinets must be able to be stacked two levels high. Cabinet structure must be able to support a minimum of 1,500 lbs.
- D. Visibility: The doors, sides, and back of the cabinet are perforated with a diamond mesh pattern to allow visible counts or weapon inventory to be taken even when the cabinet is closed and locked.
- E. Space-Efficiency: System must have fully retractable doors so they don't impede aisle ways or adjoining cabinets when issuing weapons. Bi-fold doors are not acceptable as they still impede an aisle-way which could cause them to become damaged, thus leaving a potential quality issue. All racks provided must be of the same footprint to allow for double stacking and efficient use of the armory. When using one tall cabinet vs. two shorter cabinets, manufacturer must demonstrate the ability to meet all ODA configurations in the least amount of space. Depth of the racks should allow for storage of weapons with any site or optic attached to the weapon with doors closed.
- F. Flexibility: Weapon rack cabinets must allow for "A La Carte" configurability to allow for storage of a wide range of weapon types, gear, optics, and spare barrels without making structural modifications to the rack. All individual components (pistol hooks, standard barrel supports, stock cups) must have NSN's for future sustainability or reset of rack system in the field. If individual components do not have NSN's then proof of the ability to obtain NSN's or that they are in the process of getting NSN's, must be demonstrated.
- G. Multipurpose Back Panel: Weapon racks shall come with an optional multipurpose back panel kit. This back panel kit shall support a minimum of 700 lbs and be able to accept all weapon rack accessories. Accessories must be confined to the inside of the rack and not protrude outside of the rack in any way (including fasteners). Back panel kits must be capable of fitting all previous weapon rack cabinets.
- H. Protection of Weapons: All components that come into contact with the weapons must be either dipped in a black poly vinyl chloride coating, made with an injection-molded thermoplastic, or an over molded rubber. These materials must be designed and capable of withstanding extreme temperature and protect weapons from abrasions.
- I. Safety: There must not be any exposed bolts, screws, or sharp edges on finished product. If barrel support are screwed or secured in place inside the rack, they must not protrude out the back or the rack to expose any sharp edges.
- J. Finishes:
 - 1. Fabricated Metal Components and Assemblies: Manufacturer's standard powder coat paint finish.

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2. Fabricated Laminate Components and Assemblies: Manufacturer's standard low-pressure or high-pressure laminate finishes.
- K. Sizes:
1. Available in nominal widths of [22.38] [42.38] inches [568] [1076] millimeters.
 2. Available in nominal heights of [18] [34] [45] [61] [76] [84] inches [457] [863] [1140] [1559] [1930.4] [2133.6] millimeters.
- L. Military Testing (Mandatory)
- M. Cabinets must have passed the most stringent military tests, including but not limited to the "Basic Shock/Accidental Load Test" and meets the requirements of OPNAVINST 5530.13C, AR190-11, DOD5100.76-M. Upon request manufacturers must be able to provide functional cycle testing documentation that doors pass with no visible sign of wear after 50,000 cycles.

1.6 PERFORMANCE REQUIREMENTS

- A. Design Requirements: Provide secured weapons storage cabinets manufactured in sizes and dimensions, which will install free-standing or fit Spacesaver® mobile storage units. Reference AR190-11, OPNAV Instruction 5530.13C, DOD 5100.76-M for military requirements.

1.7 SUBMITTALS

- A. Product Data: Submit manufacturer's product literature and installation instructions for each type of secured weapons storage cabinet. 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 extent of secured weapons storage cabinet installation layout including quantities, locations and types of accessories required. Include notations and descriptions of all installation items and components.
1. Show installation details at non-standard conditions, if any.
 2. Provide layout, dimensions, and identification of each secured weapons storage cabinet corresponding to sequence of installation and assembly procedures.
 3. Provide installation schedule and complete assembly procedures to ensure proper installation.
- C. Samples: Provide minimum [3] inch [76] millimeters square example of the color and texture on actual substrate for the rack that will remain exposed after installation.
- D. Warranty: Submit draft copy of proposed warranty for review by the [Architect] [Architect/Engineer] [Engineer] [Designer].
- E. Maintenance Data: Provide in form suitable for inclusion in maintenance manuals for secured weapons storage cabinets. Data shall include operating and maintenance instructions, parts inventory listing, purchase source listing, emergency instructions, and similar information.
- F. Reference List: Provide a list (minimum 5) of recently installed secured weapons storage cabinets 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. References must include name, phone number, and the quantity of racks supplied. References must also supply the name, address, phone, and other relevant contact information for local servicing dealer. References must provide proof that racks have been in use for a minimum of 3 years to demonstrate product performance. Manufacturer of racks must be ISO 9000 certified. Complete product specifications, tech data sheets, etc., must be provided with proposals to illustrate compliance with each line item requirement as listed above.
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1.8 QUALITY ASSURANCE

- A. Manufacturer Qualifications: Engage an experienced manufacturer who is ISO 9001 certified for the design, production, installation and service of secured weapons storage cabinets, carriage mounted high-density mobile storage units and support rails. Furnish manufacturer's certification attesting ISO 9001 quality system registration.
- B. Installer Qualifications: Engage an experienced installer who is a manufacturer's authorized representative for the specified products for installing weapons storage cabinets and anchoring cabinets to carriages.
 - 1. Minimum Qualifications: 1-year experience installing systems of comparable size and complexity to specified project requirements.

1.9 DELIVERY, STORAGE AND HANDLING

- A. Follow manufacturer's instructions and recommendations for delivery, storage and handling requirements.

1.10 PROJECT CONDITIONS

- A. Field Measurements: Verify quantities of secured weapons storage cabinets 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 secured weapons storage cabinets without field measurements. Coordinate construction to ensure actual dimensions correspond to established dimensions.

1.11 SEQUENCING AND SCHEDULING

- A. Sequence secured weapons storage cabinets with high density mobile storage systems to minimize possibility of damage and soiling during remainder of construction period.
- B. Schedule installation of specified secured weapons storage cabinets after finishing operations, including painting, have been completed.
- C. Provide components, which must be built in at a time, which causes no delays general progress of the work.
- D. Pre-installation Conference: Schedule and conduct conference on project site to review methods and procedures for installing secured weapons storage cabinets.
 - 1. Recommended attendees for pre-installation conference including, but not limited to the following:
 - a. Owner's Representative.
 - b. Manufacturer's representative.
 - c. Subcontractors or installers whose work may affect, or be affected by, the work of this section.

1.12 WARRANTY

- A. Provide a written warranty, executed by Contractor, Installer, and Manufacturer, agreeing to repair or replace secured weapons storage cabinets, 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.

1.13 MAINTENANCE

- A. [Provide manufacturer's extended maintenance agreement for [____] [years] [months], commencing on the day the standard maintenance warranty ends.

PART 2 PRODUCTS**2.1 MANUFACTURERS**

- A. General: Products are secured weapons storage cabinets designed to be used either free-standing or with high-density mobile storage systems manufactured by Spacesaver® Corporation.

2.2 BASIC MATERIALS

- A. General: Provide materials and quality of workmanship, which meets or exceeds established industry standards for products specified.

2.3 MANUFACTURED COMPONENTS

- A. Secure Weapons Storage Cabinets: (All specifications are mandatory)
1. Cabinet:
 - a. The cabinet shall be a one-piece assembly with an outside width of [22.38] inches [568] millimeters or [42.38] inches [1076] millimeters, a useable inside width of [19] inches [483] millimeter or [36.5] inches [927] millimeters respectively, an outside height of [18] [34] [45] [61] [76] [84] inches [457] [863] [1140] [1559] [1930.4] [2133.6] millimeters, and an outside depth of [16.25] inches [412] millimeters.
 - b. The cabinet shall be constructed of 18-gauge [1.2] millimeter double-walled upright posts welded to 18-gauge [1.2] millimeter flat plate steel sidewalls with a diamond mesh perforation.
 - c. The back wall of the cabinet shall be constructed of 18-gauge [1.2] millimeter steel perforated with diamond mesh and shall be welded to the upright posts.
 - d. The upright posts shall have interior attachment keyhole slots on [1.5] inch [38] millimeter vertical centers.
 - e. The top and bottom covers shall be made of 16-gauge [1.5] millimeter steel welded to the upright posts.
 - f. Cabinet doors shall be heavy-duty 18-gauge [1.2] millimeter, folding and fully retractable in the open position. The cabinet doors shall also include a diamond mesh perforation for visibility as well as rotating locking bars for security.
 - g. Locking bars shall lock at a single common point.
 - h. Cabinet construction to have an inherent strength that would prevent an individual from manipulating components (without tools) such that the weapon, receiver, or barrel could be removed.
 - i. Overall cabinet design such that a weapon, receiver, or barrel cannot be removed by disassembly of the weapon/component and/or the rack without damage to the rack.
 - j. Hinged locking bars for racks have the hinge pin welded or otherwise secured to prevent disassembly.
 - k. Finish: shall be factory applied electrostatic powder coat paint
 2. Bases:
 - a. Shall be constructed of 16-gauge [1.5] millimeter steel.
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- b. Base designs shall be available for supporting a variety of weapon types.
 - c. Finish:
 - 1) Bases using standard universal stock cups shall have a factory applied electrostatic powder coat paint
 - 2) Designs where stock of weapon contacts base shall have a minimum 8mil thick black thermoplastic material finish
 - 3. Support Rails:
 - a. Support rails shall be constructed of 14-gauge [1.9] millimeter steel and be punched to accept [standard], [extended standard], [wide], [extra wide], [long], [pistol], [standard transport], [large transport], and/or [receiver mounts] barrel supports.
 - b. Support rails shall contain four (4) rivet heads that interlock with the cabinet interior attachment keyhole slots.
 - c. Finish: Shall be factory applied electrostatic powder coat paint
 - 4. Back Panel Kit:
 - a. Back Panel Kit shall be constructed of 14-gauge [1.9] millimeter steel.
 - b. Back panel hole pattern shall be consistent with universal weapon rack support rails.
 - c. Back panel shall be compatible with all existing weapon rack designs (excluding mini and [18] inches [457.2] millimeter over storage cabinets), barrel supports, receiver brackets, standard bases, and intermediate shelves.
 - d. Back Panel must be able to support 700 lbs.
 - e. Back Panel shall be compatible with existing standard bases and maintain bracket spacing.
 - f. Back Panel shall be able to co-exist with bin systems and intermediate shelves.
 - g. Finish: Shall be factory applied electrostatic powder coat paint
 - 5. Barrel Supports:
 - a. Barrel supports shall be constructed of 14-gauge [1.9] millimeter steel
 - b. Finish: Shall have factory applied electrostatic powder coat paint and dipped in black, PVC, [.060-.075] inch [1.52-1.9] millimeter thickness.
 - c. Extra wide and long barrel supports to be welded assemblies.
 - 6. Bin Storage Systems:
 - a. Bin storage systems shall be constructed of 18-gauge [1.2] millimeter steel.
 - b. Bin storage system shall have the ability to create 1/3, 2/3, and full width storage cubicle compartments. The system shall have the flexibility for those compartments to be placed on the left hand, center, and/or right hand positions within the weapon racks usable storage space.
 - c. Bin storage system shelving shall have flexibility of vertical adjustment on [2.75] inches [69.9] millimeter increments
 - d. Bin storage system shall be capable of being installed and adjusted easily without the use of fasteners
 - e. Finish: Shall have factory applied electrostatic powder coat paint
 - 7. Individual Stock Supports:
 - a. Shall be constructed of 14-gauge [1.9] millimeter steel
 - b. Mounting tabs and hole pattern shall be compatible with universal weapon rack support rails and back panels
 - c. Shall be capable of withstanding 20 lbs static loading
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- d. Shall be capable of mounting standard Universal Base Support Cups
 - e. Shall be capable of supporting standard issue rifles (including snipers), light machine guns (M240, M249, etc), and grenade launchers (M79, M32).
 - f. Shall be compatible with all existing standard weapon rack designs
 - g. Shall provide ease of installation consistent with other UWR accessories
 - h. Finish: Shall have factory applied electrostatic powder coat paint
8. Horizontal Weapons Bracket:
- a. Shall be constructed of 14-gauge [1.9] millimeter steel
 - b. Mounting hole pattern shall be compatible with universal weapon rack support rails and back panels
 - c. Shall be capable of withstanding 30 lbs static loading
 - d. At minimum shall be capable of storing three (3) M4 rifles horizontally within the [42] inch [1066.8] millimeter weapon rack usable storage space.
 - e. Shall be compatible with all existing standard weapon rack designs
 - f. Shall provide ease of installation consistent with other UWR accessories
 - g. Finish: Shall have factory applied electrostatic powder coat paint. Surfaces in contact with weapon shall also be coated with black PVC, [.060-.075] inch [1.52-1.9] millimeter thickness.
9. Suppressor Holder:
- a. Shall be constructed of 14-gauge [1.9] millimeter steel
 - b. Mounting tabs and hole pattern shall be compatible with universal weapon rack support rails and back panels
 - c. Shall be capable of holding suppressors [1.750] inches [44.5] millimeter in diameter or smaller and [14.25] inches [362] millimeters
 - d. Shall be capable of withstanding 3 lbs static load
 - e. Shall be capable of mounting in between weapons in a standard ten (10) weapon configuration.
 - f. Suppressors must be held in a fashion that prohibits the suppressor from falling out, yet allows it to be easily stowed
 - g. Shall be compatible with all existing standard weapon rack designs
 - h. Shall provide ease of installation consistent with other UWR accessories
 - i. Finish: Shall have factory applied electrostatic powder coat paint. Surfaces in contact with weapon shall also be coated with black PVC, [.060-.075] inch [1.52-1.9] millimeter thickness.
10. Bin Holder:
- a. Shall be constructed of 14-gauge [1.9] millimeter steel
 - b. Mounting tabs and hole pattern shall be compatible with universal weapon rack support rails and back panels
 - c. Shall be capable of withstanding 10 lbs static load (utilizing standard 5.5W x 6-h x 10.875L Quantum bin)
 - d. Shall be capable of mounting ten (10) brackets horizontally across the width of a standard support rail or back panel.
 - e. Shall be capable of mounting standard Quantum bins or equivalent
 - f. Shall be compatible with all existing standard weapon rack designs
 - g. Shall provide ease of installation consistent with other UWR accessories
 - h. Finish: Shall have factory applied electrostatic powder coat paint.
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11. Retention Barrel Support:
 - a. Shall be constructed of 14-gauge [1.9] millimeter steel
 - b. Mounting hole pattern shall be compatible with universal weapon rack support rails and back panels
 - c. Designs shall incorporate 3 and 4 weapon solutions
 - d. Designs shall accommodate standard infantry rifles and shotgun barrels
 - e. Design shall be capable of retaining weapon from falling out when force less than 2 lbs is applied
 - f. Surfaces in contact with barrel shall be molded in rubber to protect and retain weapon.
 - g. Molded rubber material shall be capable of withstanding 50,000 cycle functional load/unload testing.
 - h. Shall be compatible with all existing standard weapon rack designs
 - i. Shall provide ease of installation consistent with other UWR accessories
 - j. Finish: Shall have factory applied electrostatic powder coat paint.
 12. Intermediate Full Shelf:
 - a. Shall be constructed of 16-gauge [1.52] millimeter steel
 - b. Shelf to be full depth; however, must be compatible with all back panel components
 - c. Shall be fully adjustable (vertically) within limits of the 4-post side panel design
 - d. Shall be capable of meeting 300 lbs static load testing: shelf deflection shall not exceed L/140
 - e. Shall be compatible with all existing standard weapon rack designs
 - f. Shall provide ease of installation consistent with other UWR accessories
 - g. Finish: Shall have factory applied electrostatic powder coat paint
 13. Intermediate Half Shelf:
 - a. Shall be constructed of 16-gauge [1.52] millimeter steel
 - b. Shall be fully adjustable within the limits of the 4-Post side panel design
 - c. Shall be compatible with all back panel components
 - d. Shall be capable of meeting 300 lbs static load testing: shelf deflection shall not exceed L/140
 - e. Finish: Shall have factory applied electrostatic powder coat paint. Designs where stock of weapon contacts base shall have a minimum 8mil thick black thermoplastic material finish
 14. Tray Accessories:
 - a. Shall be constructed of [.125] inch [3.17] millimeter ABS material
 - b. Designs sizes shall accommodate the standard 1/3, 1/2, 2/3, and full bin system width configurations
 - c. Design sizes shall accommodate UWR depths of [16] [24] inches [406.4] [609.6] millimeters
 - d. Standard color is Black
 - e. All tray designs shall have at least one pair of carrying handle cutouts
 15. Inverted Weapon Bracket:
 - a. Shall be constructed of 14-gauge [1.9] millimeter steel
 - b. Mounting hole pattern shall be compatible with universal weapon rack support rails and back panels
 - c. Shall be capable of withstanding 40 lbs static loading
 - d. Shall be capable of storing standard infantry rifles and light machine guns (with a standard pistol grip) in an inverted configuration
 - e. Bracket shall have the functionality of individual weapon storage angle adjustment
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- f. Shall be compatible with all existing standard weapon rack designs
 - g. Shall provide ease of installation consistent with other UWR accessories
 - h. Finish: Shall have factory applied electrostatic powder coat paint. Surfaces in contact with weapon shall also be coated with black PVC, [.060-.075] inch [1.52-1.9] millimeter thickness.
16. Optional Transport Components that prevent weapons from movement, vibrations, shock, and abrasion. Transport components shall allow cabinet to be tilted 90 degrees in any direction without weapons becoming dislodged, or coming in contact with each other or other components in the rack.

2.4 FABRICATION

- A. General: Coordinate fabrication and delivery to ensure no delay in progress of the work. All components necessary to complete the arms room installation should come from one manufacturer to ensure proper coordination of installation and no delays in the progress of the work.

2.5 FINISHES

- A. Colors: [Selected from manufacturer's standard available colors.]
- B. Paint Finish: Provide factory applied electrostatic powder coat paint.
- C. Coating: PVC, [.060-.075] inch [1.52-1.9] millimeter thickness.
- D. Coating: 8mil thick black thermoplastic material finish

PART 3 EXECUTION

3.1 EXAMINATION

- A. Examine storage units scheduled to receive secured weapons storage cabinets with Installer or manufacturer representative present for compliance with requirements for installation tolerances and other conditions affecting performance of specified secured weapons storage cabinets.
- B. Verify that intended installation locations of secured weapons storage cabinets will not interfere with or block established required exit paths or similar means of egress once units are installed.
- C. Proceed with secured weapons storage cabinet installation only after unsatisfactory conditions have been corrected.

3.2 INSTALLATION

- A. General: Follow manufacturer's written instructions for installation of each type of secured weapons storage cabinets specified.

3.3 FIELD QUALITY CONTROL

- A. Verify secured weapons storage cabinet 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 secured weapons storage cabinets 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 secured weapons storage cabinets 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 10 55 00